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TOCALO

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6-4-4, Minatojimaminami-Machi, Chuo-ku, Kobe

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Research Coverage Report by **Shared Research Inc.**

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Executive summary

Business overview

TOCALO Co., Ltd. (TOCALO) provides surface treatments that improve the performance of materials used across a range of industries by adding properties such as abrasion and heat resistance, conductivity, insulation, and heat shielding and dissipation. Its core technology is thermal spraying, which involves coating target surfaces by spraying metals or ceramics that have been melted using high temperature heat sources (e.g., plasma and gas). The company particularly excels in functional thermal spraying that provides both growth potential and high added value, and leads the Japanese market for thermal spraying with a share of 40% (Shared Research estimate based on data from Yano Research Institute, Digital Research, and other sources). The company also offers other surface treatments as ancillary services. These include the Toyota diffusion (TD) process, zinc alloy coating (ZAC), plasma transferred arc (PTA) process, and physical vapor deposition (PVD) process. (See the box on the next page for details.)

TOCALO's surface treatments are made to order. Accordingly, selling volume is not a business priority. The company procures coating materials and generates sales by applying surface treatments to goods and parts provided by customers. In FY03/24, it reported a GPM of 34.8%, an SG&A ratio of 15.1%, and an OPM of 19.7%, on a consolidated basis. Over half of the parent company's total manufacturing costs in FY03/24 were labor (27.6% of the total) and outsourcing costs (27.1%). Other manufacturing costs included materials (13.1%), consumables (10.7%), utilities (4.4%), depreciation (7.7%), and other costs (9.4%). TOCALO's business is labor-intensive, with personnel expenses accounting for about 50% of SG&A expenses.

The thermal spraying industry divides into companies that conduct thermal spraying internally and companies that perform thermal spraying as a contracted service. In 2018, the market for contracted treatment in Japan was worth approximately JPY60.0bn, while the global market was about JPY700.0bn (source: Yano Research Institute). Some overseas competitors sell thermal spraying materials and equipment in addition to providing contracted treatment services, but TOCALO specializes in services. Overseas sales accounted for 28.2% of sales in FY03/24 and mainly came from Japanese companies that have expanded abroad. The company also receives royalty income from licensing agreements with overseas companies, including competitors.

By area of application, 20% of thermal spraying in Japan is associated with industrial equipment, 20% semiconductors and flat panel displays (FPDs), 13% steelmaking, 10% bridges and structures, 10% paper manufacturing, and 27% other uses (2018 actual; Yano Research). At TOCALO, semiconductor/FPD-related sales at the parent made up about 44.5% of consolidated sales in FY03/25. By customer, the Tokyo Electron Limited group (TSE Prime: 8035) accounted for 27.2% of sales, and the Applied Materials group (US; AMAT) accounted for 10.1% in FY03/25. Semiconductor-related business is TOCALO's growth driver, and the company and Tokyo Electron have built a close relationship that allows them to conduct joint development.

In September 2004, TOCALO acquired all shares of Japan Coating Center Co., Ltd. (JCC), expanding into the thin coating technology known as the physical vapor disposition (PVD) process. PVD is a surface treatment method in which metals (e.g., titanium and chromium) are ionized with reactive gases in a vacuum to form highly adhesive ceramic coatings that are hard and dense but thin. Applied to surfaces of cutting tools, metallic molds, and other items, these coatings add functionality such as abrasion and corrosion resistance. Shared Research notes that synergies between the parent and the subsidiary have been generated.

By segment, Thermal Spraying (parent) accounted for 72.3% of sales in FY03/25, Domestic Subsidiaries (such as JCC) for 4.9%, Overseas Subsidiaries for 17.2%, Other Surface Treatments for 5.3% and Royalty Income 0.3%. The segment profit margins (recurring profit basis) were 22.6% in Thermal Spraying, 13.1% in Domestic Subsidiaries, 35.7% in Overseas Subsidiaries, and 14.7% in Other Surface Treatments (before segment profit adjustments).

TOCALO has expanded its overseas business by rolling out its thermal spraying technology, originally developed in Japan, to international markets. Its overseas sales ratio rose from 19.4% in FY03/20 to 30.1% in FY03/25, an increase of 10.7pp over five years. With rising semiconductor demand in overseas markets and growing needs for its thermal spraying technology, the company positions its overseas business as a new growth driver and a key contributor to medium-term consolidated earnings expansion. In addition to boosting production capacity in East Asia (China and Taiwan), the company has also begun restructuring its US operations and is planning further business expansion from FY03/27 onward.

The company is also taking steps in businesses other than domestic thermal spraying, mainly within its Domestic Subsidiaries segment. In addition to revising the business structure of JCC, it made Terada Kosakusho (a privately held manufacturer of precision components) a wholly owned subsidiary in August 2024 and is making capital investment aimed at expanding operations outside the automotive sector.

Trends and outlook

- ▶ In FY03/25, sales reached JPY54.2bn (+16.0% YoY), operating profit was JPY12.3bn (+33.4%), recurring profit JPY12.6bn (+30.0%), and net income attributable to owners of the parent JPY8.1bn (+27.3%). Driven by a recovery in the semiconductor market and a rebound in orders for semiconductor and FPD-related products—its core business—the company achieved record-high sales and profit at all levels for the first time in two years. The company raised its annual dividend forecast from JPY65.0 to JPY68.0 per share (up from JPY53.0 in FY03/24), resulting in a payout ratio of 50.2% (unchanged YoY).
- ▶ The company's forecast for FY03/26 projects sales of JPY57.0bn (+5.1% YoY), operating profit of JPY13.0bn (+5.9% YoY), recurring profit of JPY13.0bn (+3.5% YoY), net income attributable to owners of the parent of JPY8.3bn (+3.4% YoY), and EPS of JPY140.1. With continued sales growth in its core semiconductor and FPD-related businesses, the company expects to achieve record-high sales and profits across all categories for the second consecutive year. The company also plans to pay an annual dividend of JPY70.0 per share (vs. JPY68.0 in FY03/25), with a projected payout ratio of 50.0% (vs. 50.2%). It maintained its initial forecast at the time of the cumulative Q3 (April–December) earnings announcement.
- ▶ On November 9, 2021, the company publicly announced its medium-term management plan for the first time ever. This medium-term management plan clearly defines the company's vision for 2030 and outlines the growth strategy the company plans to implement over the five-year duration of the plan, which concludes with FY03/26. For FY03/26, the company has set a sales target of JPY53.0bn (versus actual sales of JPY39.3bn in FY03/21) and a recurring profit target of JPY12.0bn (versus actual recurring profit of JPY8.9bn in FY03/21). In addition to maintaining and enhancing its financial strength and profitability, the company also clearly indicated that it would aim to increase shareholder returns. However, the company additionally stated that it would periodically monitor and review expansion associated with its business operations targeting semiconductors (expected to be a major driver of results during this medium-term management plan), as it is highly subject to impact from changes in trends within the semiconductor market.
- ▶ In May 2024, the company announced the progress of its medium-term management plan. Two and a half years into the plan, progress, which had been ahead of schedule through FY03/23, fell behind due to adjustments in the semiconductor market. However, the company upheld its target for FY03/26, the final year of the plan, anticipating a recovery in orders as the semiconductor market stabilizes. Notably, the company revised its FY03/25 earnings forecast upward, signaling a return to progress exceeding the plan. While remaining cautious about semiconductor market trends, the company indicated it was on track to meet its FY03/26 targets.

Strengths and weaknesses

Shared Research believes that TOCALO's three main strengths are its portfolio of diverse surface treatments that makes the company the leader in a niche market; its ability to acquire top-class customers in major industries through joint development focused on meeting future needs; and stable earnings due to high domestic repeat demand for technologies with added value.

Shared Research has identified three notable weaknesses: a lack of peripheral technologies and mass production bases necessary to process large orders; lackluster cultivation of overseas markets; and low profitability of the Other Surface Treatments business. (See the "Strengths and weaknesses" section for details.)

Surface treatment technologies offered by TOCALO

Thermal spraying

A surface treatment technology that involves forming coatings on the workpieces by spraying them with molten metals, ceramics, cermet*, and other materials.

*Cermet: a composite material that is created by combining powder from hard compounds (metal carbide, nitride, etc.) with metal bonding materials, then sintering the mixture

Chemically defined zinc alloy coating (CDC-ZAC)

A chemical densification treatment for forming composite ceramic coatings through chemical reactions. It is characterized by excellent corrosion resistance and high degrees of hardness, which are unique properties of ceramics.

Toyota diffusion (TD) process

A surface treatment method that enables the formation of super-hard coatings. It is essential to the metallic mold industry as a surface treatment technology.

Plasma transferred arc (PTA) process

An overlay-welding method that utilizes plasma and produces excellent impact resistance.

Physical vapor deposition (PVD) process

This process minimizes heat deformation of the workpiece because it allows for a wide selection of temperature ranges, enabling treatments that best suit the substrate (the material to which spraying deposit is applied).

Source: Shared Research based on company data

Key financial data

Income statement	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25	FY03/26
(JPYmn)	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Est.
Orders	28,343	29,506	36,851	38,915	38,011	39,021	45,394	48,419	47,505	56,159	
YoY	4.4%	4.1%	24.9%	5.6%	-2.3%	2.7%	16.3%	6.7%	-1.9%	18.2%	
Order backlog	3,440	3,983	6,725	6,081	6,195	6,143	7,896	8,349	9,260	11,349	
YoY	-10.5%	15.8%	68.8%	-9.6%	1.9%	-0.8%	28.5%	5.7%	10.9%	22.6%	
Sales	28,746	28,964	34,109	39,558	37,896	39,294	43,813	48,144	46,735	54,231	57,000
YoY	10.3%	0.8%	17.8%	16.0%	-4.2%	3.7%	11.5%	9.9%	-2.9%	16.0%	5.1%
Gross profit	9,727	10,536	12,646	13,761	12,780	14,814	16,585	17,365	16,243	20,246	
YoY	8.5%	8.3%	20.0%	8.8%	-7.1%	15.9%	12.0%	4.7%	-6.5%	24.6%	
Gross profit margin	33.8%	36.4%	37.1%	34.8%	33.7%	37.7%	37.9%	36.1%	34.8%	37.3%	
Operating profit	4,806	5,646	7,110	7,741	6,550	8,890	10,255	10,558	9,197	12,271	13,000
YoY	5.2%	17.5%	25.9%	8.9%	-15.4%	35.7%	15.4%	3.0%	-12.9%	33.4%	5.9%
Operating profit margin	16.7%	19.5%	20.8%	19.6%	17.3%	22.6%	23.4%	21.9%	19.7%	22.6%	22.8%
Recurring profit	5,028	5,801	7,363	8,076	6,812	8,914	10,571	11,003	9,662	12,561	13,000
YoY	2.8%	15.4%	26.9%	9.7%	-15.7%	30.9%	18.6%	4.1%	-12.2%	30.0%	3.5%
Recurring profit margin	17.5%	20.0%	21.6%	20.4%	18.0%	22.7%	24.1%	22.9%	20.7%	23.2%	22.8%
Net income	3,016	4,070	4,836	5,441	4,404	5,463	6,909	7,350	6,326	8,052	8,330
YoY	-0.5%	34.9%	18.8%	12.5%	-19.1%	24.0%	26.5%	6.4%	-13.9%	27.3%	3.5%
Net margin	10.5%	14.1%	14.2%	13.8%	11.6%	13.9%	15.8%	15.3%	13.5%	14.8%	14.6%
Per-share data											
Issued shares FY-end (000 shares)	63,200	63,200	63,200	63,200	63,200	63,200	63,200	63,200	61,200	61,200	
EPS	49.6	67.0	79.6	89.5	72.5	89.9	113.6	120.8	105.5	135.5	140.1
EPS (fully diluted)	-	-	-	-	-	-	-	-	-	-	-
Dividend per share	18.8	21.3	26.3	30.0	25.0	35.0	45.0	50.0	53.0	68.0	70.0
Payout ratio	37.8%	31.7%	33.0%	33.5%	34.5%	38.9%	39.6%	41.4%	50.2%	50.2%	50.0%
DOE	4.2%	4.4%	4.9%	5.1%	3.9%	5.0%	5.9%	5.9%	5.8%	6.9%	
Book value per share	456.9	504.1	562.1	617.8	662.3	727.1	807.3	884.8	933.1	1,020.0	
Balance sheet (JPYmn)											
Cash and cash equivalents	8,197	8,387	9,234	12,660	16,889	16,227	17,110	16,912	16,905	14,483	
Total current assets	20,830	23,000	25,941	27,749	31,837	33,140	36,365	38,827	40,342	39,960	
Tangible fixed assets	16,151	20,305	24,589	27,395	26,786	28,594	30,740	33,037	35,125	37,449	
Investments and other assets	914	911	1,871	1,838	2,160	2,183	2,180	2,163	2,215	3,708	
Intangible assets	97	115	260	295	338	264	231	235	257	557	
Total assets	37,992	44,331	52,664	57,278	61,122	64,183	69,517	74,263	77,940	81,676	
Accounts payable	3,036	1,229	1,434	1,271	1,157	1,194	1,397	1,425	1,477	1,475	
Short-term debt	511	905	879	1,218	2,153	1,802	1,460	1,490	1,989	1,987	
Total current liabilities	7,877	8,884	14,054	13,362	11,323	12,193	13,334	14,272	14,308	14,506	
Long-term debt	117	2,419	1,701	3,337	6,045	4,267	2,825	1,449	3,114	1,888	
Total fixed liabilities	1,045	3,195	2,470	4,250	7,163	5,097	3,723	2,347	3,706	2,438	
Total liabilities	8,922	12,079	16,524	17,613	18,487	17,291	17,058	16,620	18,015	15,944	
Total liabilities and net assets	37,992	44,331	52,664	57,278	61,122	64,183	69,517	74,263	77,940	81,676	
Total interest-bearing debt	628	3,324	2,580	4,555	8,198	6,069	4,285	2,939	5,103	3,875	
Cash flow statement (JPYmn)											
Cash flows from operating activities	4,534	5,238	7,611	8,044	6,621	10,588	9,873	9,894	7,877	9,077	
Cash flows from investing activities	-895	-6,537	-4,681	-4,617	-4,217	-4,615	-5,044	-5,094	-4,634	-6,194	
Cash flows from financing activities	-1,743	1,581	-2,217	40	1,871	-3,798	-4,547	-4,561	-3,241	-5,124	
Financial ratios											
ROA (RP-based)	13.5%	14.1%	15.2%	14.7%	11.5%	14.2%	15.8%	15.3%	12.7%	15.7%	
ROE	11.2%	13.9%	14.9%	15.2%	11.3%	12.9%	14.8%	14.3%	11.6%	14.5%	
Equity ratio	73.3%	69.1%	64.9%	65.6%	65.9%	68.9%	70.6%	72.5%	71.2%	74.3%	
Capex, other (JPYmn)											
Capital expenditures	3,730	5,936	6,361	5,965	2,313	4,822	4,385	4,855	4,875	5,032	9,000
Depreciation	1,560	1,703	1,948	2,658	2,991	2,771	2,783	2,987	3,056	3,283	3,500
R&D expenses	862	834	905	1,003	1,159	1,296	1,296	1,400	1,534	1,569	1,700
R&D ratio	3.0%	2.9%	2.7%	2.5%	3.1%	3.3%	3.0%	2.9%	3.3%	2.9%	3.0%
Employee data (JPYmn)											
No. of employees (ex. temp. workers)	857	898	955	1,021	1,060	1,121	1,176	1,300	1,389		
Temporary workers	239	245	236	251	263	253	265	164	148		
Total no. of employees (incl. temp. workers)	1,080	1,123	1,163	1,239	1,304	1,344	1,414	1,402	1,493		
Sales per employee	26.6	25.8	29.3	31.9	29.1	29.2	31.0	34.3	31.3		
Operating profit per employee	4.5	5.0	6.1	6.2	5.0	6.6	7.3	7.5	6.2		

Source: Shared Research based on company data

Notes: Per- share data is adjusted for stock splits. Figures may differ from company materials due to differences in rounding methods.

Citing the application of the accounting standard for revenue recognition from FY03/22, the company has not released YoY growth rates, but Shared Research has provided estimates as the size of the impact appears to be limited.

Recent updates

TOCALO acquires land for new factory building at Nagayo Plant

2025-11-12

- ▶ On November 12, 2025, TOCALO Co., Ltd. announced that it had signed a land purchase agreement for the construction of a new factory building at its Nagoya Plant. The land is located in Chita, Aichi Prefecture, approximately 12km (about a 14-minute drive) from the existing Nagoya Plant.
- ▶ According to the company, the purpose of acquiring the land for the new factory is to expand production capacity and strengthen operations in its core Thermal Spraying business, particularly in growth areas such as aerospace, industrial machinery, and steel. The company stated that the new factory will reinforce its order-taking and production capabilities in the Chubu region. The transfer of land ownership and the start of construction are scheduled for April 2026, with completion planned for October 2027. The acquisition cost of the land has not been disclosed.

TOCALO announces interim dividend and revises year-end dividend forecast

2025-11-06

On November 6, 2025, TOCALO Co., Ltd. announced the payment of an interim dividend and a revision to its year-end dividend forecast for FY03/26.

(Click [here](#) for the company's release.)

Details of the interim dividend are as follows:

- Interim dividend: JPY37.0 per share (vs. previous company forecast of JPY34.0; FY03/25 actual: JPY30.0)

The revised year-end dividend forecast is as follows:

- Year-end dividend: JPY33.0 per share (vs. previous forecast of JPY36.0; FY03/25 actual: JPY38.0)
- Annual dividend: JPY70.0 per share (unchanged from previous forecast; FY03/25 actual: JPY68.0)

At the 1H results announcement, the company kept its full-year dividend forecast at JPY70.0 per share, as it also left its FY03/26 earnings forecast unchanged. This decision reflects the company's dividend policy, which targets a consolidated payout ratio of around 50%, a dividend on equity (DOE) of at least 5%, and stable shareholder returns. Since the company raised the interim dividend to JPY37.0 per share—above the initial forecast of JPY34.0—it now expects to pay a year-end dividend of JPY33.0 per share, below the original forecast of JPY36.0, in order to keep the full-year total unchanged.

Trends and outlook

Quarterly trends and results

Cumulative	FY03/25				FY03/26				FY03/26	
Cumulative (JPYmn)	Q1	Q1-Q2	Q1-Q3	Q1-Q4	Q1	Q1-Q2	Q1-Q3	Q1-Q4	% of Est.	FY Est.
Sales	12,864	25,863	39,903	54,231	15,151	28,311	42,621		74.8%	57,000
YoY	9.1%	12.6%	14.7%	16.0%	17.8%	9.5%	6.8%			5.1%
Gross profit	4,676	9,365	14,618	20,246	6,057	10,732	15,998			
YoY	13.7%	17.9%	22.8%	24.6%	29.5%	14.6%	9.4%			
Gross profit margin	36.3%	36.2%	36.6%	37.3%	40.0%	37.9%	37.5%			
SG&A expenses	1,989	3,981	6,128	7,975	2,219	4,213	6,469			
YoY	7.9%	9.2%	11.4%	13.2%	11.6%	5.8%	5.6%			
SG&A ratio	15.5%	15.4%	15.4%	14.7%	14.6%	14.9%	15.2%			
Operating profit	2,687	5,383	8,489	12,271	3,837	6,518	9,528		73.3%	13,000
YoY	18.5%	25.3%	32.6%	33.4%	42.8%	21.1%	12.2%			5.9%
Operating profit margin	20.9%	20.8%	21.3%	22.6%	25.3%	23.0%	22.4%			22.8%
Recurring profit	2,924	5,520	8,770	12,561	4,054	6,756	9,890		76.1%	13,000
YoY	22.9%	20.3%	30.3%	30.0%	38.6%	22.4%	12.8%			3.5%
Recurring profit margin	22.7%	21.3%	22.0%	23.2%	26.8%	23.9%	23.2%			22.8%
Net income	1,886	3,556	5,781	8,052	2,581	4,427	6,443		77.3%	8,330
YoY	22.5%	19.1%	35.1%	27.3%	36.9%	24.5%	11.5%			3.5%
Net margin	14.7%	13.7%	14.5%	14.8%	17.0%	15.6%	15.1%			14.6%
Cumulative	FY03/25				FY03/26					
Quarterly (JPYmn)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Sales	12,864	12,999	14,040	14,328	15,151	13,160	14,310			
YoY	9.1%	16.2%	18.7%	20.1%	17.8%	1.2%	1.9%			
Gross profit	4,676	4,689	5,253	5,628	6,057	4,675	5,266			
YoY	13.7%	22.5%	32.5%	29.7%	29.5%	-0.3%	0.2%			
Gross profit margin	36.3%	36.1%	37.4%	39.3%	40.0%	35.5%	36.8%			
SG&A expenses	1,989	1,992	2,147	1,847	2,219	1,994	2,256			
YoY	7.9%	10.6%	15.7%	19.5%	11.6%	0.1%	5.1%			
SG&A ratio	15.5%	15.3%	15.3%	12.9%	14.6%	15.2%	15.8%			
Operating profit	2,687	2,696	3,106	3,782	3,837	2,681	3,010			
YoY	18.5%	33.0%	47.3%	35.4%	42.8%	-0.6%	-3.1%			
Operating profit margin	20.9%	20.7%	22.1%	26.4%	25.3%	20.4%	21.0%			
Recurring profit	2,924	2,596	3,250	3,791	4,054	2,702	3,134			
YoY	22.9%	17.5%	51.9%	29.3%	38.6%	4.1%	-3.6%			
Recurring profit margin	22.7%	20.0%	23.1%	26.5%	26.8%	20.5%	21.9%			
Net income	1,886	1,670	2,225	2,271	2,581	1,846	2,016			
YoY	22.5%	15.5%	71.8%	11.0%	36.9%	10.5%	-9.4%			
Net margin	14.7%	12.8%	15.8%	15.9%	17.0%	14.0%	14.1%			

Source: Shared Research based on company data

Note: Figures may differ from company materials due to differences in rounding methods.

By segment	FY03/25				FY03/26				FY03/26	
Cumulative (JPYmn)	Q1	Q1-Q2	Q1-Q3	Q1-Q4	Q1	Q1-Q2	Q1-Q3	Q1-Q4	% of Est.	FY Est.
Sales	12,864	25,863	39,903	54,231	15,151	28,311	42,621		74.8%	57,000
YoY	9.1%	12.6%	14.7%	16.0%	17.8%	9.5%	6.8%			5.1%
Thermal Spraying (Parent)	9,659	19,325	29,536	39,213	10,795	19,961	29,891		76.1%	39,265
YoY	9.8%	15.4%	16.8%	15.8%	11.8%	3.3%	1.2%			0.1%
% of total	75.1%	74.7%	74.0%	72.3%	71.2%	70.5%	70.1%			68.9%
Domestic Subsidiaries	609	1,191	1,919	2,656	730	1,409	2,142		69.4%	3,088
YoY	-2.2%	-3.2%	3.2%	8.1%	19.9%	18.3%	11.6%			16.3%
% of total	4.7%	4.6%	4.8%	4.9%	4.8%	5.0%	5.0%			5.4%
Overseas Subsidiaries	1,861	3,890	6,230	9,319	3,004	5,649	8,654		72.0%	12,013
YoY	15.8%	13.7%	17.7%	28.4%	61.4%	45.2%	38.9%			28.9%
% of total	14.5%	15.0%	15.6%	17.2%	19.8%	20.0%	20.3%			21.1%
Other Surface Treatments	717	1,381	2,123	2,880	610	1,228	1,852		74.9%	2,474
YoY	-3.8%	-8.8%	-7.1%	-4.6%	-14.9%	-11.1%	-12.8%			-14.1%
% of total	5.6%	5.3%	5.3%	5.3%	4.0%	4.3%	4.3%			4.3%
Royalty income	17	73	92	161	11	62	81		50.6%	160
YoY	21.4%	35.2%	27.8%	14.2%	-35.3%	-15.1%	-12.0%			-0.6%
Segment profit (recurring profit)	2,924	5,520	8,770	12,561	4,054	6,756	9,890		76.1%	13,000
YoY	22.9%	20.3%	30.3%	30.0%	38.6%	22.4%	12.8%			3.5%
Recurring profit margin	22.7%	21.3%	22.0%	23.2%	26.8%	23.9%	23.2%			22.8%
Thermal Spraying (Parent)	2,217	4,324	6,831	8,868	2,620	4,167	6,242			
YoY	24.1%	36.4%	45.6%	41.1%	18.2%	-3.6%	-8.6%			
Recurring profit margin	23.0%	22.4%	23.1%	22.6%	24.3%	20.9%	20.9%			
Domestic Subsidiaries	98	157	227	349	117	154	242			

YoY	-14.0%	-44.7%	-46.0%	-29.1%	19.4%	-1.9%	6.6%	
Recurring profit margin	16.1%	13.2%	11.8%	13.1%	16.0%	10.9%	11.3%	
Overseas Subsidiaries	547	1,211	1,991	3,330	1,339	2,332	3,532	
YoY	45.5%	36.5%	44.5%	76.0%	144.8%	92.6%	77.4%	
Recurring profit margin	29.4%	31.1%	32.0%	35.7%	44.6%	41.3%	40.8%	
Other Surface Treatments	118	190	325	422	87	147	206	
YoY	-9.2%	-26.9%	-20.7%	-21.0%	-26.3%	-22.6%	-36.6%	
Recurring profit margin	16.5%	13.8%	15.3%	14.7%	14.3%	12.0%	11.1%	
Adjustments	-57	-363	-604	-409	-110	-46	-332	
By segment	FY03/25				FY03/26			
Quarterly (JPYmn)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Sales	12,864	12,999	14,040	14,328	15,151	13,160	14,310	
YoY	9.1%	16.2%	18.7%	20.1%	17.8%	1.2%	1.9%	
Thermal Spraying (Parent)	9,659	9,666	10,211	9,677	10,795	9,166	9,930	
YoY	9.8%	21.6%	19.5%	13.0%	11.8%	-5.2%	-2.8%	
% of total	75.1%	74.4%	72.7%	67.5%	71.2%	69.7%	69.4%	
Domestic Subsidiaries	609	582	728	737	730	679	733	
YoY	-2.2%	-4.1%	15.7%	23.2%	19.9%	16.7%	0.7%	
% of total	4.7%	4.5%	5.2%	5.1%	4.8%	5.2%	5.1%	
Overseas Subsidiaries	1,861	2,029	2,340	3,089	3,004	2,645	3,005	
YoY	15.8%	11.8%	25.2%	57.1%	61.4%	30.4%	28.4%	
% of total	14.5%	15.6%	16.7%	21.6%	19.8%	20.1%	21.0%	
Other Surface Treatments	717	664	742	757	610	618	624	
YoY	-3.8%	-13.8%	-3.8%	3.3%	-14.9%	-6.9%	-15.9%	
% of total	5.6%	5.1%	5.3%	5.3%	4.0%	4.7%	4.4%	
Royalty income	17	56	19	69	11	51	19	
YoY	21.4%	40.0%	5.6%	0.0%	-35.3%	-8.9%	0.0%	
Segment profit (recurring profit)	2,924	2,596	3,250	3,791	4,054	2,702	3,134	
YoY	22.9%	17.5%	51.9%	29.3%	38.6%	4.1%	-3.6%	
Recurring profit margin	22.7%	20.0%	23.1%	26.5%	26.8%	20.5%	21.9%	
Thermal Spraying (Parent)	2,217	2,107	2,507	2,037	2,620	1,547	2,075	
YoY	24.1%	52.2%	64.7%	28.0%	18.2%	-26.6%	-17.2%	
Recurring profit margin	23.0%	21.8%	24.6%	21.0%	24.3%	16.9%	20.9%	
Domestic Subsidiaries	98	59	70	122	117	37	88	
YoY	-14.0%	-65.3%	-48.5%	69.4%	19.4%	-37.3%	25.7%	
Recurring profit margin	16.1%	10.1%	9.6%	16.6%	16.0%	5.4%	12.0%	
Overseas Subsidiaries	547	664	780	1,339	1,339	993	1,200	
YoY	45.5%	29.9%	58.9%	160.5%	144.8%	49.5%	53.8%	
Recurring profit margin	29.4%	32.7%	33.3%	43.3%	44.6%	37.5%	39.9%	
Other Surface Treatments	118	72	135	97	87	60	59	
YoY	-9.2%	-44.6%	-10.0%	-21.8%	-26.3%	-16.7%	-56.3%	
Recurring profit margin	16.5%	10.8%	18.2%	12.8%	14.3%	9.7%	9.5%	
Adjustments	-57	-306	-241	195	-110	64	-286	

Source: Shared Research based on company data

Note: Figures may differ from company materials due to differences in rounding methods.

Orders	FY03/25				FY03/26			
Cumulative (JPYmn)	Q1	Q1-Q2	Q1-Q3	Q1-Q4	Q1	Q1-Q2	Q1-Q3	Q1-Q4
Orders	13,592	27,398	41,981	56,159	14,375	28,105	44,589	
YoY	10.7%	12.7%	16.0%	18.2%	5.8%	2.6%	6.2%	
Thermal Spraying (Parent)	10,327	20,313	30,750	40,205	10,153	19,546	31,502	
YoY	14.0%	14.7%	16.0%	15.3%	-1.7%	-3.8%	2.4%	
Domestic Subsidiaries	601	1,237	2,013	2,786	647	1,348	2,089	
YoY	-8.8%	-4.5%	4.1%	12.7%	7.7%	9.0%	3.8%	
Overseas Subsidiaries	1,906	4,412	6,983	10,274	2,967	5,994	9,182	
YoY	5.0%	17.4%	28.2%	43.6%	55.7%	35.9%	31.5%	
Other Surface Treatments	756	1,434	2,233	2,892	607	1,216	1,814	
YoY	1.6%	-8.1%	-2.6%	-3.9%	-19.7%	-15.2%	-18.8%	
Orders	FY03/25				FY03/26			
Quarterly (JPYmn)	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Orders	13,592	13,806	14,583	14,178	14,375	13,730	16,484	
YoY	10.7%	14.7%	22.9%	25.2%	5.8%	-0.6%	13.0%	
Thermal Spraying (Parent)	10,327	9,986	10,437	9,455	10,153	9,393	11,956	
YoY	14.0%	15.5%	18.6%	13.1%	-1.7%	-5.9%	14.6%	
Domestic Subsidiaries	601	636	776	773	647	701	741	
YoY	-8.8%	0.0%	21.6%	43.1%	7.7%	10.2%	-4.5%	
Overseas Subsidiaries	1,906	2,506	2,571	3,291	2,967	3,027	3,188	
YoY	5.0%	29.0%	52.3%	92.3%	55.7%	20.8%	24.0%	
Other Surface Treatments	756	678	799	659	607	609	598	
YoY	1.6%	-16.9%	9.2%	-8.1%	-19.7%	-10.2%	-25.2%	

Order backlog (JPYmn)	FY03/25				FY03/26			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Order backlog	10,005	10,869	11,430	11,349	10,585	11,207	13,398	
YoY	13.0%	11.5%	16.7%	22.6%	-6.7%	3.1%	17.2%	
Thermal Spraying (Parent)	7,691	8,010	8,237	8,015	7,373	7,600	9,626	
YoY	22.5%	14.9%	14.0%	14.1%	-4.1%	-5.1%	16.9%	
Domestic Subsidiaries	41	96	143	180	98	119	127	
YoY	-41.4%	-4.0%	33.6%	260.0%	139.0%	24.0%	-11.2%	
Overseas Subsidiaries	1,896	2,373	2,603	2,805	2,768	3,151	3,333	
YoY	-12.2%	3.8%	23.6%	51.6%	46.0%	32.8%	28.0%	
Other Surface Treatments	376	389	446	348	345	336	311	
YoY	8.7%	-0.5%	26.3%	3.6%	-8.2%	-13.6%	-30.3%	

Source: Shared Research based on company data

Note: Figures may differ from company materials due to differences in rounding methods.

Factors affecting RP change Cumulative (JPYmn)	FY03/25				FY03/26			
	Q1	Q1-Q2	Q1-Q3	Q1-Q4	Q1	Q1-Q2	Q1-Q3	Q1-Q4
Recurring profit	2,924	5,520	8,770	12,561	4,054	6,756	9,890	
YoY change	544	930	2,041	2,899	1,130	1,236	1,120	
Sales	521	1,239	2,352	3,626	1,483	1,639	2,150	
Variable cost ratio	249	466	887	1,779	244	366	388	
Personnel expenses	-149	-398	-808	-1,930	-449	-742	-898	
Depreciation	-29	-83	-146	-205	-97	-226	-356	
Forex impact	162	-75	9	-66	-291	-256	-247	
Other	-211	-219	-251	-304	240	455	83	
Factors affecting RP change Quarterly (JPYmn)	FY03/25				FY03/26			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Recurring profit	2,924	2,596	3,250	3,791	4,054	2,702	3,134	
YoY change	544	386	1,111	858	1,130	106	-116	
Sales	521	718	1,113	1,274	1,483	156	511	
Variable cost ratio	249	217	421	892	244	122	22	
Personnel expenses	-149	-249	-410	-1,122	-449	-293	-156	
Depreciation	-29	-54	-63	-59	-97	-129	-130	
Forex impact	162	-237	84	-75	-291	35	9	
Other	-211	-8	-32	-53	240	215	-372	

Source: Shared Research based on company data

Cumulative Q3 FY03/26 results (February 4, 2026)

Cumulative Q3 (April–December, nine months) results

- Sales: JPY42.6bn (+6.8% YoY)
- Operating profit: JPY9.5bn (+12.2% YoY)
- Recurring profit: JPY9.9bn (+12.8% YoY)
 - RPM: 23.2% (+1.2pp YoY)
- Net income attributable to owners of the parent: JPY6.4bn (+11.5% YoY)
- Orders: JPY44.6bn (+6.2% YoY)
- Order backlog: JPY13.4bn (+17.2% YoY)

Sales

- Sales in cumulative Q3 reached JPY42.6bn (+6.8% YoY), marking a record high for the period.
 - By segment, sales from Thermal Spraying (TOCALO), which accounted for around 71% of consolidated sales, increased only 1.2% YoY. This reflected a 6.3% YoY decline in orders for semiconductor and flat panel display (FPD) applications, the core business area, during 1H (April–September). As a result, cumulative Q3 sales for semiconductor and FPD applications were broadly flat at +0.3% YoY, which was the main factor behind the sluggish growth in Thermal Spraying. Within Thermal Spraying excluding semiconductor and FPD applications, sales for industrial machinery applications rose at a double-digit pace (+11.1% YoY), while sales for steelmaking-related applications increased 1.3% YoY, and sales for other applications declined 3.0% YoY.
 - Meanwhile, sales from Overseas Subsidiaries (mainly in China and Taiwan) increased 38.9% YoY; sales from Domestic Subsidiaries rose 11.6% YoY, while sales from Other Surface Treatments declined 12.8% YoY.

- ▶ Orders for semiconductor and FPD applications, which had been somewhat weak in 1H, rebounded in Q3 (October–December) with an 18.4% YoY increase and rose 2.3% YoY on a cumulative Q3 basis. In addition, the order backlog at end-Q3 increased 18.5% YoY, indicating the recovery and expansion trend is gaining momentum.

Recurring profit and RPM

- ▶ Consolidated recurring profit in cumulative Q3 (April–December) increased 12.8% YoY to JPY9.9bn, while RPM improved by 1.2pp YoY to 23.2%. Recurring profit of JPY9.9bn, like sales, marked a record high for cumulative Q3.
- ▶ By segment, profit from Thermal Spraying (TOCALO) declined 8.6% YoY to JPY6.2bn. Profit from Overseas Subsidiaries rose sharply by 77.4% YoY to JPY3.5bn, while profit from Domestic Subsidiaries increased 6.6% YoY to JPY242mn, and profit from Other Surface Treatments fell 36.6% YoY to JPY206mn. Although profit from Thermal Spraying remained at a high level despite the YoY decline, and profit from Other Surface Treatments was also weak, these declines were more than offset by the significant earnings expansion at Overseas Subsidiaries, leading to a record-high consolidated recurring profit. Segment profit is directly linked to recurring profit on the income statement.
- ▶ Operating profit increased 12.2% YoY to JPY9.5bn, while net income attributable to owners of the parent rose 11.5% YoY to JPY6.4bn; both figures marked record highs on a cumulative Q3 basis.
- ▶ The details will be updated after the scheduled interview with the company.

Company forecast

FY03/26 company forecast (out May 9, 2025)

	FY03/24			FY03/25			FY03/26		
(JPYmn)	1H Act.	2H Act.	FY Act.	1H Act.	2H Act.	FY Act.	1H Act.	2H Est.	FY Est.
Sales	22,971	23,764	46,735	25,863	28,368	54,231	28,311	28,689	57,000
YoY	-4.3%	-1.6%	-2.9%	12.6%	19.4%	16.0%	9.5%	1.1%	5.1%
Thermal Spraying (Parent)	16,748	17,111	33,859	19,325	19,888	39,213	19,961	19,304	39,265
Semiconductor and FPD equipment parts	9,737	9,820	19,557	11,395	12,719	24,114	11,989	13,198	25,187
Semiconductor equipment	8,997	9,022	18,019	10,698	11,671	22,369	11,016	12,573	23,589
FPD equipment	740	797	1,537	697	1,048	1,745	973	625	1,598
Industrial machinery	2,224	2,699	4,923	2,370	2,502	4,872	2,655	1,683	4,338
Steelmaking machinery	1,746	1,905	3,651	2,029	1,898	3,927	1,974	2,136	4,110
Other applications	3,039	2,688	5,727	3,530	2,768	6,298	3,341	2,289	5,630
Other Surface Treatments	1,515	1,504	3,019	1,381	1,499	2,880	1,228	1,246	2,474
Domestic Subsidiaries	1,230	1,227	2,457	1,191	1,465	2,656	1,409	1,679	3,088
Overseas Subsidiaries	3,422	3,835	7,257	3,890	5,429	9,319	5,649	6,364	12,013
Royalty income	54	87	141	73	88	161	62	98	160
Cost of sales	15,030	15,461	30,491	16,498	17,486	33,984	17,578		
Gross profit	7,940	8,303	16,243	9,365	10,881	20,246	10,732		
YoY	-11.1%	-1.6%	-6.5%	17.9%	31.0%	24.6%	14.6%		
Gross profit margin	34.6%	34.9%	34.8%	36.2%	38.4%	37.3%	37.9%		
SG&A expenses	3,644	3,401	7,046	3,981	3,994	7,975	4,213		
YoY	8.8%	-1.6%	3.5%	9.2%	17.4%	13.2%	5.8%		
SG&A ratio	15.9%	14.3%	15.1%	15.4%	14.1%	14.7%	14.9%		
Operating profit	4,295	4,902	9,197	5,383	6,888	12,271	6,518	6,482	13,000
YoY	-23.0%	-1.5%	-12.9%	25.3%	40.5%	33.4%	21.1%	-5.9%	5.9%
Operating profit margin	18.7%	20.6%	19.7%	20.8%	24.3%	22.6%	23.0%	22.6%	22.8%
Recurring profit	4,590	5,072	9,662	5,520	7,041	12,561	6,756	6,244	13,000
YoY	-23.9%	2.1%	-12.2%	20.3%	38.8%	30.0%	22.4%	-11.3%	3.5%
Recurring profit margin	20.0%	21.3%	20.7%	21.3%	24.8%	23.2%	23.9%	21.8%	22.8%
Net income	2,985	3,341	6,326	3,556	4,496	8,052	4,427	3,903	8,330
YoY	-23.8%	-2.6%	-13.9%	19.1%	34.6%	27.3%	24.5%	-13.2%	3.5%
Net margin	13.0%	14.1%	13.5%	13.7%	15.8%	14.8%	15.6%	13.6%	14.6%

Source: Shared Research based on company data

Notes: Figures may differ from company materials due to differences in rounding methods.

Citing the application of the accounting standard for revenue recognition from FY03/22, the company has not released YoY growth rates, but Shared Research has provided estimates as the size of the impact appears to be limited.

At its cumulative Q3 (April–December) results announcement on February 4, 2026, the company maintained its full-year forecast for FY03/26. The description below was prepared by Shared Research in June 2025 based on the

company's initial projections. As the company's forecast has been left unchanged, there are no revisions to Shared Research's commentary at this time; however, it will be updated as necessary following an interview with the company.

Overview of the company's forecast (initial forecast, announced on May 9, 2025) —

The company's forecast for FY03/26 is as follows.

- Sales: JPY57.0bn (+5.1% YoY)
 - Operating profit: JPY13.0bn (+5.9% YoY)
 - Recurring profit: JPY13.0bn (+3.5% YoY)
 - RPM: 22.8% (-0.4pp YoY)
 - Net income attributable to owners of the parent: JPY8.3bn (+3.4% YoY)
- ▶ The company forecast EPS of JPY140.1. It plans to pay an annual dividend of JPY70.0 per share (vs. JPY68.0 expected for FY03/25). Based on the company's forecast, the dividend payout ratio will be 50.0% (compared to 50.2% in FY03/25).

Overview

- ▶ The company forecasts record-high results across sales and all profit categories—including recurring profit—for the second consecutive year in FY03/26. While maintaining a cautious outlook in light of factors such as US tariff policies, rising geopolitical risks, and ongoing volatility in financial and currency markets, the company expects continued sales growth in its core semiconductor and FPD businesses. This expectation is supported by record-high order backlogs—including those at overseas subsidiaries—and resilient order activity projected for FY03/26. Although the company anticipates a modest YoY decline in RPM (down 0.4pp to 22.8%), it believes maintaining a relatively high margin will help sustain overall profit growth.

Sales

- ▶ The company forecasts consolidated sales will rise 5.1% YoY to JPY57.0bn in FY03/26, marking a new record high for the second consecutive year.
- ▶ By business segment, the company expects sales in the core Thermal Spraying segment to remain roughly flat, rising just 0.1% YoY. It projects sales in the Overseas Subsidiaries segment to grow 28.9% YoY and sales in the Domestic Subsidiary segment to increase 16.3% YoY, together driving overall sales growth. Within the Thermal Spraying segment, the company anticipates semiconductor/FPD-related sales will rise 4.4% YoY. For further details, see the sections "Sales forecasts by segment" and "Breakdown of sales forecasts for the Thermal Spraying (parent) segment" below.

Recurring profit and RPM

- ▶ The company projects recurring profit will rise 3.5% YoY to JPY13.0bn in FY03/26, driven mainly by higher semiconductor/FPD-related sales and increased sales from the Overseas Subsidiaries segment. As with sales, the company expects record-high recurring profit for the second consecutive year. However, due to higher personnel and depreciation costs, as well as the impact of a stronger yen based on its exchange rate assumptions, the company expects RPM to decline 0.4pp YoY to 22.8%.

Company forecast for 1H and 2H

- ▶ While the company projects full-year sales and profit growth in FY03/26, it takes a more cautious view of 2H. It expects sales and profit to increase YoY in 1H (April–September 2025), but forecasts sales growth and a profit decline in 2H (October 2025–March 2026). This contrasts with the outlook of Tokyo Electron Ltd. (TSE Prime: 8035), the company's largest customer, which anticipates a 2H-driven recovery in FY03/26—projecting sales growth of 2.5% in 1H, 10.7% in 2H, and 6.9% for the full year, with operating profit expected to decline 8.3% in 1H before rising 14.3% in 2H, resulting in full-year growth of 4.3%.

The company suggested a cautious outlook for 2H

- ▶ Tokyo Electron is not TOCALO's only customer—sales to Tokyo Electron accounted for 27.0% of total sales in FY03/24—so the differences between the company's forecasts and Tokyo Electron's performance outlook noted above should be viewed as reference only. However, the company has not denied that its outlook for 2H has been conservatively

- ▶ estimated in light of current macroeconomic conditions. In fact, the company's earnings summary states it remains cautious due to uncertainty over developments in US tariff policy, rising geopolitical risks, and volatility in financial and foreign exchange markets, indicating its 2H forecast is considerably conservative. On the other hand, the company has expressed a certain level of confidence in its 1H forecast, which calls for both sales and profit growth, as the forecast is based on its order backlog as of end-FY03/25—including a 15.9% YoY increase in semiconductor/FPD-related order backlog—as well as confirmed production plans from key customers.
- ▶ TOCALO includes its 1H projections in its financial statements and other documents, but it does not publish projections for 2H alone. Accordingly, Shared Research has calculated the company's 2H projections (included below) by subtracting its 1H projections from its full-year projections.
 - FY03/26 sales: JPY57.0bn (+5.1% YoY)
 - 1H (April–September): JPY28.0bn (+8.3% YoY)
 - 2H (October–March): JPY29.0bn (+2.2% YoY)
 - FY03/26 recurring profit: JPY13.0bn (+3.5% YoY)
 - 1H (April–September): JPY6.3bn (+14.1% YoY)
 - 2H (October–March): JPY6.7bn (-4.8% YoY)

The company forecast for 1H FY03/26 is as follows.

- Sales: JPY28.0bn (+8.3% YoY)
- Operating profit: JPY6.3bn (+17.0% YoY)
- Recurring profit: JPY6.3bn (+14.1% YoY)
 - RPM: 22.5% (+1.2pp YoY)
- Net income attributable to owners of the parent: JPY4.0bn (+13.6% YoY)

Annual dividend forecast

- ▶ TOCALO plans an annual dividend of JPY70.0 per share for FY03/26 (vs. a projected JPY68.0 for FY03/25), representing a dividend payout ratio of 50.0%. The plan aligns with the company's dividend policy, which targets a payout ratio of around 50% and a dividend on equity (DOE) of 5% or higher. Effective from FY03/24, the company revised its policy to enhance shareholder returns, shifting from its previous focus on returning one third or more of profits with stable dividends to the current targets. Following this change, the company posted a payout ratio of 50.2% in FY03/24 and expects the same for FY03/25.

Sales forecasts by segment

- ▶ TOCALO releases sales projections for its individual reporting segments. Effective from FY03/22, the company has established a Royalty Income segment in addition to its previously existing four segments: Thermal Spraying (parent), Domestic Subsidiary, Overseas Subsidiaries, and Other Surface Treatments. However, the company reported that its Royalty Income segment accounted for only 0.3% of sales in FY03/25.
- ▶ The company's sales projections for each segment (overall sales forecast of JPY57.0bn) are as follows.
 - Thermal Spraying (parent): JPY39.3bn (+0.1% YoY)
 - Domestic Subsidiary: JPY3.1bn (+16.3% YoY)
 - Overseas Subsidiaries: JPY12.0bn (+28.9% YoY)
 - Other Surface Treatments: JPY2.5bn (-14.1% YoY)
 - Royalty Income: JPY160mn (-0.8% YoY)
- ▶ TOCALO projects sales from its core Thermal Spraying segment (parent) to rise just 0.1% YoY to JPY39.3bn. Within the segment, the company expects sales to the semiconductor/FPD sector—its mainstay market—to increase 4.4% YoY to a record-high JPY25.2bn. Based on supply-demand information, including production plans from multiple major customers, the company expects favorable business conditions to continue in FY03/26. However, it also indicates the forecast is considerably conservative, reflecting uncertainty surrounding the current economic environment, particularly the potential impact of US tariff policy.

- ▶ The company forecasts industrial machinery-related sales within the Thermal Spraying segment to decline 11.0% YoY to JPY4.3bn in FY03/26, reflecting a reactionary drop following strong sales in FY03/25. However, it expects steelmaking-related sales to increase 4.6% YoY to JPY4.1bn. For other applications, the company projects a 10.6% YoY decline to JPY5.6bn. Based on these projections, it forecasts total Thermal Spraying segment sales—including semiconductor/FPD, industrial machinery, steelmaking, and other applications—to edge up 0.1% YoY to JPY39.3bn.

Overseas Subsidiaries segment

- ▶ Semiconductor/FPD-related operations are also central to the Overseas Subsidiaries segment. The company projects sales in this segment to surge 28.9% YoY to a record-high JPY12.0bn in FY03/26, marking the first time sales will exceed JPY10.0bn. This sharp increase reflects a recovery in the semiconductor markets in China and Taiwan, where its subsidiaries operate, as well as stronger order intake supported by enhancements to the local sales structure. However, the company expects only a limited boost from foreign exchange effects in FY03/26, due in part to differences in fiscal year-end timing. Since FY03/24, the company has been investing in new plant construction in both China and Taiwan, and plans to continue these capital expenditures into FY03/26. That said, the company expects new semiconductor-related plants to require considerable time to ramp up, including time for prototyping and obtaining customer certifications. As a result, it anticipates the impact of expanded production capacity will begin to materialize in FY03/27 or later.

Domestic Subsidiary segment

- ▶ The company forecasts sales from its Domestic Subsidiary segment to rise 16.3% YoY to JPY3.1bn in FY03/26. This increase reflects continued recovery in domestic automobile production and the full-year contribution of Terada Kosakusho, which was newly consolidated in Q3 FY03/25. The company expects the level of recovery in auto production seen in Q4 FY03/25 (+12.3% YoY) to continue into FY03/26. However, given the auto industry's high sensitivity to US tariff policy, the company indicates it has factored a certain level of risk into its FY03/26 forecast.

Breakdown of sales forecasts for the Thermal Spraying (parent) segment

- ▶ The company's sales forecast for its mainstay Thermal Spraying (parent) segment breaks down as follows.
 - Semiconductors and FPDs: JPY25.2bn (+4.4% YoY)
 - Semiconductors: JPY23.6bn (+5.5% YoY)
 - FPDs: JPY1.6bn (-8.4% YoY)
 - Industrial machinery-related: JPY4.3bn (-11.0% YoY)
 - Steelmaking-related: JPY4.1bn (+4.7% YoY)
 - Other businesses: JPY5.6bn (-10.6% YoY)

Factors affecting change in recurring profit

- ▶ The company has not disclosed by-segment breakdowns of its recurring profit forecast (JPY13.0bn). It projects recurring profit to rise by approximately JPY438mn from JPY12.6bn in FY03/26 to JPY13.0bn, affected by the following factors.
 - 1) upward impact of JPY1.9bn due to growth in sales
 - 2) upward impact of JPY342mn due to a lower variable cost ratio
 - 3) downward impact of JPY1.0bn due to an increase in personnel expenses
 - 4) downward impact of JPY217mn due to an increase in depreciation
 - 5) downward impact of JPY360mn due to forex effects
 - 6) downward impact of JPY160mn due to other factors

Sources of positive recurring profit impact

- ▶ TOCALO projects consolidated recurring profit to rise 3.5% YoY (up JPY438mn) to JPY13.0bn in FY03/26. The primary driver of this growth is an expected JPY1.9bn profit contribution from higher sales. This sales increase is mainly supported by growth in semiconductor/FPD-related thermal spraying operations and expanded sales at overseas subsidiaries.

Sales from the Overseas Subsidiaries segment will likely contribute to overall performance

- ▶ In addition to higher sales, TOCALO expects a JPY342mn profit contribution in FY03/26 from a decline in its variable cost ratio. This improvement reflects not only lower ratios of process material and outsourcing costs, but

- ▶ also a more favorable sales mix driven by growth in high-margin semiconductor/FPD-related sales. The company also expects strong profit contribution from expanded sales in its Overseas Subsidiaries segment, which remains highly profitable. In FY03/25, this segment recorded a profit margin of 35.7%, 13.1pp higher than the 22.6% margin in the Thermal Spraying segment. TOCALO believes an increasing share of sales from this high-margin segment will serve as an even greater driver of profit growth going forward.
- ▶ According to the company, the profit margin for semiconductor/FPD-related operations within the Thermal Spraying segment is significantly higher than the segment average of 22.6% and is broadly in line with that of the Overseas Subsidiaries segment.

Sources of negative recurring profit impact

- ▶ TOCALO projects the largest negative factor affecting recurring profit in FY03/26 will be a JPY1.0bn increase in personnel expenses. Excluding the one-time impact in FY03/25 from the full amortization of actuarial differences under retirement benefit accounting, the company estimates the actual profit impact of higher personnel expenses to be JPY737mn. According to the company, this increase mainly reflects ongoing wage hikes and an increase in headcount. It also indicates a rise in overtime costs driven by higher operating rates in semiconductor-related operations is partly reflected in the forecast.
- ▶ The company also expects negative recurring profit effects (in terms of YoY change) from growth in depreciation, unfavorable forex impact, and other factors other than expansion in personnel expenses. Due to its conservative exchange rate assumptions, the company anticipates both a decline in foreign exchange gains (booked as non-operating income) and less favorable recurring revenue impact from conversion differences associated with overseas subsidiaries. However, the company does not believe that these factors will have any particularly significant impact on earnings.
- ▶ The company anticipates a negative recurring profit impact of JPY160mn in FY03/26 from "other factors," primarily due to an increase in R&D expenses and higher electricity costs. Of this total, the company expects R&D expenses to rise JPY131mn YoY, suggesting the impact from electricity cost increases will be limited. Given the nature of thermal spraying operations, electricity use is unavoidable. However, the company notes it has made conservative estimates, taking into account uncertainties such as the continuation of government subsidy programs and fluctuations in crude oil prices, which could affect electricity costs.

Capital expenditures, depreciation, and R&D expenses

Plans for FY03/26 are as follows.

- Capital expenditures: JPY9.0bn (actual expenditures for FY03/25: JPY5.0bn)
- Depreciation: JPY3.5bn (actual depreciation for FY03/25: JPY3.3bn)
- R&D: JPY1.7bn (actual R&D for FY03/25: JPY1.6bn)

Breakdown of projected FY03/26 capital expenditures

- ▶ Capital expenditures for FY03/25 totaled JPY5.03bn, up from JPY4.9bn in FY03/24 and exceeding JPY5.0bn for the first time in six fiscal years. In its initial plan announced in May 2024, the company projected FY03/25 capex of JPY6.4bn. However, due to procurement delays for certain materials and equipment, as well as slower-than-expected construction progress, actual spending fell short of plan. The company attributes the shortfall primarily to timing differences and maintains that its overall capex expansion plans remain unchanged.
- ▶ For FY03/26, TOCALO plans capital expenditures of JPY9.0bn, up 78.9% YoY. This would exceed the previous record of JPY6.4bn set in FY03/18, reaching an all-time high. The breakdown of the planned JPY9.0bn is as follows.
 - TOCALO (parent): JPY7.0bn
 - Domestic Subsidiary: JPY800mn
 - Overseas Subsidiaries: JPY1.2bn
- ▶ The largest portion of the planned capex will be allocated to the parent company, TOCALO, which plans to construct new buildings at its Tokyo and Kitakyushu plants, expand company-wide production capacity, enhance operational efficiency, and strengthen R&D facilities. For FY03/26, the company intends to increase capital investment at the parent level in anticipation of a faster-paced recovery in semiconductor demand over the longer term.

- ▶ TOCALO plans to invest in expanding production capacity at domestic subsidiaries and launching new plants at overseas subsidiaries. Since FY03/23, the company has been working to expand production capacity at its overseas subsidiaries—primarily through the construction of a new plant in Taiwan—and indicates that total investment in this initiative has reached approximately JPY4.0bn. For FY03/26, the company plans to continue making proactive capital investments, including additional capacity expansion.

Depreciation outlook

- ▶ TOCALO projects depreciation expenses to reach JPY3.5bn in FY03/26, up JPY217mn from the FY03/25 result of JPY3.3bn and marking a new record high. While this increase will act as a drag on profits, the impact has already been factored into the company's forecast. Given the company's ongoing capital investment plans (see previous section), TOCALO also expects depreciation expenses to remain elevated in FY03/27 and beyond. The company forecasts R&D expenses of JPY1.7bn in FY03/26, equivalent to 3.0% of projected sales. This would represent a 0.1pp increase from the 2.9% ratio in FY03/25 and remains in line with the company's basic policy of maintaining an R&D-to-sales ratio around 3%.

Initial company forecast and results

Results vs. Initial Est.	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25	FY03/26
(JPYmn)	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.
Sales (Initial Est.)	27,500	28,000	30,000	39,000	36,000	36,500	41,000	47,500	47,000	51,000	57,000
Sales (Results)	28,746	28,964	34,109	39,558	37,896	39,294	43,813	48,144	46,735	54,231	
Results vs. Initial Est.	4.5%	3.4%	13.7%	1.4%	5.3%	7.7%	6.9%	1.4%	-0.6%	6.3%	
Operating profit (Initial Est.)	4,866	4,440	5,900	7,900	5,200	5,800	9,000	11,000	8,700	10,500	13,000
Operating profit (Results)	4,806	5,646	7,110	7,741	6,550	8,890	10,255	10,558	9,197	12,271	
Results vs. Initial Est.	-1.2%	27.2%	20.5%	-2.0%	26.0%	53.3%	13.9%	-4.0%	5.7%	16.9%	
Recurring profit (Initial Est.)	5,000	4,600	6,000	8,200	5,500	6,000	9,000	11,000	8,700	10,500	13,000
Recurring profit (Results)	5,028	5,801	7,363	8,076	6,812	8,914	10,571	11,003	9,662	12,561	
Results vs. Initial Est.	0.6%	26.1%	22.7%	-1.5%	23.9%	48.6%	17.5%	0.0%	11.1%	19.6%	
Net income (Initial Est.)	3,222	2,978	4,000	5,400	3,520	3,880	5,800	7,184	5,800	6,880	8,330
Net income (Results)	3,016	4,070	4,836	5,441	4,404	5,463	6,909	7,350	6,326	8,052	
Results vs. Initial Est.	-6.4%	36.7%	20.9%	0.8%	25.1%	40.8%	19.1%	2.3%	9.1%	17.0%	

Source: Shared Research based on company data

Notes: Figures may differ from company materials due to differences in rounding methods

Medium-term management plan

Medium-term management plan

Medium-term management plan	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25	FY03/26	5-year
(JPYmn)	Act.	Act.	Act.	Act.	Act.	MTP	CAGR
Sales	39,294	43,813	48,144	46,735	54,231	53,000	6.2%
YoY	3.7%	11.5%	9.9%	-2.9%	16.0%		
semiconductors	18,176	20,643	23,260	19,557	24,114	26,000	7.4%
YoY	28.9%	13.6%	12.7%	-15.9%	23.3%		
% of total	46.3%	47.1%	48.3%	41.8%	44.5%	49.1%	
iron/steel industrial machinery	21,118	23,170	24,884	27,178	30,117	27,000	5.0%
YoY	-11.2%	9.7%	7.4%	9.2%	10.8%		
% of total	53.7%	52.9%	51.7%	58.2%	55.5%	50.9%	
Recurring profit	8,914	10,571	11,003	9,662	12,561	12,000	6.1%
YoY	30.9%	18.6%	4.1%	-12.2%	30.0%		
Recurring profit margin	22.7%	24.1%	22.9%	20.7%	23.2%	Around 22.6%	
Equity ratio	68.9%	70.6%	72.5%	71.2%		70%	
ROE	12.9%	14.8%	14.3%	11.6%	12.0%	15.0%	
DOE	5.0%	5.9%	5.9%			Around 5%	
Capital expenditures	4,822	4,385	4,855	4,875	5,032	25,000 - 35,000	5,000 - 7,000 /year
Depreciation	2,771	2,783	2,987	3,056	3,283		
R&D expenses	1,296	1,296	1,400	1,534	1,569	1,590	
R&D ratio	3.3%	3.0%	2.9%	3.3%	2.9%	Around 3%	

Source: Shared Research based on company data.

*Figures may differ from company materials due to differences in rounding methods. Please note that sales generated through thermal spraying for purposes not involving semiconductors (iron and steel, industrial machinery, etc.) in FY03/21 (JPY21.1bn) include JPY20.9bn in sales categorized according to the company's previous reporting segment structure and JPY221mn in sales stemming from the Royalty Income segment. Accordingly, this JPY21.1bn figure differs from the figure of approximately JPY20.9bn indicated by data from the company.

Achieved the medium-term management plan targets ahead of schedule in FY03/25

- ▶ The company has already exceeded its FY03/26 final-year targets ahead of schedule in FY03/25, but it plans to complete the current medium-term management plan without any updates. It expects to announce its next medium-term management plan around May 2026, when it discloses results for FY03/26. In the next plan, the company intends to pursue further sales growth by expanding production capacity both in Japan and overseas, while also aiming to improve profitability and enhance shareholder returns.

Medium-term management plan progress report (last updated on May 16, 2024)

- ▶ On May 16, 2024, the company provided an update on the progress being made on its first medium-term management plan announced the previous year (November 2021). This is presented below. The medium-term management plan (comparison of numerical targets) began with actual results for FY03/21. CAGR indicates the average annual growth rate.

Sales

- **Target for FY03/26: JPY53.0bn**
 - Company forecast for FY03/25: JPY53.0bn
 - Five-year CAGR forecast set forth in the medium-term management plan: 6.2%
 - CAGR forecast for the four-year period ending with FY03/25: 7.8%
- ▶ In its May 2024 progress briefing, the company reported that projected sales growth through FY03/25 is outpacing the targets set in its medium-term management plan, with the JPY53.0bn target now expected to be achieved in FY03/25, one year ahead of the plan's final year. However, as the recovery in the semiconductor market still requires further evaluation, the company has opted not to revise its medium-term management plan (upward) as of October 31, 2024.

Semiconductor-related sales

- **Target for FY03/26: JPY26.0bn**
 - Company forecast for FY03/25: JPY23.8bn
 - Five-year CAGR forecast set forth in the medium-term management plan: 7.4%
 - CAGR forecast for the four-year period ending with FY03/25: 7.0%
- ▶ In its May 2022 progress briefing, semiconductor-related sales were expanding at a rate of just under twice the target specified in the medium-term management plan. However, the company emphasized its stance that it will be difficult to figure out when to adjust semiconductor-related sales.
 - ▶ However, given the decline in demand (adjustment phase) in the semiconductor market that became noticeable from 2H FY03/23, the CAGR through FY03/24 is expected to fall short of the initial plan. Still, the company maintained its initial forecast, having judged that the adjustment in the semiconductor market is only temporary.
 - ▶ Given the emergence of recovery within the semiconductor market, the company indicated it had made no changes to the projections in its medium-term management plan when announcing its May 16, 2024 progress report.

Sales related to steel-making, industrial machinery and other non-semiconductor items

- **Target for FY03/26: JPY27.0bn**
 - Company forecast for FY03/25: JPY29.2bn
 - Five-year CAGR forecast set forth in the medium-term management plan: 5.0%
 - CAGR forecast for the four-year period ending with FY03/25: 8.4%
- ▶ The company also states that sales other than semiconductor-related are also progressing over the targets of the medium-term management plan.

Recurring profit

- Target for FY03/26: JPY12.0bn
 - Company forecast for FY03/25: JPY11.5bn
 - Five-year CAGR forecast set forth in the medium-term management plan: 6.1%
 - CAGR forecast for the four years ending with FY03/25: 6.6%
- ▶ The company acknowledged that its progress toward achieving the initial recurring profit target for FY03/25 (JPY10.5bn) had been behind schedule. However, after revising the target upward to JPY11.5bn, it indicated that it is no longer behind. Furthermore, based on noticeably rebounding conditions within the semiconductor market, the company anticipates full-fledged recovery in sales generated through semiconductor-related operations. In accordance with this assumption, the company has indicated that it will target recurring profit of JPY12.0bn in FY03/26, the final year of its medium-term management plan. The company is confident that growth in its sales will tend to outpace recovery in the semiconductor market. Accordingly, the company has concluded that its expectation of profit growth generated through sales expansion is sufficiently justifiable.
- ▶ At the same time, various costs (for materials, personnel, etc.) have grown markedly since the time at which the company formulated its medium-term management plan, and the company views this cost growth as cause for concern. Due to this cost growth, the company concludes that achieving its target recurring profit margin of 22.6% for FY03/26 (as set forth in its medium-term management plan) will be decidedly challenging; for FY03/25, the company projects a recurring profit margin of 20.6%.

Finances/shareholder returns

- ▶ The company has noted that it is making steady progress with respect to each of the goals (maintaining an equity ratio of around 70%, maintaining ROE and its 15% target, a recurring profit margin of 20%, stable dividends with a dividend payout ratio of 33% or more, DOE target of 5%, etc.) set forth in the medium-term management plan.
- ▶ In May 2023, the company announced a change to its dividend policy to enhance the return of profits to shareholders. From FY03/24, the company aims for a consolidated dividend payout ratio of about 50% (previously, it had set a target of about one-third).

Capital expenditures, R&D expenses

- ▶ The company recognizes that it has transitioned to the following plan as indicated in the medium-term management plan.
- Capital expenditures: A total of JPY25bn to JPY35bn over the five years of the medium-term management plan
 - R&D expenses: Maintained at about 3% of consolidated sales

Summary of medium-term management plan (last updated in May 2024)

- ▶ On November 9, 2021, the company announced its medium-term management plan. The plan covers the five-year period extending from FY03/22 through FY03/26 (comparisons have been made using FY03/21 results as a point of reference), but the company also views it as a process toward achieving its long-term vision, which is based upon ideal circumstances the company aims to establish by 2030. This medium-term management plan is the first that the company has announced to the public. TOCALO is using the occasion of its 70th anniversary to present its vision for the future to its stakeholders.
- ▶ The company has identified 10 issues based on analyses of its surrounding business environment and major changes affecting this environment. Having identified these issues, the company established its vision of becoming a company that "contributes to a prosperous future for people and nature" by 2030 through its surface treatments, which primarily consist of thermal spraying. As a part of this process, the company has set the following performance targets for FY03/26 (five years after the beginning of the plan) using FY03/21 results as a launch pad (basis of comparison). The company will aim to achieve the targets in this plan by expanding existing businesses and by branching into new business areas.
- Sales: JPY53.0bn (versus JPY39.2bn in FY03/21)
 - JPY26.0bn of this total to be generated through thermal spraying for semiconductors (versus JPY18.2bn in FY03/21)

- JPY27.0bn of this total to be generated through thermal spraying for non-semiconductor-related purposes, such as iron and steel and industrial machinery (versus JPY21.1bn in FY03/21)
 - Recurring profit: JPY12.0bn (versus JPY8.9bn in FY03/21)
- ▶ Sales generated through thermal spraying for purposes not involving semiconductors (iron and steel, industrial machinery, etc.) in FY03/21 (JPY21.1bn) include JPY20.9bn in sales categorized according to the company's previous reporting segment structure and JPY221mn in sales stemming from the Royalty Income segment. Accordingly, this JPY21.1bn figure differs from the figure of approximately JPY20.9bn indicated by data from the company.
- ▶ In addition these earnings target, the company also aims to maintain or exceed current levels associated with financial strength, ROE and other measurements of earning power, and dividend payout ratio.

Awareness of current circumstances (business environment, etc.)

Awareness of issues (10 issues)

- ▶ In formulating this medium-term management plan, which is the first that has been announced to the public, the company first examined its surrounding earnings environment. Then, the company identified the following 10 issues with the goals of further expanding the business domain associated with its core thermal spraying technologies and enhancing its four strengths (development of advanced functional coatings, flexible production support, capacity for providing solutions in response to customer needs, and robust financial strength capable of supporting development investment).
- ▶ When identifying these 10 issues, the company established a table in which the horizontal X-axis consisted of four customer categories (semiconductors and FPDs, iron and steel, energy and environment, and industrial machinery and others) and one additional category that applies to all of these customer categories (management and operation). Meanwhile, the vertical Y-axis included three categories: market development, development, and manufacturing (production). Then, the issues were mapped out across this table using a cross-functional format that compares the five categories on the X-axis and the three categories on the Y-axis. The 10 issues identified by the company in this way are shown below.
- (1) Conversion of customers into partners
 - (2) Targeting of markets aimed at diversifying sources of revenue
 - (3) Enhancement of service system
 - (4) Global expansion
 - (5) Establishment of technological superiority
 - (6) Enhancement of manufacturing processes
 - (7) Further enhancement of quality control systems
 - (8) Reduction of environmental impact
 - (9) Creation of comfortable working environments
 - (10) Enhancement of internal controls

TOCALO's medium-term management plan was formulated and is being executed based on the company's goal of addressing these 10 issues.

Renewed awareness concerning the company's management philosophy and vision and formulation of a corporate mission

- ▶ While formulating its medium-term management plan, the company reaffirmed its management philosophy and vision and defined its corporate mission. Then, based on changes in the global earnings environment (which the company refers to as "megatrends"), the company decided upon the future direction of its growth strategy. In order to solidify this growth strategy, the company has decided to further develop its current business model.

Management philosophy and long-term vision

- ▶ The company's management philosophy is to "contribute to society as a specialized manufacturer of surface treatment processes centered on thermal processing and establish ourselves as a corporate group with advanced technologies and a highly profitable structure." Shared Research has selected some of its key points and summarized them below.

- ▶ When formulating its medium-term management plan, the company established a new long-term vision for 2030: "contribute to a prosperous future for people and nature." In terms of content, this vision is essentially the same as the company's current corporate philosophy. However, by making it clearer and more concise than the latter, the company has reaffirmed its commitment to both the ideals it has always held and the achievement of its future goals.

Mission

- ▶ The company has established a mission to facilitate the realization of its renewed management philosophy and vision of contributing to a "prosperous future for people and nature." The mission of TOCALO's corporate group is "to enhance corporate value through continuous growth with an emphasis on ESG." In addition, the company has adopted to the following four initiatives to facilitate the execution of this essential mission.
 1. Create high-quality and high value-added products (films) and provide them to our customers
 2. Contribute to technologies that help in the preservation of the global environment
 3. Make employees and their families proud to work energetically and safely at TOCALO
 4. Be trusted by customers, shareholders, business partners, and local communities forever
- ▶ By implementing these four initiatives, the company aims to achieve its absolute mission of enhancing "corporate value through continuous growth with an emphasis on ESG."

Advantageous future direction and three keys to growth as observed from the perspective of megatrends

- ▶ In formulating its medium-term management plan, the company deeply analyzed changes affecting the global earnings environment ("megatrends"), including the launch of efforts targeting the achievement of carbon neutrality by 2050. Based on these analyses, the company has identified the following three megatrends as keys to future growth and identified the most advantageous direction it should take moving forward.
 - Rising seriousness of environmental issues
 - Technological shift toward information & communication technology (ICT) and digitalization
 - Resource and food shortages and population growth

In response to these three megatrends, the company plans to actively implement growth strategies, develop new products, and cultivate new markets. In addition, the company has identified specific themes for each of these three megatrends.

- With regard to the rising seriousness of environmental issues, the company identified the following three themes: adopting the use of non-fossil fuels, generating renewable energy, and establishing smart grids (dispersed power sources).
- The three themes the company selected for the technological shift toward ICT and digitalization were the arrival of the big data era, high-speed communication, and the spread of electric vehicles (EVs).
- In addition, the company chose the development of smart agriculture, the improvement of medical technology, and the diversification and expansion of recycling technology as its three themes for resource and food shortages and population growth.

Two initiatives of particular focus (growth strategies)

- ▶ Finally, the company says that it will focus on "People and the Environment (Nature)" as two core initiatives (growth strategies) on which its corporate group will place particular emphasis. In the area of "people," the company plans to develop applications for the semiconductor and FPD industries, and in the area of "environment (nature)," it plans to develop applications in the fields of energy and materials. However, these two growth strategies will be difficult to implement successfully within a short period of time. Accordingly, the company has stated that it is not attempting to achieve concrete results through these strategies by FY03/26; rather, it has presented them with the intention of indicating its future direction.
- ▶ The company also stated that it would work on "further developing its business model." In accordance with this intention, the company has grouped the 10 issues identified above into several thematic categories. "Conversion of customers into partners" and "targeting of markets aimed at diversifying sources of revenue" have been left to stand as separate and independent themes. "Enhancement of service system" and "global expansion" have been grouped

- ▶ under the theme "enhancement of market development." "Establishment of technological superiority" has been placed under its own theme, "strengthen technology development systems." Meanwhile, the company grouped "enhancement of manufacturing processes," "further enhancement of quality control systems," and "reduction of environmental impact" under the theme "advancement of manufacturing." Finally, "creation of comfortable working environments" and "enhancement of internal controls" were included under the theme "sustainable growth toward a 100-year company."

Numerical targets associated with the company's medium-term management plan

- ▶ Within its medium-term management plan, the company has set earnings targets for FY03/26, which is a key point in the the course the company will take to achieve its long-term vision for 2030. The launch pad (basis for comparison) will be results generated in FY03/21.

Earnings targets for FY03/26

Note: The FY03/26 targets below are those set forth in the medium-term management plan announced in November 2021. For the company's FY03/26 forecasts, please refer to the "Company forecast" section.

- Sales: JPY53.0bn (versus JPY39.0bn in FY03/21; growth of 35.8% over five years)
- Recurring profit: JPY12.0bn (versus JPY8.9bn in FY03/21; growth of 34.6% over five years)
- Recurring profit margin: 22.6% (versus 22.8% in FY03/21; decrease of 0.2pp over five years)

Breakdown of JPY53.0bn sales target

- Semiconductor-related sales: JPY26.0bn (versus JPY18.2bn in FY03/21; growth of 43.0% over five years)
 - Other sales (related to iron and steel, industrial machinery, etc.): JPY27.0bn (versus JPY21.1bn in FY03/21; growth of 27.9% over five years)
- ▶ The basis for comparison the company is using to calculate rates of change in business performance over the five-year duration of its medium-term management plan is results generated in FY03/21 (the launch pad year). However, in FY03/2021, a decrease in retirement benefit expenses stemming from one-time factors boosted recurring profit by the same amount (approximately JPY358mn). Therefore, the company believes that its recurring profit in FY03/21 was effectively about JPY8.6bn, and maintains that this figure should be used as a basis for comparison. Using this JPY8.6bn figure as a comparative launch pad, Shared Research estimates that recurring profit will grow at a rate of 40.4% over the course of the five-year plan. The company projects that its recurring profit margin in FY03/26 will decline by 0.2pp compared to FY03/2021, but as discussed later on in this report, this prediction was made because the company expects a temporary increase in its depreciation burden due to ongoing high levels of capital investment. This projected recurring profit margin is still commensurate with the benchmark of 20% set by the company as a profitability target.
- ▶ Although the company did not disclose specific figures, it established sales targets for new businesses in fields such as agriculture and medical care in FY03/26. Fundamentally, these new businesses do not constitute a part of the company's current (existing) businesses. The company has also indicated that it will divide its existing businesses into three categories: businesses to be expanded (semiconductor, FPD, and environment and energy-related operations), businesses to be downsized, and businesses to be maintained. The TOCALO did not specifically indicate which businesses it plans to downsize or maintain.
- ▶ TOCALO does not, however, view these earnings targets as goals that it is fully committed to achieving, but rather as benchmarks for sustainable growth. The company maintains this viewpoint because results generated through its semiconductor-related operations, which will drive its performance moving forward, are highly dependent on market trends. Currently, the company's semiconductor-related sales are growing in line with expansion in the market for wafer fab equipment used in front-end processes associated with semiconductor manufacturing equipment. However, past trends have proven that performance within the semiconductor market varies greatly between periods of expansion and contraction, and the company has accordingly decided to closely monitor market trends and revise its forecasts on a regular basis.

Capital expenditures and research and development expenses

Capital expenditures

- ▶ In order to generate this expansion in earnings, the company will continue to make high levels of capital investment: over the five years ending with FY03/26, the company plans to invest between JPY25.0bn and JPY35.0bn (between JPY5.0bn and JPY7.0bn per year) to maintain and improve its technological superiority. Listed below is a summary of the company's most recent capital expenditures.

- FY03/16: JPY3.7bn
- FY03/17: JPY5.9bn
- FY03/18: JPY6.4bn
- FY03/19: JPY6.0bn
- FY03/20: JPY2.3bn
- FY03/21: JPY4.8bn
- FY03/22: JPY4.4bn
- FY03/23: JPY4.9bn
- FY03/24: JPY4.9bn
- FY03/25: JPY5.0bn
- FY03/26 (projected): JPY9.0bn

In its medium-term management plan, the company projects that capital expenditures will remain at roughly the same peak level at which trended during the period spanning from FY03/17 through FY03/19 for the next five years (including FY3/2022).

These high levels of capital expenditure are mainly related to efforts aimed at increasing semiconductor production, new technological processes, and production efficiency. The company has indicated how total capital expenditure will be divided among these categories, but Shared Research assumes that the largest share of this total will be allocated to efforts aimed at increasing semiconductor production for at least the first two to three years of the plan (which include FY03/22).

Research and development expenses

- ▶ Additionally, the company has indicated that it will maintain R&D expenses at a rate of about 3% of consolidated sales. Included below is a summary of the company's most recent research and development expenses.

- FY03/20: JPY1.2bn (3.0% of sales)
- FY03/21: JPY1.3bn (3.3%)
- FY03/22: JPY1.3bn (3.0%)
- FY03/23: JPY1.4bn (2.9%)
- FY03/24: JPY1.5bn (3.3%)
- FY03/25: JPY1.6bn (2.9%)
- FY03/26 (projected): JPY1.7bn (3.0% of sales)

If we were to calculate projected research and development expenses in FY03/26 (the final year of the five-year medium-term management plan) using this ratio of 3%, they would amount to approximately JPY1.6bn.

Establishment of financial targets and shareholder return goals

In its medium-term management plan, the company has also set financial targets and shareholder return goals.

Maintenance of a strong financial position

- The company aims to maintain an equity ratio of about 70% and continue to conduct effectively debt-free management.
- Most recently, the company reported equity ratios of 65.9% in FY03/20, 68.9% in FY03/21, 70.6% in FY03/22, and 72.5% in FY03/23.

Maintenance of earning power (ROE, recurring profit margin, etc.)

- Target the achievement and maintenance of an ROE of 15%

- Most recently, the company reported ROEs of 11.3% in FY03/20, 12.9% in FY03/21, 14.8% in FY03/22, and 14.3% in FY03/23.
- Target the achievement and maintenance of a recurring profit margin of 20%
- Most recently, the company reported recurring profit margins of 17.9% in FY03/20, 22.8% in FY03/21, 24.1% in FY03/22, and 22.9% in FY03/23, and forecast 18.5% in FY03/24.
- Maintain and improve EPS

Dividend payout ratio

- **Issue stable dividends equivalent to at least one-third of its net income (Note: In May 2023, the company announced a change to its dividend policy to enhance the return of profits to shareholders. It aims for the consolidated payout ratio of about 50% starting in FY03/24.)**
- Most recently, the company generated dividend payout ratios of 34.5% in FY03/20, 38.9% in FY03/21, 39.6% in FY03/22, and 41.4% in FY03/23. It projects a dividend payout ratio of 51.7% in FY03/24.
- Target the achievement and maintenance of **DOE of 5%.**
Most recently, the company reported DOE of 3.9% in FY03/20, 5.0% in FY03/21, 5.9% in FY03/22, and 5.9% in FY03/23.

Initiatives aimed at reducing environmental impact

At the end of its medium-term management plan, the company outlined two initiatives aimed at reducing its environmental impact: an initiative consisting of measures targeting the elimination of greenhouse gas emissions and another initiative comprising measures designed to prevent water and air pollution.

Measures targeting the elimination of greenhouse gas emissions

- Exploration of thermal spraying methods that do not use fossil fuels
- Reduction of electricity consumption through the improvement of treatment processes
- Application of renewable energy

As a broader target that includes the implementation of these initiatives, the company is aiming to reduce greenhouse gas emissions in FY2030 by 46% compared to levels in FY2013. This rate of reduction is the same as the rate specified in targets issued by the government of Japan. However, the company has designated 2021 and 2022 as a period during which it will prepare for the implementation of these initiatives.

Measures designed to prevent water and air pollution

Situational awareness and improvement efforts to be applied to all processes associated with the company's business activities

As mentioned above, the medium-term management plan that the company announced on November 9, 2021 along with its long-term vision for 2030 is the first that the company has ever publicly announced. Accordingly, comparing or contrasting it with a previous plan is impossible. However, Shared Research had previously included the following description of the company's medium-term strategy in this report. For the time being, the section below will remain in the report for purposes of reference and comparison with the company's newly announced medium-term management plan.

Overview: Achieving sustainable growth

TOCALO does not release a medium-term business plan or numerical targets, but defines its strategy for sustainable growth as the development of new products and markets. The company focuses on five target markets: semiconductor and FPD; energy and environment; advanced materials (high-performance iron and steel materials, highly functional film, paper/nonwoven fabrics, etc.); transportation (high-speed railway, aircraft, etc.); and medical care.

TOCALO's action plan toward sustainable growth includes the following three points:

1. Diversification of earnings sources: Product development in target markets and expanded applications in existing markets

2. Deep cultivation of business within the semiconductor and FPD sectors: Increase production capacity in preparation for market expansion and develop next-generation film technologies
3. Global expansion: Strengthen maintenance businesses, localize operations (subsidiaries and affiliates) and license technologies (licensing business)

Building on success

Made progress in the semiconductor and FPD fields—the largest pillar among TOCALO's target markets

TOCALO's first encounter with a semiconductor equipment maker dates back to the winter of 1994. Before dawn on January 17, 1995, the Great Hanshin earthquake caused the company's headquarters to collapse and also damaged the company's factories in Kobe and Akashi. Despite this tragedy, TOCALO achieved fast recovery through its efforts in the semiconductor and FPD fields. The company then pushed forward with its development of thermal spraying technologies for semiconductor equipment, and in 1997, was awarded an order to apply thermal spraying to etching chamber parts. The company calls 1997 the first year of its semiconductor era. In 2000, TOCALO began mass producing new ceramic coatings through thermal spraying and began applying its thermal spraying technology to the mass production of chamber parts in etching equipment for 300mm wafers. These moves spurred steady progress for the company. The feature size of state-of-the-art semiconductors (very large-scale integrated circuits) is becoming miniaturized and the structure of these semiconductors multi-layered; and the trend toward using dry etching processes (use of plasmas or etchant gases to remove portions of substrate layers based on specific patterns defined by photoresist masks) is becoming increasingly more common. Moving forward, TOCALO will further strengthen its production capacity and enhance its development of next-generation coating technology.

Diversified revenue sources by offering a range of coatings from thick to thin

In September 2004, the company acquired all shares of Japan Coating Center Co., Ltd. (JCC) to enter the field of physical vapor disposition (PVD), which enables the formation of a thin coating. The PVD process adds functionality, such as abrasion and corrosion resistance, to the workpieces (cutting tools, metallic molds, etc.) by forming hard, dense, thin, and highly adhesive ceramic coatings on their surfaces. These coatings are generated by ionizing metals, including titanium and chromium, in a vacuum with reactive gases. Through the acquisition of JCC, the company began covering a wide range of coating technologies from thick coating created by thermal spraying and other surface treatments to thin coating made by the PVD process. This setup will give the company more breadth and depth in target market areas.

Business

Business overview

Note: Key figures have been updated, but some figures will be updated when the 1H results are announced following the release of the company's annual securities report for FY03/25.

Surface treatment centered on thermal spraying

The TOCALO group comprises a parent company, six consolidated subsidiaries, and two non-consolidated subsidiaries. It primarily conducts thermal spraying but also provides peripheral services, including the Toyota diffusion (TD) process, zinc-allow coating (ZAC), plasma transferred arc (PTA) process, and physical vapor deposition (PVD) process. These are all surface treatments that improve the performance of the workpiece through the application of coatings that have different properties from the substrate (the material to which spraying deposit is applied).

The company's strength is in R&D aimed at finding possibilities for new coatings. TOCALO is also proficient in solution-based marketing that resolves customers' worksite issues. Rather than just providing simple proposals, the company actively works with customers to develop new applications, as seen in its partnership with Tokyo Electron, and this approach has propelled it to gain top market share in the industry. The company emphasizes three-pronged management involving "manufacturing, marketing, and technological development."

Segments

By segment, Thermal Spraying (Parent) accounted for 75.2% of sales in FY03/23, while Domestic Subsidiaries accounted for 5.0%, Overseas Subsidiaries 13.8%, Other Surface Treatments 5.7%, and Royalty Income 0.4%. Segment profit margins (recurring profit basis) were 23.1% for Thermal Spraying (Parent), 14.6% for Domestic Subsidiary, 25.0% for Overseas Subsidiaries, and 17.0% for Other Surface Treatments. Overseas sales, which comprised 23.3% of total sales in FY03/23, primarily came from Japanese companies that have expanded abroad. While some overseas competitors sell thermal spraying materials and equipment in addition to providing contracted treatment services, TOCALO specializes in services. The company has licensing agreements with a number of overseas companies including competitors and receives royalty income (JPY177mn in FY03/23).

Breakdown of sales by segment

By segment	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25
(JPYmn)	Act.	Act.	Act.	Act.	Act.	Act.	Act.	Act.	Act.	Act.
Sales	28,746	28,964	34,109	39,558	37,896	39,073	43,813	48,144	46,735	54,231
YoY	10.3%	0.8%	17.8%	16.0%	-4.2%	3.1%	12.1%	9.9%	-2.9%	16.0%
Thermal Spraying (Parent)	21,933	22,309	26,183	30,400	28,221	30,141	33,043	36,184	33,859	39,213
YoY	14.4%	1.7%	17.4%	16.1%	-7.2%	6.8%	9.6%	9.5%	-6.4%	15.8%
% of total	76.3%	77.0%	76.8%	76.8%	74.5%	77.1%	75.4%	75.2%	72.4%	72.3%
Domestic Subsidiary	1,978	2,111	2,312	2,493	2,364	2,018	2,399	2,414	2,457	2,656
YoY	1.5%	6.8%	9.5%	7.8%	-5.2%	-14.6%	18.9%	0.6%	1.8%	8.1%
% of total	6.9%	7.3%	6.8%	6.3%	6.2%	5.2%	5.5%	5.0%	5.3%	4.9%
Overseas Subsidiaries	3,262	2,806	3,642	4,460	4,925	4,800	5,695	6,622	7,257	9,319
YoY	2.4%	-14.0%	29.8%	22.5%	10.4%	-2.5%	18.6%	16.3%	9.6%	28.4%
% of total	11.3%	9.7%	10.7%	11.3%	13.0%	12.3%	13.0%	13.8%	15.5%	17.2%
Other Surface Treatments	1,572	1,736	1,971	2,204	2,384	2,112	2,502	2,745	3,019	2,880
YoY	-10.6%	10.4%	13.5%	11.8%	8.2%	-11.4%	18.5%	9.7%	10.0%	-4.6%
% of total	5.5%	6.0%	5.8%	5.6%	6.3%	5.4%	5.7%	5.7%	6.5%	5.3%
Royalty income	-	-	-	-	-	-	171	177	141	161
YoY	-	-	-	-	-	-	-	3.5%	-20.3%	14.2%
% of total	-	-	-	-	-	-	0.4%	0.4%	0.3%	0.3%

Source: Shared Research based on company data

Breakdown of sales by region

By region (JPYmn)	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25
	Act.	Act.	Act.	Act.	Act.	Act.	Act.	Act.	Act.	Act.
Sales	28,746	28,964	34,109	39,558	37,896	39,073	43,813	48,144	46,735	54,231
YoY	10.3%	0.8%	17.8%	16.0%	-4.2%	3.1%	12.1%	9.9%	-2.9%	16.0%
Domestic	23,678	24,407	28,206	32,155	30,543	30,350	34,568	36,942	33,573	37,914
YoY	9.6%	3.1%	15.6%	14.0%	-5.0%	-0.6%	13.9%	6.9%	-9.1%	12.9%
% of total	82.4%	84.3%	82.7%	81.3%	80.6%	77.7%	78.9%	76.7%	71.8%	69.9%
Overseas	5,068	4,557	5,903	7,403	7,352	8,722	9,245	11,202	13,162	16,317
YoY	13.7%	-10.1%	29.5%	25.4%	-0.7%	18.6%	6.0%	21.2%	17.5%	24.0%
% of total	17.6%	15.7%	17.3%	18.7%	19.4%	22.3%	21.1%	23.3%	28.2%	30.1%

Source: Shared Research based on company data

Business model

Note: Key figures have been updated, but some figures will be updated when the Q1 results are announced following the release of the company's annual securities report for FY03/25.

Focus on functional thermal spraying

One of TOCALO's strengths is its ability to handle a wide variety of surface treatments, ranging from thick coating (e.g., thermal spraying, TD process, ZAC, and PTA process) to thin coating (e.g., PVD process). Of the different categories in thermal spraying (metalized contact thermal spraying, maintenance thermal spraying, and functional thermal spraying), the company excels in functional thermal spraying, which is high value-added and has strong growth potential. It has captured more than 40% of the thermal spraying market in Japan (scale of about JPY60.0bn in 2018; source: Yano Research Institute) and holds the top share.

Key phrases that describe TOCALO

- ▶ A coating shop: The company's sales come from coating treatment fees. Although it is a manufacturer, it does not make original products. Workpieces inside of the company's factories belong to its customers.
- ▶ Niche business in a niche market: TOCALO's coating treatments are mainly applied to goods and manufacturing equipment components. The customers are manufacturers spanning a wide range of sectors from industrial to lifestyle-related, resulting in a customer mix that helps TOCALO navigate through changing economic climates.
- ▶ Made-to-order production: The company's coating technology is both important and essential to customer production lines and products. Accordingly, the company develops coatings that are specially adjusted for each customer.
- ▶ R&D driven: By responding to advanced technological demand, the company targets further growth that will enable it to meet diverse customer needs.

Characteristics of thermal spraying

Thermal spraying is a surface coating treatment that uses thermal energy to create molten or semi-molten materials, which—through the addition of kinetic energy—are simultaneously atomized into fine droplets that are emitted at high speeds (spraying). These droplets then make contact with and accumulate on the workpieces, creating a coating. Since thermal spraying can accommodate broad ranges of temperatures and speeds generated from thermal and kinetic energy, it allows for the application of various spraying materials as long as they can be turned to a molten or semi-molten state. Furthermore, there are relatively few limitations on substrates (the material to which spraying deposit is applied), allowing for a high degree of freedom when choosing which spraying and substrate materials to use together. Compared to surface treatments such as plating or physical vapor deposition, coating layers created through thermal spraying do not excel in terms of structural control and density. However, the technology allows for broad selection of materials and is characterized by its high speed and capacity to be applied to large surfaces.

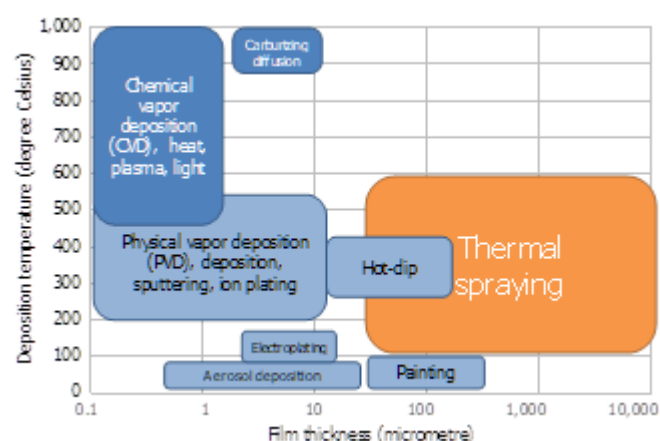
Coating technologies

Method	Coating material	Substrate material	Adhesion	Deposition rate (mm/h)	Principle	Film thickness
Thermal spraying	Metal, alloy, ceramics, plastics, glass	Metal, ceramics, plastics, wood, paper product	Excellent	Flame: 15kg/h Arc: 25kg/h	Thermal spraying; spraying; stacking	Thick
Plating	Metal, alloy	Materials resistant to corrosion by plating liquid	Relatively good	0.01–0.25	Wet plating; reduction of ion; precipitation	Thin, thick
Chemical vapor deposition (CVD)	Heat-resistant metal, sulfide, ceramics, selenium compound	Materials resistant to heat (500–2000 degree Celsius) and chemical corrosion by evaporation materials	Relatively good	0.01–2.00	Chemical reaction of gases; precipitation	Thin
Vacuum deposition	Pure metal, alloy, compound	Surface without gas emission	Good with substrate heating; Excellent when substrate is cleaned with sputtering	0.015–4.500	Vaporization; precipitation	Thin
Ion plating	Pure metal, alloy, carbide, nitride, oxide	Surface without gas emission	Excellent	0.005–1.500	Dry plating; reduction of ion; precipitation	Thin

Source: Shared Research based on data from the Japan Thermal Spray Society

Coating technologies can be divided into thick coating, which includes thermal spraying and plating, and thin coating, which includes chemical vapor deposition (CVD), vacuum deposition, and ion plating. Plating has long been used as a coating technique because it is inexpensive and produces relatively high adhesive properties. However, when compared with thermal spraying, plating takes more time, only allows for metals and alloys to be used as coating materials, and has an extremely large impact on the environment. Thermal spraying, on the other hand, is widely used as a coating technology in industrial circles despite its higher costs compared to plating, because the method coats quickly and is applicable to a wide range of coating materials, including metals, ceramics, plastics, and glass.

Coating thickness and film formation temperatures by type of surface treatment



Source: Shared Research based on company data

Comparison between electroplating and thermal spraying

Category	Method	
	Electroplating (hard chrome plating)	Thermal spraying (WC/12Co cermet)
Process	Wet	Dry
Coating characteristics	Difficult with complex shape	Difficult with complex shape
Deposition rate	Low	High
Coating material selection	Extremely limited	Very wide
Film adhesion	High	High
Film hardness	Hv800–900	Hv1100 or higher
Hydrogen embrittlement	Highly susceptible	None
Environmental impact	Very large	Small

Source: Shared Research based on data from the Japan Thermal Spray Society

Thermal spraying applications

Purpose	Sprayed material	Application
Corrosion resistance	Zinc, aluminum, aluminum-zinc alloy, plastics, stainless steel	Chemical plants, steel structures, marine structures
Abrasion resistance	Cemented carbide (WC/Co), self-fluxing alloy, Co-Cr-Al alloy, Al ₂ O ₃ -TiO ₂ , stainless steel)	Hot-rolling hearth roll, press mold, hot-extrusion dies, pump shaft sleeves and seals, water wheel paddles, printer dampening rollers, various mechanical parts
Gap adjustment	Si-Al-polyester, Ni-C	Jet engine compressor sliding units, housing for turbo charger compressor
Heat resistance	Zirconia (ZrO ₂ -Y ₂ O ₃ , ZrO ₂ -CaO, ZrO ₂ -MgO), M-Cr-Al-Y alloy, Ni-Cr alloy	Gas turbine blades, jet engine combustion chamber wall, rocket engine nozzles
Insulation property	Al ₂ O ₃	Electric parts
Conductive property	Cu, Al, Ni-Cr alloy	Electric heaters
Decoration	Brass, various types of ceramics	Furniture, manhole covers
Biocompatibility	Pure titan, hydroxyapatite	Artificial bones, artificial hip prostheses, artificial tooth roots
Other	Zirconia	Oxygen sensors, electrolytes for solid oxide fuel cell

Source: Shared Research based on data from the Japan Thermal Spray Society

Thermal spraying equipment is categorized by the heat source it uses, which includes combustion gas, electricity, and laser. Based on the types of spraying material and gas pressure levels applied, equipment using combustion gas can be further broken down into wire, rod, or powder flame spraying equipment, high velocity flame spraying equipment (for high velocity oxy fuel [HVOF] and high velocity air fuel [HVOF] processes), and detonation spraying equipment (for D-gun treatment). Equipment using electricity as the heat source includes arc spraying equipment (for wire spraying that utilizes arc discharge) and plasma spraying equipment (for atmospheric plasma spraying, low-pressure plasma spraying, high-pressure plasma spraying, and underwater plasma spraying among others). Compared to atmospheric plasma spraying, low-pressure plasma spraying allows for faster spraying of molten particles, and can form a coating with higher density and bonding strength. It is widely used as an indispensable thermal spraying method in advanced fields such as high-performance coating for components of semiconductor and FPD manufacturing equipment.

Heat source	Spraying method		Material
Combustion gas	Flame spraying	Wire flame	Metal wire, ceramic-filled plastic tube
		Rod flame	Ceramic rod
		Powder flame	Metal, ceramics, plastic
	High velocity flame spraying	High velocity oxy fuel (HVOF)	Metal, cermet
		High velocity air fuel (HVOF)	Metal, cermet
	Detonation spraying	Detonation gun process	Metal, ceramics
Electric	Arc spraying		Metal wire, ceramic-filled metal tube
	Plasma spraying (direct current [D.C.])	Atmospheric	Oxide ceramics
		Low-pressure	Metal, cermet
		High-pressure	Ceramics, intermetallic compound
		Underwater	
		Water-stabilized	Oxide ceramics
	Radio frequency induction plasma spraying		Ceramics, metal
	Electromagnetic acceleration plasma spraying		Ceramic rod, metal rod
	Wire explosion spraying		Metal wire
	Electrothermally exploded power spray		Conductive ceramic powder, metal powder
Laser beam	Laser spraying		Metal wire, ceramics
Other	Laser plasma hybrid spraying		Ceramics, metal
	Cold spray		Metal, cermet, some ceramics

Source: Shared Research based on material from Japan Thermal Spray Society

Wire flame spraying method: Main characteristics are as follows (the same characteristics also apply to arc spraying):

- 1) The workpiece can be held at a low temperature during spraying, preventing undesirable thermal impact such as dimensional changes, deformation, cracking, or deterioration of strength.
- 2) Allows for a wide selection of coating thickness (normally 0.1–5.0 mm)
- 3) Produces a coating with excellent abrasion resistance because the particles that form the coating via this method achieve hardness beyond that of their raw material state. Hard materials, such as metallic oxide, nitride, and carbide are also interpositioned and dispersed within the coating for added strength.

Arc spraying method: Advantages over flame spraying that uses combustion gas are as below:

- 1) Thermal spraying capacity is more than twice as high and is more efficient when applied to articles with large surface areas
- 2) Has a higher degree of sectional adhesion, leading to stronger overall adhesiveness
- 3) Offers higher compressive strength, enabling use under heavy loads

Plasma spraying method: "Plasma" refers to ionized gases that form when gases are heated and their molecules separate into atoms and further break down into electrons and positive ions (electrolytic dissociation). Plasma spraying is a thermal spraying treatment that utilizes a high-temperature and high-speed gas jet, or "plasma jet," that gathers these gases and uses them to melt and spray out metals, alloys, and refractory materials including various types of ceramics, or cermet, which is a combination between ceramics and metals or alloys. Plasma spraying methods include atmospheric plasma spraying (APS), which is conducted in normal atmospheric air, and vacuum plasma spraying (VPS), which is conducted within a chamber with atmosphere and pressure controls.

Wire flame spraying: A thermal spraying treatment in which metal or alloy wire is melted by an oxy acetylene (propane) flame, atomized to form a fine spray, and propelled to the substrate to form a coating. Both wire flame spraying and arc spraying are categorized as wire treatments. A wide range of wires can be used, including materials with low melting points such as aluminum, zinc, and babbitt metals, as well as metals and alloys such as copper, bronze, monel, carbon steel, stainless steel, and molybdenum.

Rod flame spraying: A thermal spraying treatment in which ceramic rods molten by a combustion gas flame (primarily oxy acetylene) is atomized into particles and sprayed onto the substrate. Only particles that have been completely melted are propelled to the substrate using compressed air, forming a ceramic coating that is high density and highly adhesive.

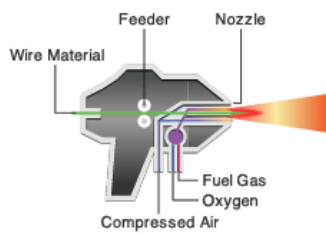
Powder flame spraying: A thermal spraying treatment in which self-fluxing alloys* in powder form are molten by an oxy acetylene (propane) flame. Particles of the molten material are then sprayed onto the substrate. The method also involves a fusing treatment performed after spraying (heating the applied coating to its melting point), which strengthens the bond between the coating and the substrate, forming a nearly nonporous coating that offers high degrees of adhesion and excellent corrosion resistance. In the fusing and solidifying process, the coating deposits a solid layer of boride and carbide, also adding high abrasion resistance to the coating. The treatment is also characterized by excellent resistance to corrosion from most chemical solutions, erosion resistance, cavitation erosion resistance, and hot hardness.

*Self-fluxing alloy: any alloy used in thermal spraying which does not require the addition of a flux in order to wet the substrate and coalesce when heated.

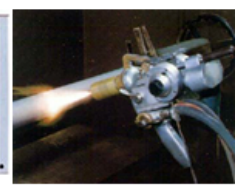
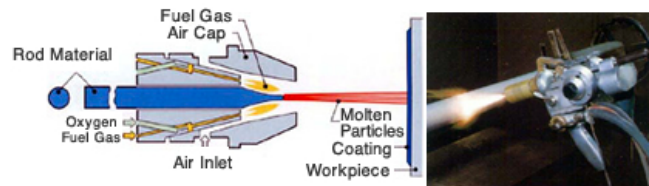
High velocity flame spraying: In high velocity oxy fuel (HVOF) spraying, a type of high velocity thermal spraying, the pressure inside the spray gun combustion chamber is raised to generate a high velocity flame that is comparable to a flame produced through explosive, detonative combustion. Spraying material in powder form, fed into the center of the jet stream generated by this flame, achieves a molten or semi-molten state; the resulting particles are then continuously sprayed onto the substrate at a high velocity. This method allows for the creation of an extremely dense and adhesive coating because it forces the sprayed particles to collide with the substrate at supersonic speeds. The true value of HVOF spraying lies in its capacity to form a carbide cermet coating that is particularly resistant to abrasion. This method produces coatings of more uniform quality than detonation spraying because it forms coatings continuously.

Source: Shared Research based on company data

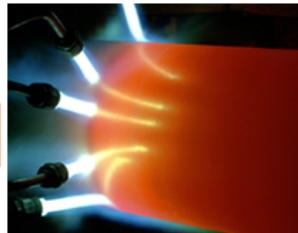
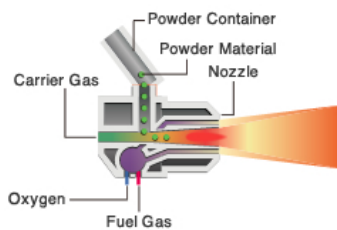
Wire flame spraying (combustion gas)



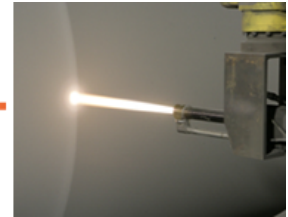
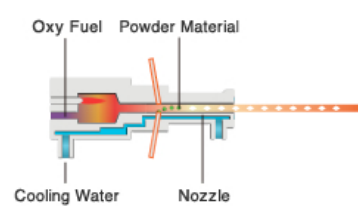
Rod flame spraying (combustion gas)



Powder flame spraying (combustion gas)



High velocity flame spraying (combustion gas)



Source: Company data

Arc spraying: This is a method that involves feeding two conductive wires (one positive and one negative) through to the gun head of a thermal spraying gun. The two wires meet at the tip of the gun (the nozzle), arc against each other, and create a molten material, which is then atomized into fine spray and propelled to the substrate using compressed air. Along with the wire flame spraying method, it is generally known as a wire treatment. All metals and alloys that can be processed into wires are compatible with electric arc spraying.

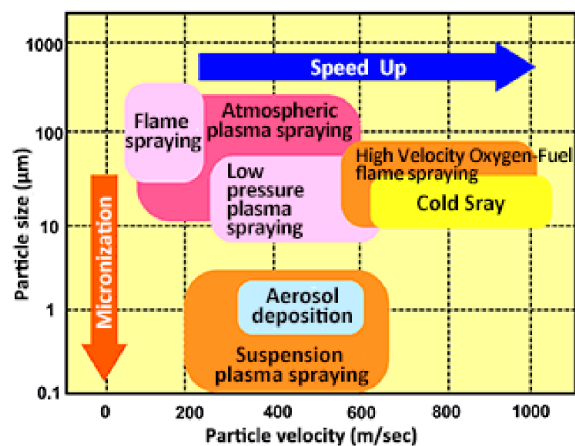
Plasma spraying: "Plasma" refers to ionized gases that form when gases are heated, and their molecules separate into atoms and then break down further into electrons and positive ions (electrolytic dissociation). A "plasma jet" is a high-speed gas jet formed by a convergence of plasma-state gases. "Plasma spraying" is a thermal spraying method that involves using a plasma jet with extremely high energy density and a temperature of over 10,000° Celsius to melt pulverized metals and alloys, ceramics that are refractory materials, or cermets (a combination between ceramics and metals or alloys). After being melted, these materials are sprayed onto the substrate. This method allows a high degree of freedom when selecting spraying materials and is characterized by the sprayed coating that is highly adhesive to the substrate.

Atmospheric plasma spraying (APS): a type of plasma spraying conducted under normal atmospheric pressure. APS coatings are a product of optimal material selection (i.e., studying the usage environment of the substrate and choosing the right material from a range of ceramics with varying characteristics), appropriate coating design, and stringent execution management, and are actively used in a variety of capacities. APS can also be simply referred to as "plasma spraying."

Low-pressure plasma spraying: A plasma spraying treatment that is conducted in an atmosphere- and pressure-controlled chamber. Prior to the spraying, the chamber is first evacuated, then filled with inert gas at a low pressure. The procedure is also referred to as vacuum plasma spraying (VPS). This thermal spraying method has three main characteristics: it does not damage material properties, and thus produces a coating with functionalities that are exactly as designed; active metals such as titanium can be used as coating material; and the molten particles that fly at a higher velocity than APS allow for a very dense coating with high bonding strength. This method is regarded as essential for the formation of high-performance coatings applied in advanced fields.

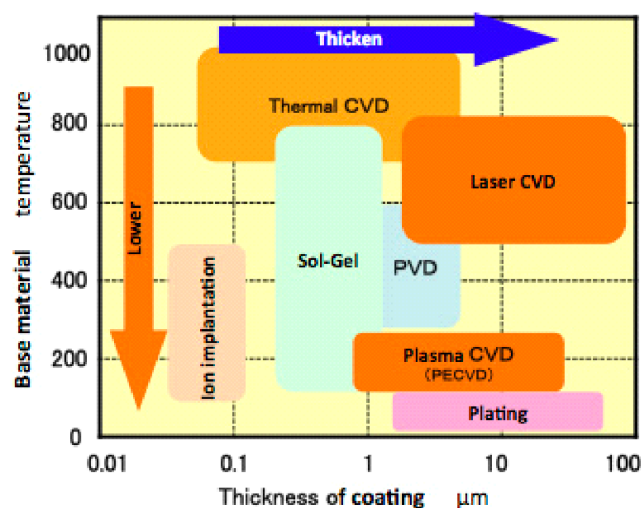
Source: Shared Research based on company data

Types of thermal spraying technology

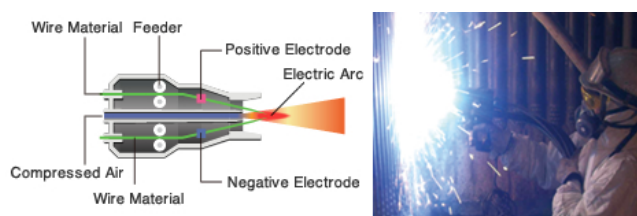


Source: Company data

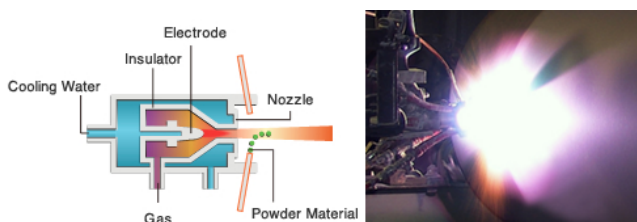
Types of coating technology



Arc spraying (electricity)

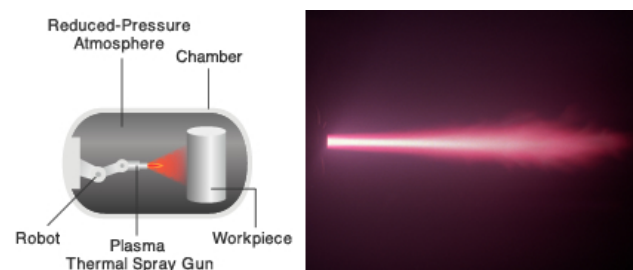


Atmospheric plasma spraying (electricity)

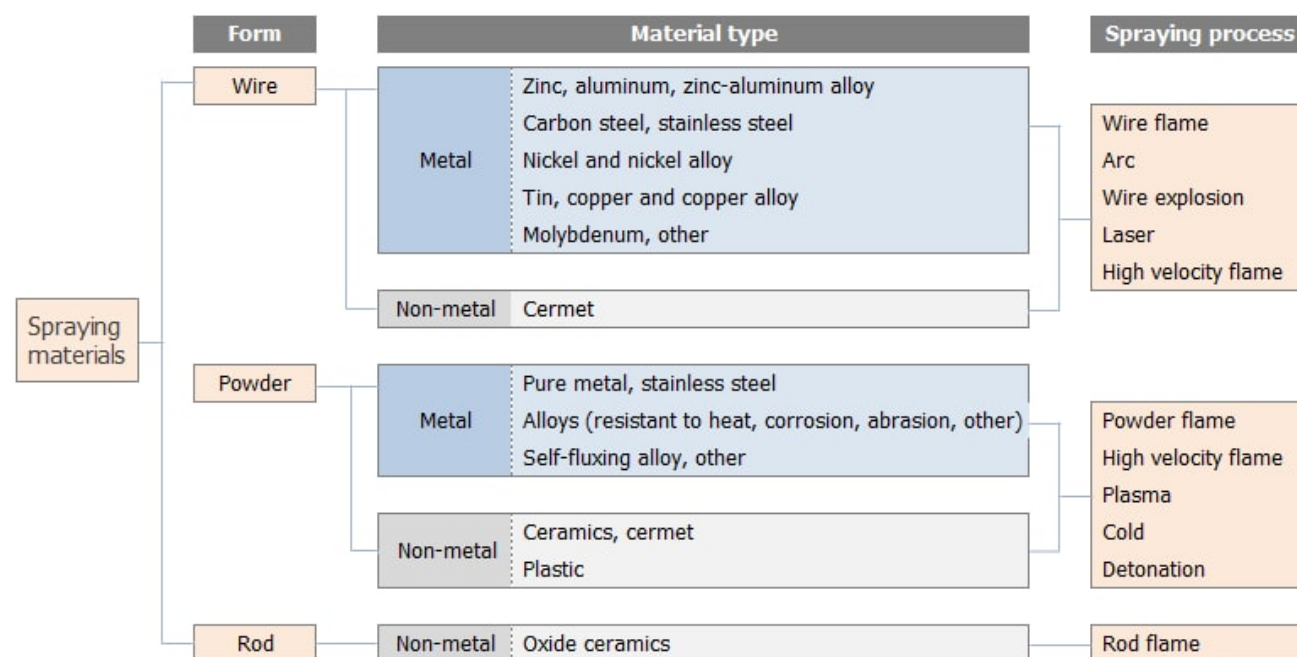


Source: Company data

Low-pressure plasma spraying (electricity)



Spraying materials—types and corresponding treatment methods



Source: Shared Research based on data from the Japan Thermal Spray Society

Surface treatments customized to individual orders

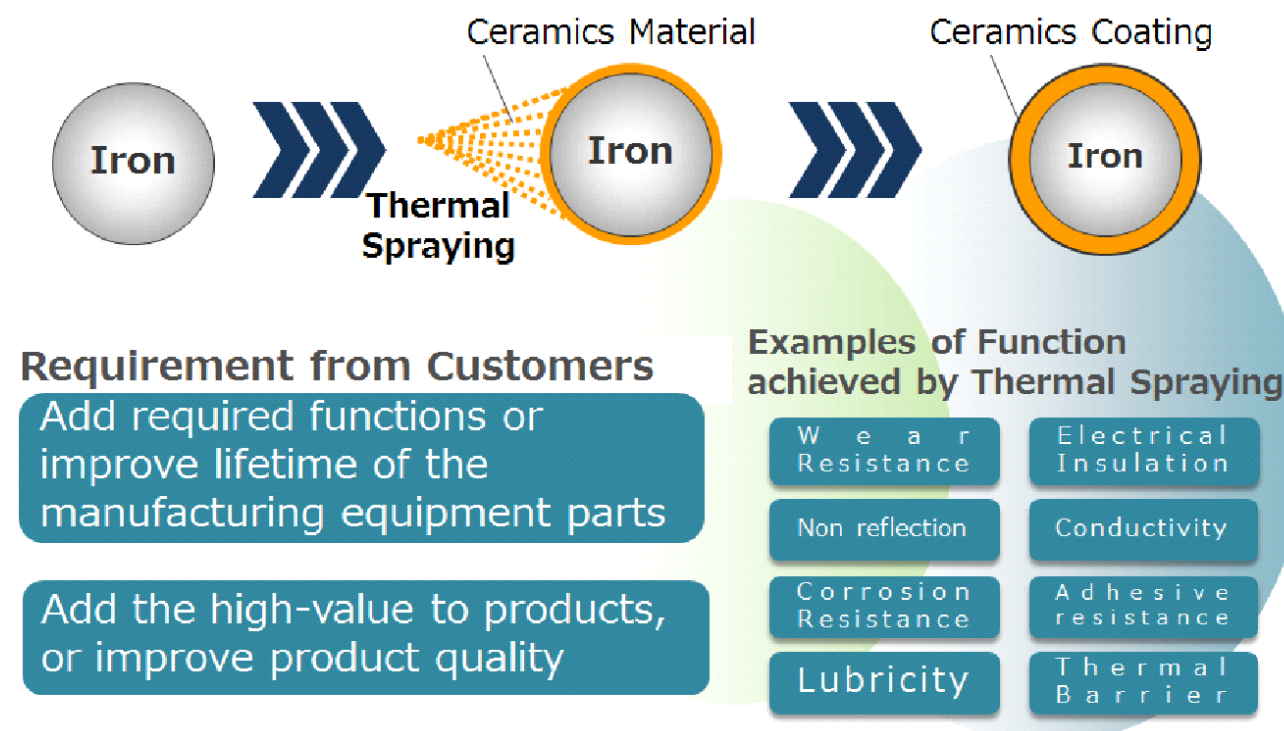
TOCALO conducts all of its surface treatments through a made-to-order production system. Accordingly, quantity is not a business priority. Once it receives an order from a customer, TOCALO has the workpieces (e.g., customers' goods and components of their manufacturing equipment) delivered to its factory, where they are kept while surface treatment is applied. The company procures the coating materials and generates sales by providing coating services. When the workpieces are too large to be removed from customer factories, as is the case with a yankee cylinder used in tissue paper production, TOCALO employees visit these factories to perform coating operations. As of end-FY03/23, the company had 1,300 full-time and directly hired temporary employees on a consolidated basis. When including temporary employees received on dispatch, staff totals are between 1,500 and 1,600 employees.

The company's operations include a mixture of semiautomated treatments, such as plasma spraying, and treatments that require human labor, such as flame spraying. Even the semiautomated treatments are considerably labor-intensive because the orders entail a wide variety of workpieces, each in small volume and requiring pretreatment, setting modification, and inspection processes done manually.

TOCALO specializes in surface treatments for industrial manufacturing equipment. Its surface treatment lines, mainly for thermal spraying, are designed to suit workpieces that have relatively large surface areas. Even in the case of handling small workpieces, the company responds to customer specifications that are becoming more diverse such as treatment on just specific parts of a component.

Among specific customer needs is the improvement of functionality and durability of the manufacturing equipment in their factories. For example, applying coatings to production line rolls in steel mills helps extend the lives of these rolls and raises the quality of the steel plates they produce. Customers also express the need to add value and enhance the qualities of their products through the application of functional coatings. Treatments of this nature include the coating for parts used in semiconductor equipment and gas turbine components. Cermet (ceramic metal) is a representative coating material. "Cermet" is a coined word that expresses both the hardness of ceramics and toughness of metal. The material's main components are titanium and tungsten, which give it excellent resistance to corrosion, make adhesion less likely, and allow for a clean finish of the surfaces. Thermal spraying treatment adds functional properties, such as abrasion resistance, seize resistance, corrosion resistance, lubricity, electric insulation, non-adhesiveness, water resistance, and heat resistance, in a relatively efficient manner.

Principle and effects of surface treatments



Source: Company data

Cost structure

In FY03/23, TOCALO reported a GPM of 36%, an SG&A ratio of 14%, and an OPM of 22%, on a consolidated basis. Labor cost and outsourcing cost accounted for 29% and 24% of total manufacturing costs at the parent respectively, while materials accounted for 14%, consumables 11%, utilities 5%, depreciation 7%, and other costs 10%. TOCALO's business is labor-intensive, with personnel expenses also accounting for 50% of SG&A expenses. We understand that full operational automation in the surface treatment business is difficult to attain because specifications are different for each customer and workpiece.

Cost of sales

Cost of sales	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25
(parent, JPYmn)	Parent	Parent	Parent	Parent	Parent	Parent	Parent	Parent	Parent	Parent
Materials costs	2,404	2,178	2,542	3,110	2,794	2,844	3,249	3,781	3,453	3,861
% of total	15.0%	13.8%	13.3%	13.9%	13.0%	13.3%	13.7%	14.2%	13.1%	13.1%
Labor costs	4,310	4,212	5,015	6,158	6,066	6,227	6,806	7,629	7,264	8,514
% of total	26.9%	26.6%	26.2%	27.6%	28.2%	29.1%	28.8%	28.6%	27.6%	28.9%
Outsourcing costs	4,658	4,622	5,407	5,916	5,653	5,353	5,833	6,488	7,134	7,321
% of total	29.1%	29.2%	28.3%	26.5%	26.3%	25.0%	24.7%	24.3%	27.1%	24.8%
Other costs	4,657	4,802	6,153	7,139	6,971	7,000	7,742	8,797	8,504	9,791
% of total	29.1%	30.4%	32.2%	32.0%	32.4%	32.7%	32.8%	33.0%	32.3%	33.2%
Utility	780	734	890	1,006	995	899	1,051	1,388	1,163	1,273
% of total	4.9%	4.6%	4.7%	4.5%	4.6%	4.2%	4.4%	5.2%	4.4%	4.3%
Consumables	1,404	1,518	1,931	2,149	1,936	2,130	2,539	3,013	2,832	3,548
% of total	8.8%	9.6%	10.1%	9.6%	9.0%	9.9%	10.7%	11.3%	10.7%	12.0%
Depreciation	967	1,094	1,225	1,804	2,020	1,864	1,851	1,952	2,030	2,133
% of total	6.0%	6.9%	6.4%	8.1%	9.4%	8.7%	7.8%	7.3%	7.7%	7.2%
Other	1,506	1,456	2,107	2,180	2,020	2,107	2,301	2,444	2,479	2,837
% of total	9.4%	9.2%	11.0%	9.8%	9.4%	9.8%	9.7%	9.2%	9.4%	9.6%
Total cost of manufacturing	16,029	15,814	19,118	22,325	21,486	21,425	23,632	26,697	26,356	29,489

Source: Shared Research based on company data

Note: Figures may differ from company materials due to differences in rounding methods.

Changes in SG&A (consolidated)

SG&A expenses (cons., JPYmn)	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25
	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.
Directors' compensations	306	328	362	421	378	338	295	315	386	413
% of total	6.2%	6.7%	6.5%	7.0%	6.1%	5.7%	4.7%	4.6%	5.5%	5.2%
Personnel expenses	2,311	2,290	2,504	2,660	2,791	2,788	3,036	3,257	3,170	3,575
% of total	47.0%	46.8%	45.2%	44.2%	44.8%	47.1%	48.0%	47.8%	45.0%	44.8%
Personnel expenses	1,857	1,974	2,135	2,257	2,360	2,448	2,541	2,769	2,883	3,136
% of total	37.7%	40.4%	38.6%	37.5%	37.9%	41.3%	40.1%	40.7%	40.9%	39.3%
Provision for bonuses	279	298	323	326	318	402	444	437	357	416
% of total	5.7%	6.1%	5.8%	5.4%	5.1%	6.8%	7.0%	6.4%	5.1%	5.2%
Retirement benefit expenses	175	18	46	77	113	-62	51	51	-70	23
% of total	3.6%	0.4%	0.8%	1.3%	1.8%	-1.0%	0.8%	0.7%	-1.0%	0.3%
Transportation and communication expenses	352	352	355	365	342	206	217	270	345	386
% of total	7.2%	7.2%	6.4%	6.1%	5.5%	3.5%	3.4%	4.0%	4.9%	4.8%
Depreciation	52	60	138	224	273	273	209	247	237	263
% of total	1.1%	1.2%	2.5%	3.7%	4.4%	4.6%	3.3%	3.6%	3.4%	3.3%
R&D expenses	740	719	771	844	974	1,068	1,080	1,143	1,267	1,243
% of total	15.0%	14.7%	13.9%	14.0%	15.6%	18.0%	17.1%	16.8%	18.0%	15.6%
Other	1,160	1,141	1,406	1,505	1,471	1,251	1,492	1,575	1,641	2,095
% of total	23.6%	23.3%	25.4%	25.0%	23.6%	21.1%	23.6%	23.1%	23.3%	26.3%
Total	4,921	4,890	5,536	6,019	6,229	5,924	6,329	6,807	7,046	7,975

Source: Shared Research based on company data

Note: Figures may differ from company materials due to differences in rounding methods.

Group structure

Note: The following description has not yet been updated. After the release of the company's FY03/25 securities report, we plan to revise the content based on market data at the time of the 1H results announcement.

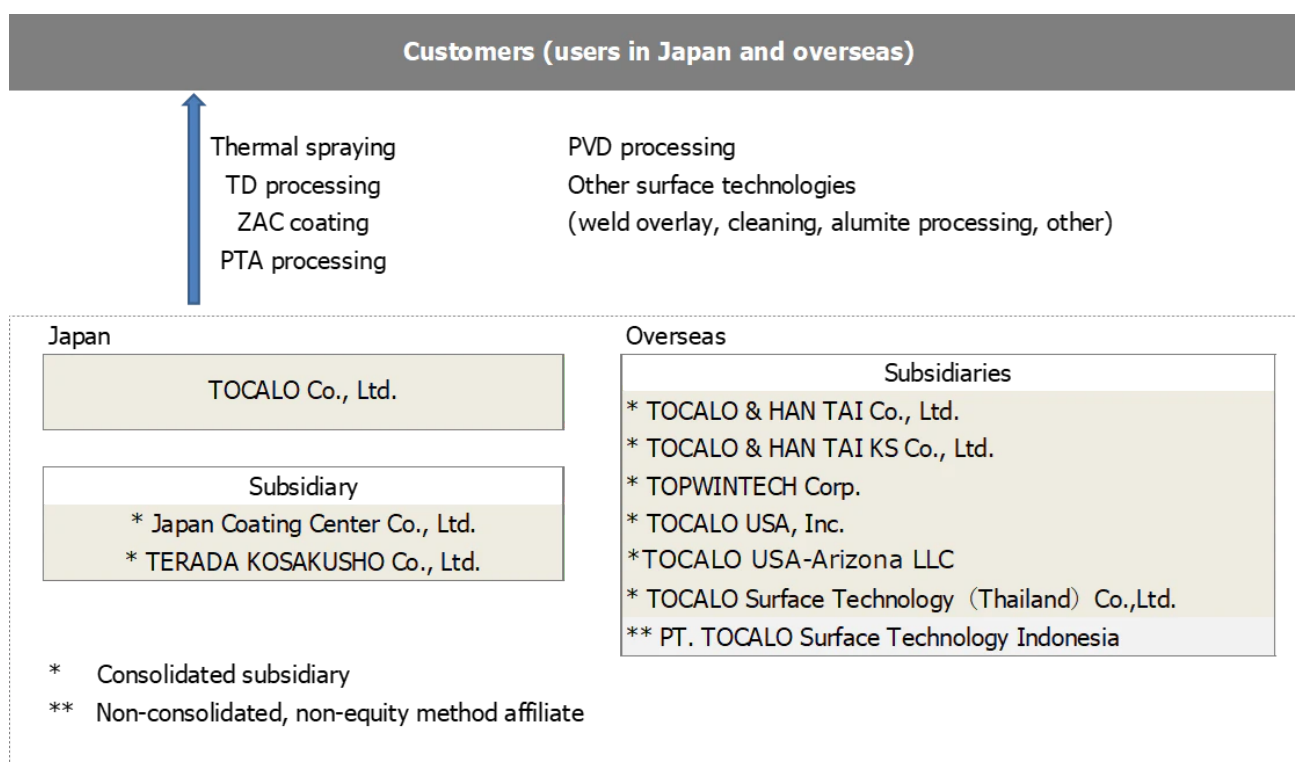
Overview

The TOCALO group comprises a parent company, six consolidated subsidiaries, and two non-consolidated subsidiaries. It primarily conducts thermal spraying treatments but also performs services in peripheral fields, including the Toyota diffusion (TD) process, zinc alloy coating (ZAC), plasma transferred arc (PTA) process, and physical vapor deposition (PVD) process. All of these processes are types of surface treatments, which involve providing new functionality to workpieces by forming coatings on their surfaces that have different properties from their substrates (the material to which spraying deposit is applied).

In September 2004, the company entered the field of PVD process, a technique to form thin coatings, by acquiring all shares of Japan Coating Center Co., Ltd. (JCC).

Overseas sales accounted for 23.3% of the company's overall sales in FY03/23 and primarily came from Japanese companies that have expanded abroad. The company has concluded many licensing agreements with overseas companies but does not work to acquire customers locally overseas. Some competitors overseas sell thermal spraying materials and equipment in addition to providing contracted treatment services, but TOCALO only provides services.

Group companies



Note: In August 2019, PT. TOCALO Surface Technology Indonesia merged with PT. Tanaka Machinery in Indonesia, a non-equity method affiliated, in an absorption-type merger

Source: Shared Research based on company data

International network (licensees)

	Company	Fields of technology licenses
People's Republic of China	東華隆(Guangzhou) 表面改質技術有限公司	Thermal spraying (steel, other)
	東華隆(昆山) 電子有限公司	Thermal spraying(semiconductor and FPDs)
	BAOSTEEL Engineering & Technology Group Co., Ltd.	Thermal spraying (steel, other)
	High Shine Limited	TD process(steel, other)
	SMS Siemag Technology (Tianjin) Co., Ltd.	Thermal spraying (steel, other)
Taiwan	TOPWINTeCH Co., Ltd.	Thermal spraying(semiconductor and FPDs)
	HAN TAI TECHNOLOGY Co., Ltd.	Thermal spraying (steel, other)
South Korea	DAE SHIN METALLIZING Co., Ltd.	Thermal spraying (steel, other)
	TOPWINTeCH Corp.	Thermal spraying(semiconductor and FPDs)
ASEAN	TOCALO Surface Technology (Thailand) Co., Ltd.	Thermal spraying (steel, other)
	PT. TOCALO Surface Technology Indonesia	Thermal spraying (steel, other)
	HAN TAI VIETNAM CO., LTD	Thermal spraying (steel, other)
India	ATS Techno Pvt. Ltd	Thermal spraying (steel, other)
EU	Oerlikon Surface Solutions AG	Thermal spraying (steel, other)
	Duma-BandZink GmbH	Thermal spraying (steel, other)
United States	TOCALO USA, Inc.	Thermal spraying (semiconductor, other)
	SMS group Inc.	Thermal spraying (steel, other)
	NxEdge	Thermal spraying(semiconductor)
Brazil	SMS group Metalurgia do Brasil Ltda.	Thermal spraying (steel, other)

Source: Shared Research based on company data

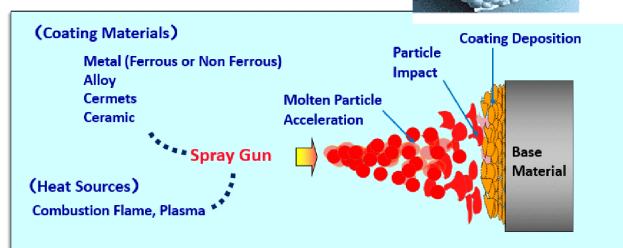
Thermal Spraying (Parent)

Thermal spraying treatment is a surface treatment method used to form coatings on industrial product parts such as components of semiconductor and FPD manufacturing equipment; power generating gas turbines; batteries used for power storage; a variety of bearings; factory machine pieces including rolls used in steel and paper mills; and parts used in chemical plants. It involves melting coating materials (e.g., metals, ceramics, and cermet) using high temperature heat sources (plasma or gas-based flames) and then spraying the molten material onto the target surface. Thermal spraying

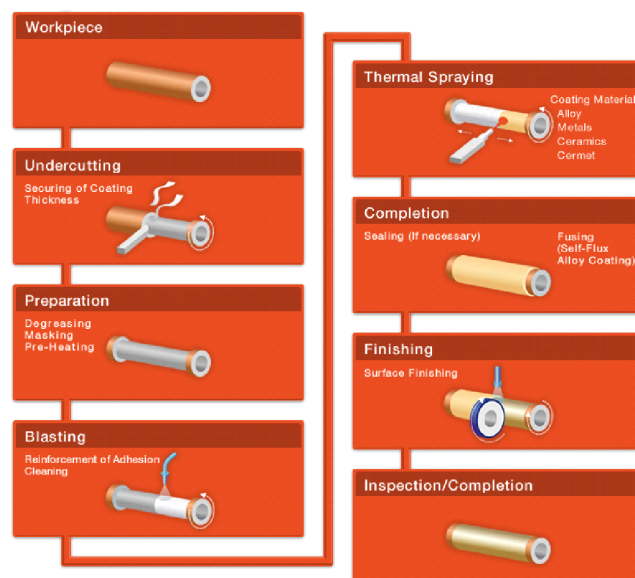
adds a variety of functions to the workpiece, including improved durability through higher abrasion and heat resistance; electrical characteristics such as conductivity and electric insulation; and thermal properties, including heat insulation and heat dissipation. A wide variety of thermal spraying treatment methods exist, but TOCALO primarily utilizes atmospheric plasma spraying and low-pressure plasma spraying, which both use plasma as a heat source; and high velocity flame spraying, wire flame spraying, and powder flame spraying which use combustion flame as a heat source. The company chooses which method is appropriate for any given workpiece.

Principle of thermal spraying technology

■ Thermal Spraying is a technology to form coating by depositing molten materials on metal surfaces at high speed.



Thermal spraying process



Source: Company data

Surface treatment centered around thermal spraying has become a standard technology in a wide variety of fields, ranging from manufacturing to medical care, and its demand has been on the rise year by year. TOCALO has built a diverse customer base across many sectors, creating a customer mix that helps it navigate through changing economic climates. In particular, it has managed to acquire customers that are top-class companies in major growth industries. Breaking down the company's sales in FY03/23, 48% came from treatments on semiconductor and FPD manufacturing equipment parts; 8% industrial machinery parts; 7% furnishings and equipment used in the steel industry; 12% from other thermal spraying treatments; 6% from other types of surface treatments; 5% domestic subsidiary; and 14% overseas subsidiaries. In the past, most demand came from the steel and paper and pulp industries, but sales to customers in the semiconductor and FPD manufacturing equipment industries currently account for nearly 50% of sales. The company's most prominent customer is Tokyo Electron Limited, which accounted for 33.1% of consolidated sales in FY03/23.

Even in past cases in which profit fell short of initial forecasts or dropped YoY, TOCALO has maintained a stable, profitable structure with relatively few fluctuations in earnings, despite its high degree of reliance on semiconductor- and FPD-related sales. Shared Research believes that this stable, profitable structure is underpinned by TOCALO's robust customer base in the semiconductor and FPD fields as well as other industries, and repeat orders for functional surface treatments that offer high added value.

Sales to the Tokyo Electron group

Sales to large lot customers (JPYmn)	FY03/16 Act.	FY03/17 Act.	FY03/18 Act.	FY03/19 Act.	FY03/20 Act.	FY03/21 Act.	FY03/22 Act.	FY03/23 Act.	FY03/24 Act.	FY03/25 Act.
Tokyo Electron group	5,004	7,867	10,719	13,291	11,615	13,543	15,631	15,946	12,633	14,727
Sales dependence	17.4%	27.2%	31.4%	33.6%	30.6%	34.7%	35.7%	33.1%	27.0%	27.2%
Semiconductor equipment (parent)	8,628	8,519	11,273	14,895	12,497	16,030	18,990	21,739	19,557	24,114
Tokyo Electron group as % of semis	58.0%	92.3%	95.1%	89.2%	92.9%	84.5%	82.3%	73.4%	64.6%	61.1%

Source: Shared Research based on company data

Note: Figures for the Tokyo Electron Group include both parent company and overseas subsidiary sales.

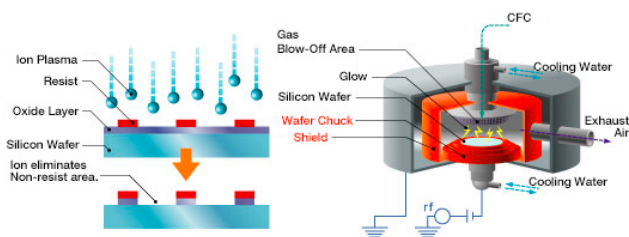
Surface treatment for semiconductor equipment parts

Thermal spraying is applied to parts of equipment used in silicon wafer processing (orange-colored components in the following diagrams). The procedure is utilized to achieve a range of objectives such as improving the components' resistance to plasma corrosion or giving electrical properties to the electrostatic chuck that holds the wafer during processing.

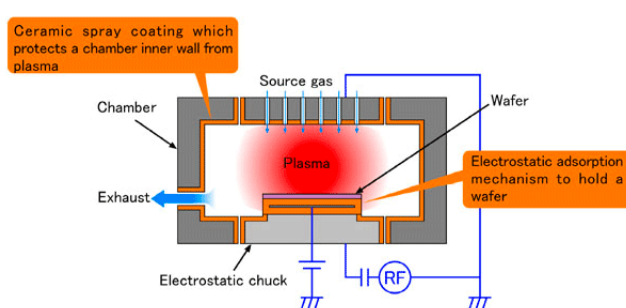
In the past, semiconductor equipment makers faced an urgent need to eliminate deposits inside their etching equipment chambers (making sure that particles scraped away during the etching process did not adhere to the chamber wall). In particular, chamber walls treated by aluminum alloy, alumite, or alumina were subject to corrosion in the plasma etching process, producing chemical compound particles, which became a significant cause of chip defects. TOCALO proposed a ceramic-based thermal spray coating for chamber walls that proved to be highly plasma resistant. The coating was quickly adopted as a standard for mass production in the semiconductor equipment industry accompanying its shift to 300mm wafers (the company also licenses technology to competitors).

The feature size of the most advanced semiconductors (very large-scale integrated circuits [VLSI circuits]) is becoming miniaturized, and the structure of these semiconductors multi-layered. Along with this trend, dry etching processes (use of plasmas or etchant gases to remove portions of substrate layers based on specific patterns defined by photoresist masks) are becoming increasingly more common. We understand more than half of the company's surface treatment on semiconductor equipment components is for dry etching equipment. TOCALO provides services to major semiconductor equipment makers in Japan and abroad, including Tokyo Electron, with which it has built a particularly close relationship and conducts joint development.

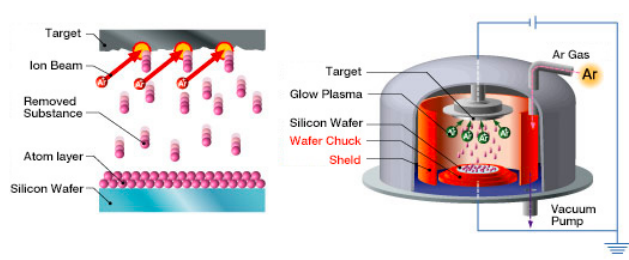
Dry etching equipment components



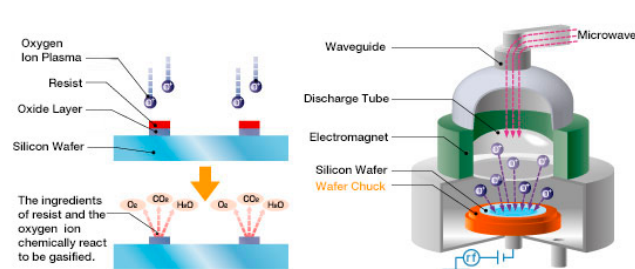
Dry etching equipment schematics



Sputtering equipment components



Ashing equipment components



Source: Company data

Surface treatment outside of the semiconductor and FPD fields (industrial equipment, steel, paper and pulp, energy, transportation, petrochemical, resins/films sectors)

The thermal spraying business for the steel and paper industries supported TOCALO's rapid progress during the 1980s and 1990s. The steelmaking industry was a standout driver of growth. Increased orders for thermal spraying on in-sink and processing rolls (tension bridges, deflector rolls, etc.) of continuous galvanizing lines (CGL) and hearth rolls of continuous annealing lines (CAL), continuous annealing and processing lines (CAPL), and CGL helped expand the company's earnings.

In the paper industry, TOCALO reached a technical cooperation agreement in 1989 with Vendor Machine Co., Ltd., which had a strong track record in Europe and the US, and began offering thermal spraying and polishing treatments for yankee dryer rolls. The yankee dryer roll is a core machine for paper manufacturers and determines the quality of paper products such as tissue paper and newspaper. The company's coating technology has been widely adopted as a standard thermal spraying treatment for rolls used by many paper manufacturers because of its excellent reputation for quality.

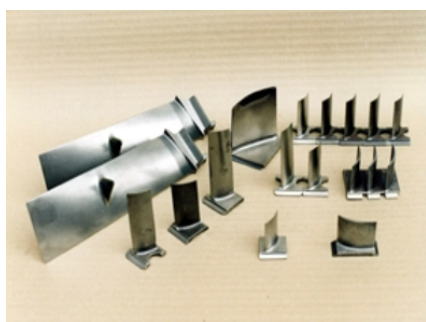
In industrial equipment, particularly noteworthy is the use of TOCALO's thermal spraying technology to insulate the bearings utilized in drive motors for bullet train cars (delivered by the company in 2001). Sometimes, minute electrical currents can leak from motors and generators attached to the surface of bearings, causing electrical discharge. This can cause (electrolytic) corrosion, which leads to early bearing deterioration. TOCALO was able to add insulation properties to the surface of these bearings and prevent the corrosion caused by electrical discharge. Leveraging the safety knowhow nurtured through the bullet train project, TOCALO developed low-cost, thermal-sprayed insulated bearings that are currently being widely utilized as industry standards in both Chinese railways and in the New York subway system. These bearings are also receiving attention for their application in wind power generators and are being progressively adopted in this capacity.

Thermal spraying is also essential for gas turbines that are powered by fossil fuels such as coal and oil. It is applied to vital components used in these gas turbines, including their blades, which must provide stable performance in harsh environments near combustor outlets that can reach temperatures of 1,500° C.

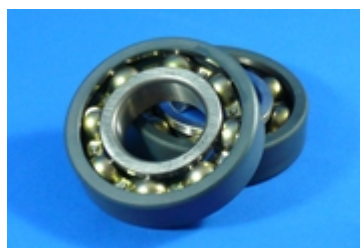
Surface treatment technology is also important in the automotive and aviation equipment industries. However, TOCALO's opportunities to provide contracted thermal spraying services in these industries are limited by major hurdles, such as restrictions aimed at meeting safety standards and capacity for mass production work. The company conducts the Toyota diffusion (TD) process, a surface treatment method developed by Toyota Central R&D Labs, Inc., on press molds used for automobiles.

In the aircraft industry, TOCALO had performed thermal spraying (recoating) on engine parts for ANA (TSE Prime: 9202) but was forced to pull out after about one year as ANA began performing this treatment internally. The company also works on components of the Mitsubishi SpaceJet passenger planes being developed by Mitsubishi Heavy Industries, Ltd. (TSE Prime: 7011) and wing flap components made by Embraer S.A. in Brazil, but these endeavors have apparently not achieved notable progress when compared to initial plan.

Gas turbines (industrial equipment, transportation equipment)



Bearings (industrial equipment)



Boilers (energy, petrochemical)



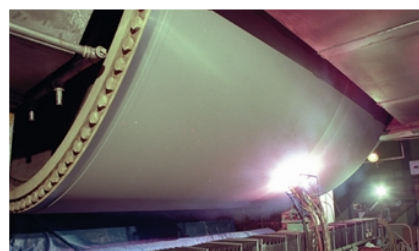
Hearth rolls (steel industry, in-furnace rolls)



Sink rolls (steel industry, in-sink rolls)



Yankee dryer rolls (paper manufacturing)



Source: Company data

Primary business locations (parent)

TOCALO's main factories for the semiconductor and FPD fields are the Akashi Harima, Kitakyushu, and Tokyo factories. The company has also located its Miyagi Technical Service Center nearby the Miyagi factory of Tokyo Electron, a major customer. Its Nagoya and Mizushima factories focus primarily on the steel industry while its Kobe factory performs miscellaneous surface treatments, such as the TD process and ZAC coating.

Main business bases (non-consolidated)

List of offices and plants	Plant
Headquarters (Kobe, Hyogo prefecture)	Tokyo Plant Gyoda Workshop
Thermal Spraying Technology R&D Laboratories (Akashi, Hyogo prefecture)	Tokyo Plant Suzumi Workshop
	Miyagi Technical Service Center
Office	Nagoya Plant
Kitakanto Office	Kobe Plant
Kanagawa Office	Akashi Plant
Yamanashi Office	Akashi No.2 Plant
Shizuoka Office	Akashi No.4 Plant
	Akashiharima Plant
	Kurashiki Plant
	Kitakyushu Plant

Source: Shared Research based on company data

Domestic Subsidiaries

The company has two consolidated subsidiaries in Japan: Japan Coating Center Co., Ltd. (JCC) and Terada Kosakusho Co., Ltd., both of which are wholly owned subsidiaries.

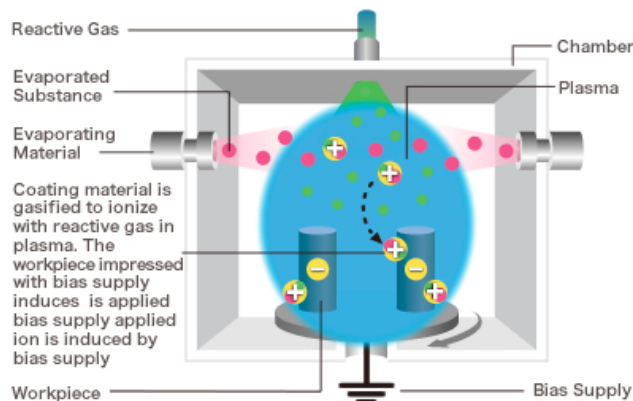
Japan Coating Center Co., Ltd. (JCC)

JCC was established in 1985 and became a wholly owned subsidiary of the company in 2004. It primarily performs physical vapor deposition (PVD) on cutting tools, edged tools, metallic molds, and other similar materials. The PVD process adds functionality, such as abrasion and corrosion resistance, to the workpieces by forming hard, dense, thin, and highly adhesive ceramic coatings on their surfaces. These coatings are generated by ionizing metals, including titanium and chromium, in a vacuum with reactive gases.

Among the various types of **PVD processes**, JCC utilizes the ion plating method, which stands out in deposition and adhesive properties. This process minimizes heat deformation of the workpiece because it allows for a wide selection of temperature ranges, enabling optimal treatment based on the type of substrate. It is also suitable for mass produced goods. The Mercury Coat offered by JCC is a new coating with high hardness, oxidation resistance, and abrasion resistance. An example of its application is the high-performance coating for hob cutters (components of hobbing machines to cut gears) that suit the changing specifications in gear cutting technology, which is shifting toward dry machining and high-speed/high-feed equipment.

Source: Shared Research based on company data

PVD process diagram

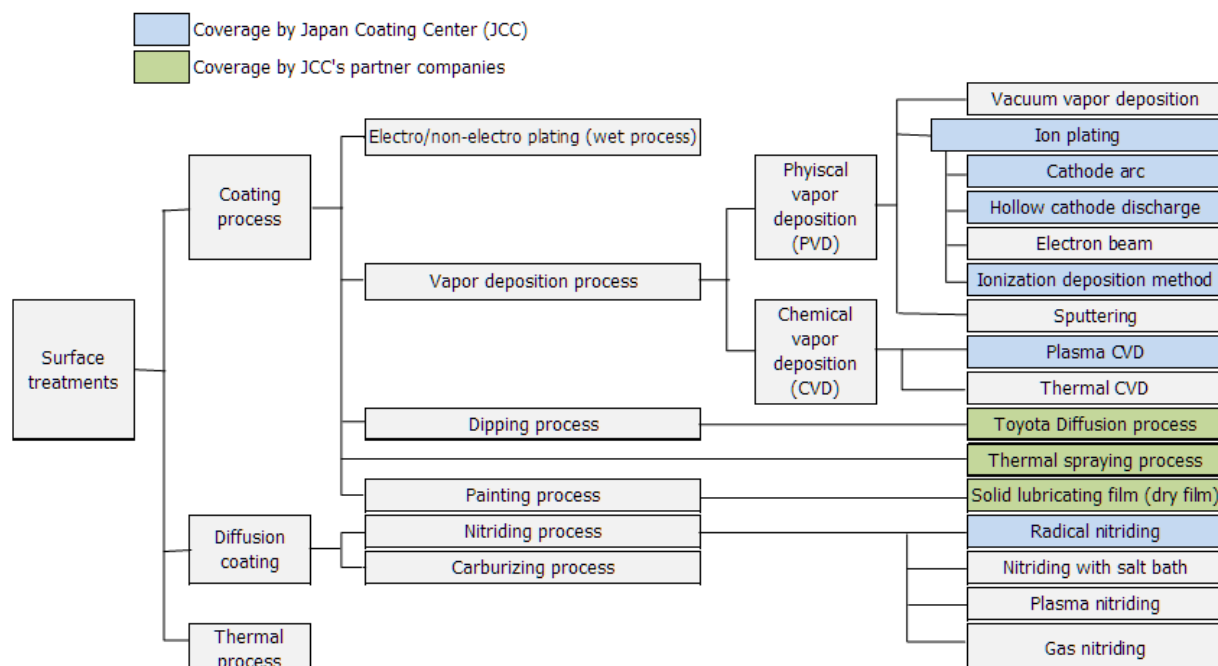


Application example: Cutting tools (hob cutters)



Source: Company data

Surface treatment technologies offered at Japan Coating Center Co., Ltd. (JCC)



Source: Shared Research based on company data

Terada Kosakusho

The other consolidated subsidiary in Japan, Terada Kosakusho Co., Ltd., is engaged in the production of machine tools and precision machinery components. TOCALO acquired 100% of its shares on August 26, 2024. Terada Kosakusho operates three in-house plants, each specializing in general parts machining, ultra-precision machining, and polishing, respectively. Utilizing a wide range of materials and an integrated production system, the subsidiary has delivered high-precision machining of mechanical components. TOCALO aims to create new value by combining Terada Kosakusho's machining technologies with its own surface modification technologies. To this end, the company plans to make capital investments in FY03/26, including the construction of a new plant building (Plant No. 4) at Terada Kosakusho. As of the August 2024 acquisition, the three existing plants at Terada Kosakusho were as follows:

- **General machining plant:** This facility manufactures standard parts with high precision and consistent quality by handling a wide variety of shapes and materials. It is equipped with NC lathes, vertical machining centers (MCs), and horizontal MCs.
- **Precision machining plant:** This plant produces precision and complex-shaped parts with high accuracy and stable quality, using horizontal MCs and 5-axis MCs to handle high-difficulty machining tasks.
- **Polishing plant:** Specializing in the finishing of part surfaces, inner diameters, outer diameters, and flat surfaces, this facility uses polishing machines to achieve smooth finishes and micron-level precision.

Other Surface Treatments

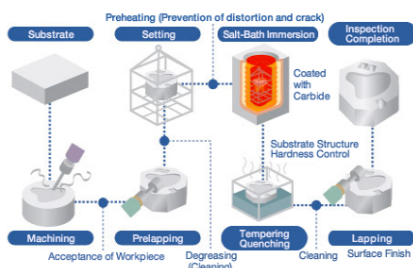
Toyota diffusion (TD) process (external sales of JPY803mn [2.8% of total sales] in FY03/16)

The TD process is a surface treatment method that forms extremely hard and thin carbide layer by immersing workpieces, such as molds for automobiles, components used in steelworking, and extruder parts, into molten salt baths, causing the diffusion and osmosis of substances such as vanadium and niobium. This carbide layer adds abrasion resistance and seize resistance to target surfaces.

TD- vanadium carbide (VC) coating is an extremely hard coating that can be produced using TD treatment, a type of high-temperature salt bath treatment. It has a cross-sectional hardness of between 3,200 and 3,800 Hv, which protects workpiece surfaces from abrasion and seizing. TD-VC coating also significantly improves the durability of components and is now highly regarded as an indispensable surface treatment technology in the die making industry. Furthermore, the salt bath treatment can be performed regardless of the shape of the subject, enabling uniform coating formation, even on unseen interior surfaces. The TD process has been used to add abrasion resistance and seize resistance properties to press molds used for automobiles, raising productivity and extending the lives of these metallic molds.

Source: Shared Research based on company data

TD process



TD-VC coating



Application example: molds used for automobiles



Source: Company data

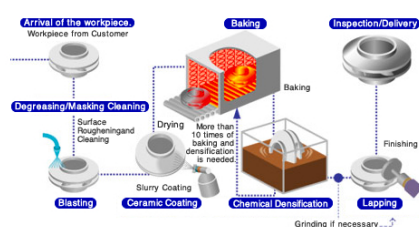
Zinc alloy coating (ZAC) (external sales of JPY406mn [1.4% of total sales] in FY03/16)

ZAC treatment is a surface treatment method that forms extremely dense composite ceramic coatings whose main component is chromium oxide. The treatment is often applied to parts of equipment such as pumps, textile machinery, and wiredrawing machines, giving them corrosion and abrasion resistance properties.

ZAC coating uses chemical reaction to form composite ceramic coatings primarily composed of chromium oxide (Cr_2O_3). The coating is characterized by properties such as high density, hardness, and adhesiveness, as well as a low frictional coefficient. It is extraordinarily powerful when used to enhance machine parts that require abrasion and corrosion resistance. ZAC coating treatment has been applied to a variety of pump components, forming ceramic coatings with superior corrosion resistance that extend their useful lives and eliminate the need for maintenance.

Source: Shared Research based on company data

CDC-ZAC coating process



Furnace combustion treatment



Application example: pump components



Source: Company data

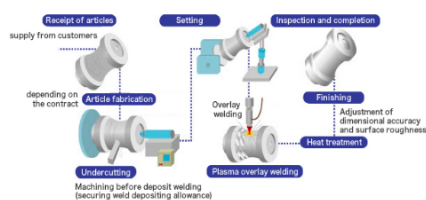
Plasma transferred arc (PTA) process (external sales of JPY364mn [1.3% of total sales] in FY03/16)

The PTA process, a type of overlay welding, is a surface treatment method that uses a high-energy plasma arc to melt a wide variety of pulverized materials and welds them onto the surfaces of equipment that requires high degrees of reliability, including pump and valve components and devices such as steelworking rolls. It provides the equipment with abrasion and corrosion resistance properties.

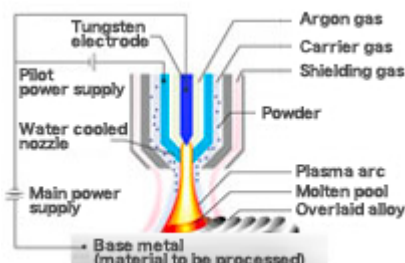
PTA process: A surface treatment technology that uses a high-energy transferred plasma arc to perform overlay welding. Since the overlay material can be applied in powder form, materials that cannot be processed into wires or rods, such as hard materials and ceramics, can be used in this treatment. Coatings that best suit the intended use of the workpiece are achieved by mixing a wide variety of powdered metal alloys and ceramics at controlled ratios. It is also possible to convert the coating created through this process into cermet after it has been overlaid onto the target surface. The bond between the coating and the substrate is metallurgic, causing superior peeling resistance. Since the PTA treatment uses overlay welding, it is quite capable of forming thicker coatings than other methods. In addition to these characteristics, the PTA coating maintains a high degree of hardness even when exposed to high temperatures, and sports superior abrasion, seize, and corrosion resistance. Its application is poised to expand to an increasingly large variety of equipment requiring first-class quality control, including petroleum-related equipment, ships, aircraft, transportation equipment, and nuclear power generation equipment.

Principle of PTA technology: The next figure (center) illustrates how overlay welding via the PTA process works. First, a pilot power supply is used to start an arc in an argon gas-filled space between a tungsten electrode and a water-cooled nozzle. Argon gas passing through this electric arc is ionized to form a hot plasma gas, which is then constricted through a thermal pinch effect produced by the water-cooled constrictor nozzle and discharged against the workpiece as a plasma arc with high energy density. Once this arc reaches the workpiece, the main power supply is activated to maintain contact between the arc and the substrate. The arc current flows through the substrate, forming a molten pool on its surface. Meanwhile, the powdered overlay material is pumped into a carrier gas, such as helium or argon gas, and fed into the plasma arc. It is thrown into the molten pool on the surface of the substrate in a melted state, forming an overlay. The figure (RHS) below compares the convergence properties of plasma arcs and gas tungsten arcs based on the differences between their temperature distributions. The plasma arc is narrowly constricted by the water-cooled nozzle, giving it high energy density. This is why the PTA process even allows for powders with high melting points to be used as overlay materials. Source: Shared Research based on company data

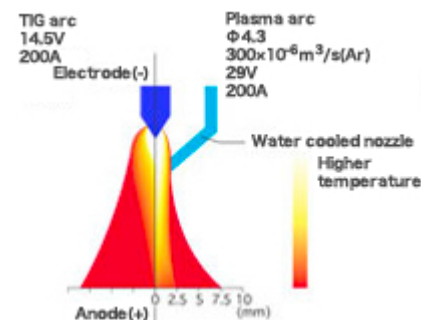
PTA overlay welding process



Principle of PTA technology



Temperature distribution of gas tungsten (TIG) arc and plasma arc



Source: Company data

Overseas Subsidiaries

Consolidated subsidiary TOCALO & HAN TAI Co., Ltd. (Guangzhou, Guangdong, China; established in April 2005) primarily performs thermal spraying and overlay welding within China.

TOCALO & HAN TAI KS Co., Ltd. (Kunshan, Jiangsu, China; established in May 2011) and TOCALO & HAN TAI TW Co., Ltd. (Tainan, Taiwan; established in June 2011), both consolidated subsidiaries, serve as bases for expanding the maintenance business for semiconductor and FPD manufacturing equipment in Chinese and Taiwanese markets. They perform surface treatments, including thermal spraying, cleaning, and anodizing treatment, on equipment components.

Consolidated subsidiary TOCALO USA, Inc. (California, USA; established in November 2015) was established to set up a service base for the maintenance of semiconductor equipment components in the US, which houses a number of

prominent end users. However, operating rates remained low as the launch of operations was delayed because permits and approvals from state authorities took longer than expected to obtain. In FY03/21, the company booked an impairment loss on fixed assets of JPY349mn as an extraordinary loss as part of a sweeping overhaul, including dealing with prior-year losses all at once. The company decided to revamp its structure in anticipation of semiconductor growth from 2024 onward as major US semiconductor companies start operations at new factories.

The two overseas non-consolidated subsidiaries—PT. TOCALO Surface Technology Indonesia (established in June 2017) and TOCALO Surface Technology (Thailand) Co., Ltd. (established in October 2012)—primarily provide surface modification processing such as thermal spraying and welding for Japanese steel manufacturers operating locally.

Group companies (as of FY3/25)

Company	Established	Headquarters	Stake	Business
Consolidated subsidiaries				
Japan Coating Center Co., Ltd.	Apr. 1985	Kanagawa	100%	Physical vapor deposition (PVD) process
Terada Kosakusho Co., Ltd.	May 1980	Fukuoka Pref.	100%	Machining of machine tool and precision machinery components
TOCALO & HAN TAI Co., Ltd.	Apr. 2005	Guangzhou, China	70%	Thermal spraying (steel, other)
TOCALO & HAN TAI (KUNSHAN) Co., Ltd.	Nov. 2011	Jiangsu, China	90%	Thermal spraying (steel, semiconductor, FPD, other)
TOPWINTech Co., Ltd.	Jun. 2011	Tainan, Taiwan	50%	Thermal spraying (steel, semiconductor, FPD, other)
TOCALO USA, Inc.	Nov. 2015	California, US	100%	Thermal spraying (semiconductor, other)
TOCALO USA-Arizona LLC	Sep. 2025	Arizona, US	100%	Thermal spraying (semiconductor, other)
Other (non-cons., non-equity method)	One in Indonesia, another in Thailand			Thermal spraying (steel, other)

Source: Shared Research based on company materials

Segment summary

Note: While the key figures in the description have been updated, we plan to revise certain figures at a later date based on market data.

By segment, Thermal Spraying (Parent) accounted for 72.4% of sales in FY03/24, while Domestic Subsidiary (JCC) made up 5.3%, Overseas Subsidiaries 15.5%, Other Surface Treatments 6.5%, and royalty income 0.4%. The segment profit margins (recurring profit basis) were 18.6% in Thermal Spraying (Parent), 20.0% in Domestic Subsidiary, 26.1% in Overseas Subsidiaries, and 17.7% in Other Surface Treatments. The company's segment profit margins are showing relatively stable improvement, despite being prone to the silicon cycle. Profitability in the Domestic Subsidiary segment (comprising Japan Coating Center Co., Ltd. [JCC]) is lower than in the Thermal Spraying (Parent) segment but has been improving notably. JCC managed itself independently for about ten years after becoming a TOCALO subsidiary in September 2004, but Shared Research observes JCC has produced synergy with the parent company over the past several years. However, JCC has been susceptible to the impact of trade friction and other macroeconomic factors because many of its transactions are in the automotive parts industry.

By region	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25
(JPYmn)	Act.	Act.	Act.	Act.	Act.	Act.	Act.	Act.	Act.	Act.
Sales	28,746	28,964	34,109	39,558	37,896	39,073	43,813	48,144	46,735	54,231
YoY	10.3%	0.8%	17.8%	16.0%	-4.2%	3.1%	12.1%	9.9%	-2.9%	16.0%
Domestic	23,678	24,407	28,206	32,155	30,543	30,350	34,568	36,942	33,573	37,914
YoY	9.6%	3.1%	15.6%	14.0%	-5.0%	-0.6%	13.9%	6.9%	-9.1%	12.9%
% of total	82.4%	84.3%	82.7%	81.3%	80.6%	77.7%	78.9%	76.7%	71.8%	69.9%
Overseas	5,068	4,557	5,903	7,403	7,352	8,722	9,245	11,202	13,162	16,317
YoY	13.7%	-10.1%	29.5%	25.4%	-0.7%	18.6%	6.0%	21.2%	17.5%	24.0%
% of total	17.6%	15.7%	17.3%	18.7%	19.4%	22.3%	21.1%	23.3%	28.2%	30.1%

Source: Shared Research based on company data

Note: Figures may differ from company materials due to differences in rounding methods.

By segment (JPYmn)	FY03/16 Act.	FY03/17 Act.	FY03/18 Act.	FY03/19 Act.	FY03/20 Act.	FY03/21 Act.	FY03/22 Act.	FY03/23 Act.	FY03/24 Act.	FY03/25 Act.
Sales	28,746	28,964	34,109	39,558	37,896	39,073	43,813	48,144	46,735	54,231
YoY	10.3%	0.8%	17.8%	16.0%	-4.2%	3.1%	12.1%	9.9%	-2.9%	16.0%
Thermal Spraying (Parent)	21,933	22,309	26,183	30,400	28,221	30,141	33,043	36,184	33,859	39,213
YoY	14.4%	1.7%	17.4%	16.1%	-7.2%	6.8%	9.6%	9.5%	-6.4%	15.8%
% of total	76.3%	77.0%	76.8%	76.8%	74.5%	77.1%	75.4%	75.2%	72.4%	72.3%
Domestic Subsidiary	1,978	2,111	2,312	2,493	2,364	2,018	2,399	2,414	2,457	2,656
YoY	1.5%	6.8%	9.5%	7.8%	-5.2%	-14.6%	18.9%	0.6%	1.8%	8.1%
% of total	6.9%	7.3%	6.8%	6.3%	6.2%	5.2%	5.5%	5.0%	5.3%	4.9%
Overseas Subsidiaries	3,262	2,806	3,642	4,460	4,925	4,800	5,695	6,622	7,257	9,319
YoY	2.4%	-14.0%	29.8%	22.5%	10.4%	-2.5%	18.6%	16.3%	9.6%	28.4%
% of total	11.3%	9.7%	10.7%	11.3%	13.0%	12.3%	13.0%	13.8%	15.5%	17.2%
Other Surface Treatments	1,572	1,736	1,971	2,204	2,384	2,112	2,502	2,745	3,019	2,880
YoY	-10.6%	10.4%	13.5%	11.8%	8.2%	-11.4%	18.5%	9.7%	10.0%	-4.6%
% of total	5.5%	6.0%	5.8%	5.6%	6.3%	5.4%	5.7%	5.7%	6.5%	5.3%
Royalty income	-	-	-	-	-	-	171	177	141	161
YoY	-	-	-	-	-	-	-	3.5%	-20.3%	14.2%
% of total	-	-	-	-	-	-	0.4%	0.4%	0.3%	0.3%
Segment profit (recurring profit)	5,028	5,801	7,363	8,076	6,812	8,914	10,571	11,003	9,662	12,561
YoY	2.8%	15.4%	26.9%	9.7%	-15.7%	30.9%	18.6%	4.1%	-12.2%	30.0%
Recurring profit margin	17.5%	20.0%	21.6%	20.4%	18.0%	22.8%	24.1%	22.9%	20.7%	23.2%
Thermal Spraying (Parent)	4,520	4,889	6,009	6,515	5,273	6,760	8,086	8,341	6,284	8,868
YoY	18.3%	8.2%	22.9%	8.4%	-19.1%	28.2%	19.6%	3.2%	-24.7%	41.1%
Recurring profit margin	20.6%	21.9%	23.0%	21.4%	18.7%	22.4%	24.5%	23.1%	18.6%	22.6%
% of total	84.1%	82.8%	78.9%	78.7%	74.4%	78.6%	76.5%	77.1%	68.3%	68.4%
Domestic Subsidiary	272	402	502	545	491	406	471	352	492	349
YoY	-16.0%	47.8%	24.9%	8.6%	-9.9%	-17.3%	16.0%	-25.3%	39.8%	-29.1%
Recurring profit margin	13.8%	19.0%	21.7%	21.9%	20.8%	20.1%	19.6%	14.6%	20.0%	13.1%
% of total	5.1%	6.8%	6.6%	6.6%	6.9%	4.7%	4.5%	3.3%	5.3%	2.7%
Overseas Subsidiaries	589	491	974	1,064	1,056	1,297	1,537	1,653	1,892	3,330
YoY	8.7%	-16.6%	98.4%	9.2%	-0.8%	22.8%	18.5%	7.5%	14.5%	76.0%
Recurring profit margin	18.1%	17.5%	26.7%	23.9%	21.4%	27.0%	27.0%	25.0%	26.1%	35.7%
% of total	11.0%	8.3%	12.8%	12.9%	14.9%	15.1%	14.5%	15.3%	20.6%	25.7%
Other Surface Treatments	-4	122	126	152	266	135	468	468	534	422
YoY	-	-	3.3%	20.6%	75.0%	-49.2%	246.7%	0.0%	14.1%	-21.0%
Recurring profit margin	-0.3%	7.0%	6.4%	6.9%	11.2%	6.4%	18.7%	17.0%	17.7%	14.7%
% of total	-	2.1%	1.7%	1.8%	3.8%	1.6%	4.4%	4.3%	5.8%	3.3%
Adjustments	-349	-103	-249	-201	-275	314	7	188	457	-409

Source: Shared Research based on company data

Note: Figures may differ from company materials due to differences in rounding methods.

Subsegment sales (JPYmn)	FY03/16 Act.	FY03/17 Act.	FY03/18 Act.	FY03/19 Act.	FY03/20 Act.	FY03/21 Act.	FY03/22 Act.	FY03/23 Act.	FY03/24 Act.	FY03/25 Act.
Sales	28,746	28,964	34,109	39,558	37,896	39,294	43,813	48,144	46,735	54,231
YoY	10.3%	0.8%	17.8%	16.0%	-4.2%	3.7%	11.5%	9.9%	-2.9%	16.0%
Thermal Spraying (Parent)	21,933	22,309	26,183	30,400	28,221	30,141	33,043	36,184	33,859	39,213
YoY	14.4%	1.7%	17.4%	16.1%	-7.2%	6.8%	9.6%	9.5%	-6.4%	15.8%
% of total	76.3%	77.0%	76.8%	76.8%	74.5%	76.7%	75.4%	75.2%	72.4%	72.3%
Semiconductor and FPD equipment parts	10,069	10,003	13,474	17,134	14,102	18,176	20,643	23,260	19,557	24,114
YoY	20.2%	-0.7%	34.7%	27.2%	-17.7%	28.9%	13.6%	12.7%	-15.9%	23.3%
% of total	35.0%	34.5%	39.5%	43.3%	37.2%	46.3%	47.1%	48.3%	41.8%	44.5%
Semiconductor equipment	8,628	8,519	11,273	14,895	12,497	16,030	18,990	21,739	18,019	22,369
YoY	18.7%	-1.3%	32.3%	32.1%	-16.1%	28.3%	18.5%	14.5%	-17.1%	24.1%
% of total	30.0%	29.4%	33.0%	37.7%	33.0%	40.8%	43.3%	45.2%	38.6%	41.2%
FPD equipment	1,441	1,484	2,201	2,238	1,604	2,145	1,653	1,520	1,537	1,745
YoY	29.8%	3.0%	48.3%	1.7%	-28.3%	33.7%	-22.9%	-8.0%	1.1%	13.5%
% of total	5.0%	5.1%	6.5%	5.7%	4.2%	5.5%	3.8%	3.2%	3.3%	3.2%
Industrial machinery	4,072	4,050	4,218	4,154	4,782	3,965	3,707	3,802	4,923	4,872
YoY	8.5%	-0.5%	4.1%	-1.5%	15.1%	-17.1%	-6.5%	2.6%	29.5%	-1.0%
% of total	14.2%	14.0%	12.4%	10.5%	12.6%	10.1%	8.5%	7.9%	10.5%	9.0%
Steelmaking machinery	3,438	3,497	3,697	3,662	3,899	3,166	3,450	3,582	3,651	3,927
YoY	13.1%	1.7%	5.7%	-0.9%	6.5%	-18.8%	9.0%	3.8%	1.9%	7.6%
% of total	12.0%	12.1%	10.8%	9.3%	10.3%	8.1%	7.9%	7.4%	7.8%	7.2%
Other applications	4,353	4,758	4,793	5,449	5,437	4,832	5,242	5,539	5,727	6,298
YoY	8.8%	9.3%	0.7%	13.7%	-0.2%	-11.1%	8.5%	5.7%	3.4%	10.0%
% of total	15.1%	16.4%	14.1%	13.8%	14.3%	12.3%	12.0%	11.5%	12.3%	11.6%
Other Surface Treatments	1,572	1,736	1,971	2,204	2,384	2,112	2,502	2,745	3,019	2,880
YoY	-10.6%	10.4%	13.5%	11.8%	8.2%	-11.4%	18.5%	9.7%	10.0%	-4.6%
% of total	5.5%	6.0%	5.8%	5.6%	6.3%	5.4%	5.7%	5.7%	6.5%	5.3%
Domestic Subsidiary	1,978	2,111	2,312	2,493	2,364	2,018	2,399	2,414	2,457	2,656
YoY	1.5%	6.8%	9.5%	7.8%	-5.2%	-14.6%	18.9%	0.6%	1.8%	8.1%
% of total	6.9%	7.3%	6.8%	6.3%	6.2%	5.1%	5.5%	5.0%	5.3%	4.9%
Overseas Subsidiaries	3,262	2,806	3,642	4,460	4,925	4,800	5,695	6,622	7,257	9,319

YoY	2.4%	-14.0%	29.8%	22.5%	10.4%	-2.5%	18.6%	16.3%	9.6%	28.4%
% of total	11.3%	9.7%	10.7%	11.3%	13.0%	12.2%	13.0%	13.8%	15.5%	17.2%
Royalty income	-	-	-	-	-	-	171	177	141	161
YoY	-	-	-	-	-	-	-	3.5%	-20.3%	14.2%
% of total	-	-	-	-	-	-	0.4%	0.4%	0.3%	0.3%
Physical vapor deposition (PVD) process	1,978	2,111	2,312	2,493	2,364	2,018	2,399	2,414	2,457	2,656
YoY	1.5%	6.7%	9.5%	7.8%	-5.2%	-14.6%	18.9%	0.6%	1.8%	8.1%
% of total	6.9%	7.3%	6.8%	6.3%	6.2%	5.1%	5.5%	5.0%	5.3%	4.9%
Toyota Diffusion (TD) process	803									
YoY	-8.9%									
% of total	2.8%									
Zinc-alloy coating (ZAC) process	406									
YoY	-9.6%									
% of total	1.4%									
Plasma transferred arc (PTA) process	364									
YoY	-15.0%									
% of total	1.3%									
Other	3,263									
YoY	2.4%									
% of total	11.4%									

Source: Shared Research based on company data

Notes: Figures may differ from company materials due to differences in rounding methods.

PVD treatment is performed by domestic subsidiary JCC

Stability of earnings supported by repeat demand from domestic customers

In the past, even when profit has fallen below forecast or decreased YoY, the company has maintained stable profitability with relatively little deviation in terms of earnings, despite its high degree of reliance on semiconductor and FPD sales. Shared Research believes that these stable earnings are underpinned by a thick customer base in industries other than semiconductors and FPDs and repeat demand for functional surface treatments that provide high added value. Shared Research also holds the view that TOCALO has successfully gained customer loyalty by successively launching high-end products in response to customer needs.

Capital expenditures, depreciation, and R&D expenses

TOCALO made significant capital expenditures of around JPY6.0bn in each year over the FY03/17–FY03/19 accounting periods. The purpose of these investments was to respond to heightened production in the semiconductor and FPD fields as well as to increase the production capacity of its domestic subsidiary. In FY03/23, capital expenditures were JPY4.9bn (+10.7% YoY). Its FY03/24 plan calls for capital expenditures of JPY5.0bn. This includes JPY2.6bn to strengthen the production system and improve efficiency at the Tokyo, Akashi, and Kitakyushu plants and put in place equipment to deal with anticipated robust semiconductor demand in Japan. Overseas, it earmarked JPY2.1bn for the construction of a new plant in Taiwan. The company generally targets an R&D expenses-to-sales ratio of about 3%, but is looking for 3.1% in FY03/24.

	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25
(JPYmn)	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.
Capital expenditures	3,730	5,936	6,361	5,965	2,313	4,822	4,385	4,855	4,875	5,032
Depreciation	1,560	1,703	1,948	2,658	2,991	2,771	2,783	2,987	3,056	3,283
R&D expenses	862	834	905	1,003	1,159	1,296	1,296	1,400	1,534	1,569
R&D ratio	3.0%	2.9%	2.7%	2.5%	3.1%	3.3%	3.0%	2.9%	3.3%	2.9%

Source: Shared Research based on company data

R&D structure

TOCALO's R&D is supported by two pillars: preemptive research and product development in response to customer need. The company has also identified three priority areas for R&D: thermal spraying technology development (development of components for general industrial machinery and equipment, thermal spraying treatment development); semiconductor component technology (development of components used in semiconductor and FPD manufacturing equipment through thermal spraying and other technologies); and coating method development (laser application, PVD, CVD, DLC, TD, ZAC) and organic coating.

The group's R&D lab for thermal spraying technology is central to its R&D activities. While working to develop new treatments and coating films, improve understanding of technological trends, and strengthen industrial and academic

collaboration, TOCALO aims to improve its R&D by raising its academic sensitivity by selecting and applying elemental technologies and gathering technical information. Meanwhile, the sales, manufacturing, and production technology departments at each of its factories and the R&D lab are collaborating to swiftly develop products that provide an immediate response to diversifying customer need and to resolve issues concerning production technology.

Furthermore, consolidated subsidiary Japan Coating Center Co., Ltd. is also lending its cooperation to R&D concerning physical vapor deposition (PVD), diamond-like carbon (DLC), and other thin coating treatments. In FY03/23, total R&D expenses for the entire group were JPY1.4bn. Details for each segment are indicated below (a segment-by-segment breakdown of the group's R&D expenses has not been included due to difficulty determining amounts that should be allocated to each segment).

(1) Thermal Spraying (Parent)

In pursuit of sustainable growth, the company is promoting the development of applications for surface treatment technology on high-performance components, focusing on fields such as semiconductors and FPD; new materials; environment and energy; transport aircraft; and medical care. In the semiconductor field, TOCALO is conducting ongoing development of electrostatic chucks and plasma-resistant coating technology for manufacturing equipment components. In particular, the company focuses on new coating materials and methods for the treatment of plasma etching equipment parts, as well as related evaluation technologies. Against a backdrop of active application of IoT and big data, this focus addresses the need for high-performance coating that can respond to production of integrated circuits with nano-level linewidth.

In the area of new materials, TOCALO helps blast furnace manufacturers by developing antifriction sprayed coatings for components that undergo severe stress from impact or other causes. The company is also developing a non-adhesive coating for conveyor rolls used by film manufacturers and the paper and pulp industry. In the environment and energy field, the company developed a high-performance, heat-shielding ceramic coating that protects high-temperature components in gas turbine generators and other equipment. This thermal spraying method is receiving worldwide attention, and the company is pursuing further development.

TOCALO is also actively working on developing a coating treatment that combines thermal spraying and laser technology. Thanks to these efforts, the company was able to trial manufacture a coating that offered dramatically improved adhesiveness and abrasion/corrosion resistance compared with the conventional thermal spray coating. The company began offering this coating to specific customers, and plans to conduct relevant product development while simultaneously evaluating its performance.

(2) Domestic Subsidiaries

Japan Coating Center Co., Ltd. develops PVD and DLC coatings. In FY03/20, it focused on developing a coating for semiconductor manufacturing equipment parts, which it has begun delivering to some customers. In addition, in the area of DLC coatings, it refined its existing Neo Slick series. In terms of production techniques, it installed automatic testing equipment, worked to automate in-process work, and began initiatives to improve quality and efficiency.

In addition, at Terada Kosakusho—which the company made a wholly owned subsidiary in August 2024—TOCALO aims to create new value by combining Terada Kosakusho's machining technologies with its own surface modification technologies. In addition to constructing a new plant building, the company also plans to strengthen its R&D capabilities.

(3) Other businesses

Aside from thermal spraying, TOCALO conducts ongoing product development related to functional coatings produced through the TD process, ZAC, PTA process, and other methods. In terms of developing organic and inorganic coatings, the company is testing the application of functional thin coatings in the areas of medical care and food. Projects include the development of coatings that prevent adhesion with living organisms and blood; the application of coatings to both water-resistant and hydrophilic medical devices; and the development and evaluation of corrosion-resistant coatings. Additionally, in the area of laser cladding technology (a new coating method), aiming to establish it as repair technology for general industrial machinery, the company evaluated the electrochemical characteristics and residual stress of the coatings. It plans to continue the active development of coatings utilizing laser technology.

(4) Patents

The group actively submits patent applications to secure the rights to its technology and coating products. In FY03/23, it held 140 patents in Japan and 122 patents overseas. The company submitted 33 patent applications in FY03/23 and had

22 patents registered.

Profitability analysis

Profit margins (JPYmn)	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25
	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.
Gross profit	9,727	10,536	12,646	13,761	12,780	14,814	16,585	17,365	16,243	20,246
Gross profit margin	33.8%	36.4%	37.1%	34.8%	33.7%	37.7%	37.9%	36.1%	34.8%	37.3%
Operating profit	4,806	5,646	7,110	7,741	6,550	8,890	10,255	10,558	9,197	12,271
Operating profit margin	16.7%	19.5%	20.8%	19.6%	17.3%	22.6%	23.4%	21.9%	19.7%	22.6%
EBITDA	6,423	7,361	9,058	10,399	9,541	11,661	13,038	13,545	12,253	15,570
EBITDA margin	22.3%	25.4%	26.6%	26.3%	25.2%	29.7%	29.8%	28.1%	26.2%	28.7%
Net margin	10.5%	14.1%	14.2%	13.8%	11.6%	13.9%	15.8%	15.3%	13.5%	14.8%
Financial ratios										
ROA (RP-based)	13.5%	14.1%	15.2%	14.7%	11.5%	14.2%	15.8%	15.3%	12.7%	15.7%
ROE	11.2%	13.9%	14.9%	15.2%	11.3%	12.9%	14.8%	14.3%	11.6%	13.9%
Total asset turnover	0.77	0.70	0.70	0.72	0.64	0.63	0.66	0.67	0.61	0.68
Inventory turnover	10.1	9.7	8.9	8.5	8.7	9.0	8.5	7.4	6.2	6.1
Days in inventory	36.2	37.5	41.1	43.1	42.0	40.4	42.7	49.1	58.9	60.3
Working capital	7,953	10,694	13,113	13,647	13,136	12,218	14,310	15,808	17,192	19,453
Current ratio	264.4%	258.9%	184.6%	207.7%	281.2%	271.8%	272.7%	272.1%	282.0%	295.9%
Quick ratio	235.6%	232.0%	164.4%	184.1%	258.6%	248.6%	246.3%	238.9%	246.6%	250.5%
OCF / Current liabilities	0.56	0.63	0.66	0.59	0.54	0.90	0.77	0.72	0.55	0.65
Net debt / Equity	-26.0%	-15.7%	-18.4%	-20.4%	-20.4%	-21.7%	-24.4%	-24.2%	-19.7%	-16.1%
OCF / Total liabilities	0.5	0.4	0.5	0.5	0.4	0.6	0.6	0.6	0.4	0.6
Cash conversion cycle (days)	89.1	n.a.	56.4	54.0	74.2	70.4	62.7	69.0	79.6	95.5
Change in working capital	624	2,741	2,419	534	-511	-918	2,092	1,498	1,384	2,261

Cash conversion cycle	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25
	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.
Accounts receivable turnover	3.2	3.0	3.2	3.4	3.2	3.5	3.9	3.9	3.6	3.8
Days in accounts receivable	112.6	120.5	115.8	107.8	112.8	103.5	94.8	93.4	101.8	95.4
Inventory turnover	10.1	9.7	8.9	8.5	8.7	9.0	8.5	7.4	6.2	6.1
Days in inventory	36.2	37.5	41.1	43.1	42.0	40.4	42.7	49.1	58.9	60.3
Accounts payable turnover	6.1	n.a.	3.6	3.8	4.5	5.0	4.9	5.0	4.5	6.1
Days in accounts payable	59.7	n.a.	100.4	96.9	80.6	73.5	74.8	73.6	81.0	60.3
Cash conversion cycle (days)	89.1	n.a.	56.4	54.0	74.2	70.4	62.7	69.0	79.6	95.5

Note: Accounts payable turnover is calculated using the previous method (not including electronically recorded monetary obligations) through FY03/16 and the current method (including electronically recorded monetary obligations) from FY03/18.

Assets	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25
(JPYmn)	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.
Total current assets	20,830	23,000	25,941	27,749	31,837	33,140	36,365	38,827	40,342	39,960
(% of total assets)	54.8%	51.9%	49.3%	48.4%	52.1%	51.6%	52.3%	52.3%	51.8%	48.9%
Accounts receivable	9,138	9,986	11,654	11,716	11,712	10,571	12,176	12,476	13,587	14,776
(% of total assets)	24.1%	22.5%	22.1%	20.5%	19.2%	16.5%	17.5%	16.8%	17.4%	18.1%
Total fixed assets	17,163	21,332	26,722	29,529	29,285	31,043	33,152	35,436	37,597	41,716
(% of total assets)	45.2%	48.1%	50.7%	51.6%	47.9%	48.4%	47.7%	47.7%	48.2%	51.1%
Investment securities	682	684	1,015	886	1,317	1,322	1,324	1,325	1,331	2,344
(% of total assets)	1.8%	1.5%	1.9%	1.5%	2.2%	2.1%	1.9%	1.8%	1.7%	2.9%
Total assets	37,992	44,331	52,664	57,278	61,122	64,183	69,517	74,263	77,940	81,676
Total asset turnover (times/year)	0.77	0.70	0.70	0.72	0.64	0.63	0.66	0.67	0.61	0.68
Liabilities	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25
(JPYmn)	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.
Total current liabilities	7,877	8,884	14,054	13,362	11,323	12,193	13,334	14,272	14,308	13,506
Accounts payable	3,036	1,229	1,434	1,271	1,157	1,194	1,397	1,425	1,477	1,475
Short-term debt	511	905	879	1,218	2,153	1,802	1,460	1,490	1,989	1,987
Accounts payable turnover (times/year)	6.1	n.a.	3.6	3.8	4.5	5.0	4.9	5.0	4.5	6.1
Current ratio	264.4%	258.9%	184.6%	207.7%	281.2%	271.8%	272.7%	272.1%	282.0%	295.9%
Total liabilities	8,922	12,079	16,524	17,613	18,487	17,291	17,058	16,620	18,015	15,944
Total interest-bearing debt	628	3,324	2,580	4,555	8,198	6,069	4,285	2,939	5,103	3,875
Dependence on interest-bearing debt	1.7%	7.5%	4.9%	8.0%	13.4%	9.5%	6.2%	4.0%	6.5%	4.7%
Net debt	-7,569	-5,063	-6,654	-8,105	-8,691	-10,158	-12,825	-13,973	-11,802	-10,608
Dependence on net interest-bearing debt	-19.9%	-11.4%	-12.6%	-14.2%	-14.2%	-15.8%	-18.4%	-18.8%	-15.1%	-13.0%
Total liabilities and net assets	37,992	44,331	52,664	57,278	61,122	64,183	69,517	74,263	77,940	81,676

Source: Shared Research based on company data

Note: Figures may differ from company materials due to differences in rounding methods.

Market and value chain

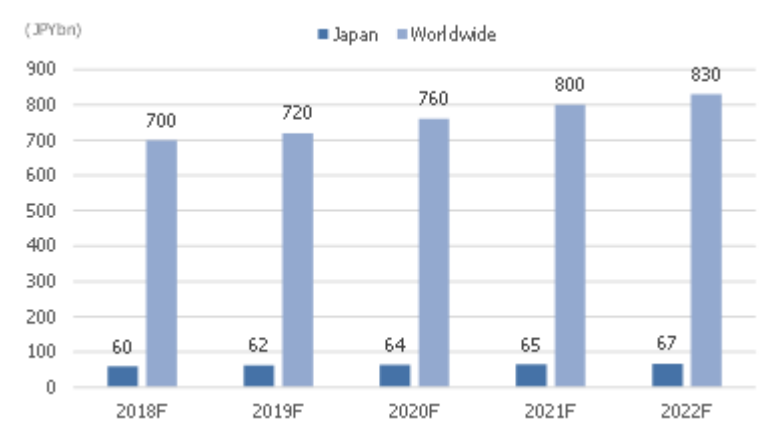
Note: The key figures in the tables and the description have not yet been updated. We will update them at a later date based on market data.

Scale of thermal spraying market

The thermal spraying industry broadly divides into companies that conduct thermal spraying internally and companies that perform thermal spraying as a contracted service. The market for contracted treatment in Japan was worth an estimated JPY60.0bn in 2018, while the global market was valued at about JPY700.0bn (Source: Yano Research Institute). We understand the company holds the top market share in Japan, at more than 40%.

Some competitors overseas sell thermal spraying materials and equipment in addition to providing contracted treatment services, but TOCALO specializes in services. Overseas sales accounted for 23.3% of the company's overall sales in FY03/23, primarily coming from Japanese companies that have expanded abroad. The company has concluded a number of licensing agreements with companies overseas.

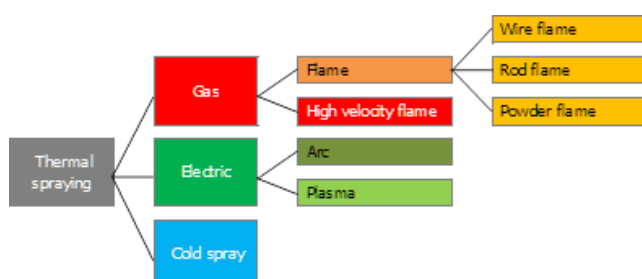
Thermal spraying market forecasts (Japan, worldwide)



Source: Shared Research based on data from the 2019 edition of *Thermal Spraying Market* from Yano Research Institute Ltd.

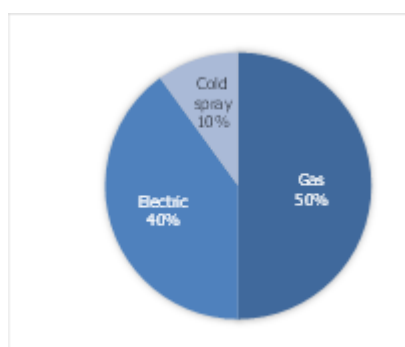
In 2018, gas-based thermal spraying methods accounted for 50% of the Japanese thermal spraying market, while electricity-based methods accounted for 40%, and cold-spray methods accounted for 10% (Source: Yano Research Institute).

Classification of thermal spraying methods



Source: Shared Research based on data obtained from the Japan Thermal Sprayers Association

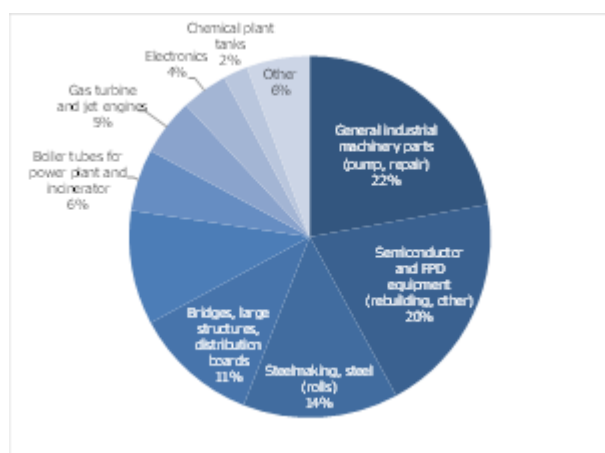
Breakdown of thermal spraying market (JPY60.0bn in FY2018) by method



Source: Shared Research based on data from the 2019 edition of *Thermal Sprayers Association Thermal Spraying Market* from Yano Research Institute

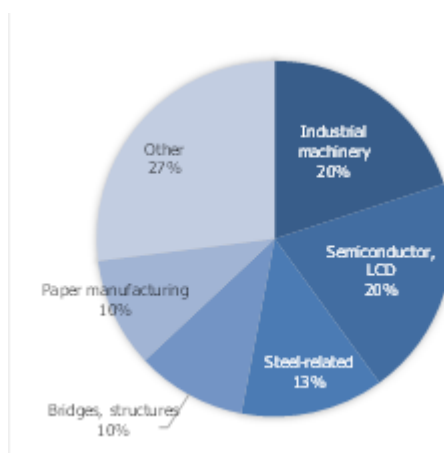
By areas of application, 20% of thermal spraying in Japan is associated with industrial equipment, 20% semiconductors and flat panel displays (FPDs), 13% steelmaking, 10% bridges and structures, 10% paper manufacturing, and 27% other uses (2018 actual; Yano Research).

Breakdown of FY2012 thermal spraying market (JPY43.5bn) by field of demand



Source: Shared Research based on data obtained from the 2013 edition of Status and Outlook of the *Thermal Spraying Market* from Digital Research, Inc.

Breakdown of FY2018 thermal spraying market (JPY60.0bn) by field of demand



Source: Shared Research based on data from the 2019 edition of *Thermal Spraying Market* from Yano Research Institute Ltd.

Sales of semiconductor equipment by Japan-based manufacturers (Source: Semiconductor Equipment Association of Japan [SEAJ]) are highly linked with TOCALO's sales in the semiconductor field. According to the SEAJ forecast announced in January 2022, sales of Japanese semiconductor equipment in FY2020 totaled JPY2.3tn (+7.9% YoY) and sales of Japanese FPD manufacturing equipment totaled JPY420.0bn (-11.7% YoY), for a total of JPY2.8tn (+7.9% YoY). At TOCALO (parent), sales in the semiconductor and FPD fields were JPY18.2bn (+28.9% YoY).

Japan-based manufacturing equipment sales (JPYmn)										Forecast		
(JPYmn)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Semiconductor	1,127,800	1,292,100	1,308,900	1,564,200	2,043,600	2,247,900	2,073,000	2,383,500	3,443,000	3,684,000	3,499,800	4,199,700
YoY	9.7%	14.6%	1.3%	19.5%	30.6%	10.0%	-7.8%	15.0%	44.5%	7.0%	-5.0%	20.0%
FPD	348,500	271,700	299,300	485,700	491,600	536,400	475,800	463,800	480,900	452,000	361,600	542,500
YoY	66.8%	-22.0%	10.2%	62.3%	1.2%	9.1%	-11.3%	-2.5%	3.7%	-6.0%	-20.0%	50.0%
Total	1,476,300	1,563,800	1,608,200	2,049,900	2,535,200	2,784,300	2,548,800	2,847,300	3,923,900	4,136,000	3,861,400	4,742,200
YoY	19.3%	5.9%	2.8%	27.5%	23.7%	9.8%	-8.5%	11.7%	37.8%	5.4%	-6.6%	22.8%
TOCALO sales (JPYmn)	FY03/14	FY03/15	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	
(JPYmn)	Act.	Act.	Act.	Act.	Act.	Act.	Act.	Act.	Act.	Act.	Est.	
Semiconductor	5,030	7,270	8,628	8,519	11,273	14,895	12,497	16,030	18,990	21,739	19,400	
YoY	-0.3%	44.5%	18.7%	-1.3%	32.3%	32.1%	-16.1%	28.3%	18.5%	14.5%	-10.8%	
FPD	1,023	1,110	1,441	1,484	2,201	2,238	1,604	2,145	1,653	1,520	1,300	
YoY	69.1%	8.5%	29.8%	3.0%	48.3%	1.7%	-28.3%	33.7%	-22.9%	-8.0%	-14.5%	
Total	6,054	8,380	10,069	10,003	13,474	17,134	14,102	18,176	20,643	23,260	20,700	
YoY	7.1%	38.4%	20.2%	-0.7%	34.7%	27.2%	-17.7%	28.9%	13.6%	12.7%	-11.0%	

Source: Shared Research based on data obtained from the company and the Semiconductor Equipment Association of Japan

Competitive landscape

Note: Key figures in this section and the tables included therein remain unchanged and will be updated when the company announces its 1H results after annual securities reports (both its own and those of its competitors) have been issued for FY03/25.

Domestic competitors

TOCALO is the sole listed company in the Japanese thermal spraying market, and boasts a share over 40%. The rest of the market is crowded with small- and medium-sized companies that each hold shares of just a few percent. The market includes some affiliates of major listed companies such as Nippon Steel Hardfacing Corporation, but it also houses a large number of independent companies like TOCALO that provide contracted treatment services.

Praxair Surface Technologies K.K.

Praxair Surface Technologies K.K. was established in Japan in 1960. It is a Japanese subsidiary of Praxair Surface Technologies, Inc. in the United States, which is expanding on a global scale. Praxair's thermal spraying and surface treatment technologies cover a variety of fields, including aerospace, nuclear power, steelworking, petrochemical, plastics, electronics, and industries related to printing.

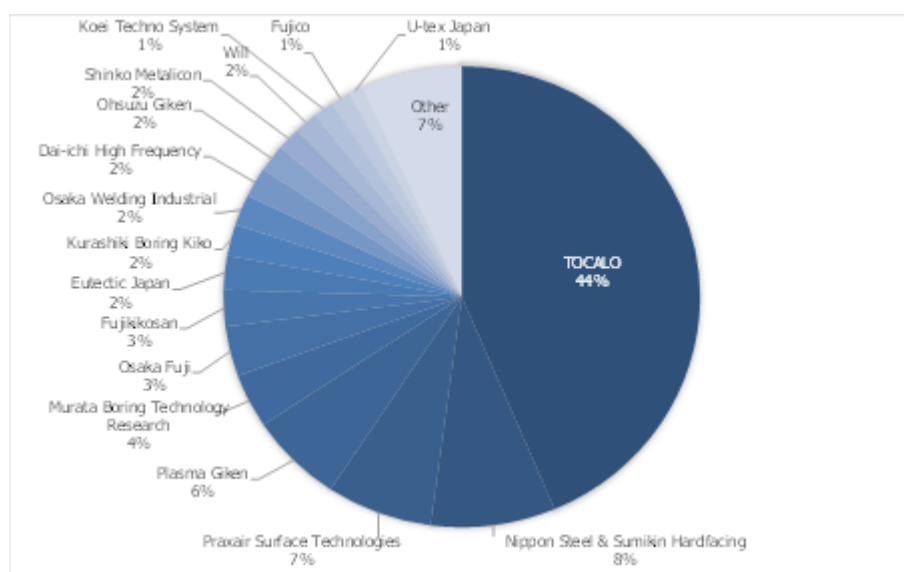
Nippon Steel Hardfacing Corporation (former name: Nippon Steel and Sumikin Hardfacing Co., Ltd.)

Nippon Steel Hardfacing Corporation came into existence in 1960 as the Nippon Hardfacing Co., Ltd., which was originally a part of the Yawata Iron & Steel Co., Ltd. (currently, the Nippon Steel Corporation [TSE Prime: 5401]) and specialized in surface hardening technology. Later, as the sole surface treatment provider in the Nippon Steel group, it worked to minimize lifecycle costs for rolls (excluding rolling mill rolls) and peripheral devices mainly used in the steel industry, with a core focus on the development of materials for welding and thermal spraying and relevant application techniques. In addition to its business activities in Japan, Nippon Steel Hardfacing began expanding globally in the 1990s, starting with North and South America. It is working to establish global supply systems primarily targeting the worldwide steel industry through a variety of efforts, including its 2012 establishment of a subsidiary in Thailand as a supply base for East Asia.

Plasma Giken Co., Ltd.

Established in 1980, Plasma Giken Co., Ltd. specializes in thermal spraying treatment. It principally provides contracted treatment services ranging from thermal spraying (plasma spraying, arc spraying, high velocity flame spraying, and detonation spraying) to cold spraying, from development to trial manufacturing, and from small- and medium-sized lots to mass production.

Shares of FY2012 cermet spraying market (JPY9.5bn)



Source: Shared Research based on data obtained from the 2013 edition of *Status and Outlook of the Thermal Spraying Market* from Digital Research, Inc.

Strengths and weaknesses

Strengths

A portfolio of diverse surface treatments that makes the company the leader in a niche market

One of TOCALO's strengths is its ability to handle a wide variety of surface treatments, ranging from thick coating (e.g., thermal spraying, TD process, ZAC coating, and PTA process) to thin coating (e.g., PVD process). Of the different categories in thermal spraying (metalized contact thermal spraying, maintenance thermal spraying, and functional thermal spraying), the company excels in functional thermal spraying, which is high value-added and has strong growth potential. It has captured more than 40% of the thermal spraying market in Japan (scale of about JPY60.0bn in 2018; source: Yano Research Institute) and holds the top share, whereas its competitors are all small- and medium-sized companies with market shares of 10% or less. These companies specialize in specific fields, and thus, are unable to handle a wide range of surface treatments that span from thick to thin coatings, as TOCALO can.

Ability to acquire top-class customers in major industries through joint development focused on meeting future needs

Surface treatment centered around thermal spraying has become a standard technology in a wide variety of fields, ranging from steel to semiconductors, and its demand has been on the rise year by year. One of TOCALO's strengths is that it has acquired top-class customers in major industries through joint development focused on needs of the future. In the past, most demand came from the steel and paper and pulp industries, but sales from the semiconductor and FPD equipment industries currently account for nearly 48% of the company's sales in FY03/23. One of the largest drivers of its semiconductor-related business is Tokyo Electron, which accounted for 35.7% of consolidated sales in FY03/22. TOCALO and Tokyo Electron have established a close relationship through which they conduct joint development to further improve surface treatments in the semiconductor and FPD fields, both areas of intense technological innovation. The company's engineers make frequent visits to customer sites to uncover hidden needs, and work with the customers to jointly discover solutions.

Stable earnings due to high domestic repeat demand for technologies with added value

In the past, even when profit has fallen below forecast or decreased YoY, the company has maintained stable profitability with relatively little deviation in terms of earnings, despite its high degree of reliance on semiconductor and FPD-related sales. Shared Research believes that these stable earnings are underpinned by a thick customer base in industries other than semiconductors and FPDs and repeat demand for functional surface treatments that provide high added value. Recoating demand is generated when components and parts that have undergone thermal spraying or other types of surface treatments become worn or deteriorate over time. The company does not merely provide maintenance through its recoating services; it also captures repeat demand for higher added value by proposing and providing products and services with heightened functionality.

Weaknesses

A lack of peripheral technologies and mass production bases necessary to process large orders

TOCALO has adopted a labor-intensive, made-to-order production system through which it customizes all surface treatments to fit the specifications of individual customers. Some of the company's competitors overseas develop, manufacture, and sell thermal spraying materials and equipment in addition to providing contracted treatment services, but TOCALO specializes in services. TOCALO's surface treatment lines, mainly thermal spraying, are designed to suit workpieces that have relatively large surface areas, and are not geared toward mass processing of small components. Accordingly, the company is currently unable to handle high volume components such as automobile parts, which are generally processed in quantities as large as one million units per year. We think the company lacks the peripheral technologies (including internal production of thermal spraying materials and equipment) and mass production bases necessary to handle high volume orders.

Lackluster cultivation of overseas markets

The global thermal spraying market was valued at about JPY700.0bn in 2018 (Source: Yano Research Institute). Although TOCALO has the top market share in Japan, it has not yet cultivated much of the overseas market, which is at least ten

times the size of Japan's market. In FY03/22, overseas sales only accounted for 21.1% of the company's sales, and mainly came from Japanese companies that had expanded overseas. The company has concluded many licensing agreements with overseas companies but rarely cultivates local customers on its own. Shared Research believes the company's market development abroad is somewhat lackluster compared with that of the many Japanese industrial machinery makers that have ventured overseas. Anticipating growth in its recoating business abroad, the company has expanded its overseas bases, primarily in Asia. However, it often misses out on repeat demand as recoating is often handled by local companies, particularly for low-end technologies where there is a large number of new market entrants (high-end technologies also apply in the case of South Korea). Shared Research surmises that TOCALO's strategy of obtaining royalty revenue through technological licensing is one factor lowering the barrier of entry for local companies.

Low profitability of the Other Surface Treatments business

The recurring profit margin (before segment adjustments) in Other Surface Treatments, which was 17.0% in FY03/23, paled in comparison to the 23.1% profit margin in Thermal Spraying, 14.6% in Domestic Subsidiary (Japan Coating Center), and 25.0% in Overseas Subsidiaries. Although Other Surface Treatments offers a variety of treatments (TD process, ZAC, and PTA process), their sales are only a few hundred million yen each. Despite this segment's involvement with the industrial equipment industry, it has not received enough orders to be able to demonstrate any volume efficiency. Shared Research believes that all of these treatment technologies are gradually becoming legacy technologies, which causes them to remain niche markets, inhibiting market expansion.

Historical results and financial statements

Income statement

Income statement (JPYmn)	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25
	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.
Sales	28,746	28,964	34,109	39,558	37,896	39,294	43,813	48,144	46,735	54,231
YoY	10.3%	0.8%	17.8%	16.0%	-4.2%	3.7%	11.5%	9.9%	-2.9%	16.0%
Cost of sales	19,020	18,428	21,462	25,797	25,116	24,479	27,227	30,778	30,491	33,984
Gross profit	9,727	10,536	12,646	13,761	12,780	14,814	16,585	17,365	16,243	20,246
YoY	8.5%	8.3%	20.0%	8.8%	-7.1%	15.9%	12.0%	4.7%	-6.5%	24.6%
Gross profit margin	33.8%	36.4%	37.1%	34.8%	33.7%	37.7%	37.9%	36.1%	34.8%	37.3%
SG&A expenses	4,921	4,890	5,536	6,019	6,229	5,924	6,329	6,807	7,046	7,975
YoY	11.9%	-0.6%	13.2%	8.7%	3.5%	-4.9%	6.8%	7.6%	3.5%	13.2%
SG&A ratio	17.1%	16.9%	16.2%	15.2%	16.4%	15.1%	14.4%	14.1%	15.1%	14.7%
Operating profit	4,806	5,646	7,110	7,741	6,550	8,890	10,255	10,558	9,197	12,271
YoY	5.2%	17.5%	25.9%	8.9%	-15.4%	35.7%	15.4%	3.0%	-12.9%	33.4%
Operating profit margin	16.7%	19.5%	20.8%	19.6%	17.3%	22.6%	23.4%	21.9%	19.7%	22.6%
Non-operating income	294	211	283	386	367	72	337	475	529	330
Non-operating expenses	71	55	30	52	105	48	21	29	63	41
Recurring profit	5,028	5,801	7,363	8,076	6,812	8,914	10,571	11,003	9,662	12,561
YoY	2.8%	15.4%	26.9%	9.7%	-15.7%	30.9%	18.6%	4.1%	-12.2%	30.0%
Recurring profit margin	17.5%	20.0%	21.6%	20.4%	18.0%	22.7%	24.1%	22.9%	20.7%	23.2%
Extraordinary gains	3	5	2	85	0	13	1	4	7	33
Extraordinary losses	342	3	198	83	17	361	124	18	13	396
Income taxes	1,467	1,540	2,008	2,273	2,038	2,675	3,091	3,150	2,731	3,559
Implied tax rate	31.3%	26.5%	28.0%	28.1%	30.0%	31.2%	29.6%	28.7%	28.3%	29.2%
Net income attributable to non-controlling interests	206	193	322	363	351	428	447	487	596	586
Net income attributable to owners of the parent	3,016	4,070	4,836	5,441	4,404	5,463	6,909	7,350	6,326	8,052
YoY	-0.5%	34.9%	18.8%	12.5%	-19.1%	24.0%	26.5%	6.4%	-13.9%	27.3%
Net margin	10.5%	14.1%	14.2%	13.8%	11.6%	13.9%	15.8%	15.3%	13.5%	14.8%

Source: Shared Research based on company data

Note: Figures may differ from company materials due to differences in rounding methods.

Non-operating income and expenditures

- ▶ For FY03/25, non-operating income came to JPY289mn, down JPY177mn from JPY466mn in FY03/24. The main factors behind the decline were: a drop in foreign exchange gains recorded under non-operating income (from JPY378mn in FY03/24 to JPY135mn, down JPY243mn YoY); a deterioration in financial income (from JPY28mn to JPY22mn, down JPY6mn YoY); and decreases in commission expenses (from JPY25mn to JPY6mn, down JPY19mn YoY) and compensation expenses (from JPY33mn to JPY13mn, down JPY20mn YoY), both recorded under non-operating expenses. The company's average non-operating income for the 10-year period from FY03/15 to FY03/24 (excluding FY03/25) was JPY280mn. While FY03/25 exceeded this average by JPY9mn, the figure was broadly in line with the historical average.
- ▶ Foreign exchange gains (or losses)—mainly arising from end-of-period revaluations of foreign currency-denominated receivables and payables—are the most significant variable impacting the company's non-operating income (or expenses). Since FY03/21, foreign exchange gains booked as non-operating income have been on an upward trend, driven by the weakening yen. As a result, the JPY466mn in non-operating income recorded in FY03/24 marked the highest level in the past 10 years. However, the yen began to strengthen in 2H FY03/25, and the company has indicated that it expects the positive impact of forex gains to diminish from FY03/26 onward. Previously, the company had recorded royalty income under non-operating income but changed its accounting treatment in FY03/22 to record

- ▶ such income as sales. It retroactively adjusted its FY03/21 figures to reflect this change but did not apply retroactive adjustments for FY03/20 or earlier periods. As a result, the 10-year historical trend in non-operating income (or expenses) lacks full continuity and should be regarded as a reference only.

Extraordinary gains and losses

- ▶ For FY03/25, TOCALO reported a net extraordinary loss of JPY363mn, a deterioration of JPY357mn from the JPY6mn loss recorded in FY03/24. The main factors were an impairment loss of JPY157mn and environmental remediation expenses of JPY194mn, both recorded as extraordinary losses (neither of which was recorded in the previous fiscal year). The company's average extraordinary loss over the 10-year period from FY03/15 to FY03/24 was JPY109mn, ranging from a gain of JPY2mn to a loss of JPY348mn. The FY03/25 result represents a deterioration of JPY254mn relative to this average and marks the largest extraordinary loss since FY03/15. Nonetheless, the impact of extraordinary items on the company's bottom line remained limited, even in FY03/25.

Balance sheet

Balance sheet (JPYmn)	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25
	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.
Assets										
Cash and deposits	8,197	8,387	9,234	12,660	16,889	16,227	17,110	16,912	16,905	14,483
Notes and accounts receivable	9,138	9,986	11,654	11,716	11,712	10,571	12,176	12,476	13,587	14,776
Operational investment securities	1,000	2,000	2,000	0	0	3,000	3,000	4,000	4,000	3,500
Inventories	1,851	1,937	2,893	3,202	2,581	2,841	3,531	4,757	5,082	6,152
Deferred tax assets	489	499	0	0	0	0	0	0	0	
Allowance for doubtful accounts	-72	-50	-54	-48	-20	-10	-4	-19	-22	-19
Other	227	241	214	219	675	511	552	701	790	1,068
Total current assets	20,830	23,000	25,941	27,749	31,837	33,140	36,365	38,827	40,342	39,960
Buildings and structures	6,325	6,247	9,871	12,974	12,416	12,273	14,866	14,210	13,816	14,309
Machinery, equipment and vehicles	2,321	2,484	3,941	4,476	4,207	3,644	3,815	3,559	3,979	4,369
Land	6,003	7,305	8,246	8,652	8,648	9,050	10,189	11,918	11,975	12,145
Lease assets	21	110	88	72	50	36	33	24	17	29
Construction in progress	1,200	3,828	2,014	670	742	2,849	866	2,223	4,170	5,357
Other fixed assets	281	332	426	548	720	739	969	1,100	1,165	1,238
Total tangible fixed assets	16,151	20,305	24,589	27,395	26,786	28,594	30,740	33,037	35,125	37,449
Total intangible assets	97	115	260	295	338	264	231	235	257	557
Investment securities	682	684	1,015	886	1,317	1,322	1,324	1,325	1,331	2,344
Deferred tax assets	100	112	712	819	668	606	592	557	288	420
Allowance for doubtful accounts	0	0	-28	-14	0	-5	0	0	-2	-2
Other	132	115	172	147	175	260	264	280	596	945
Investments and other assets	914	911	1,871	1,838	2,160	2,183	2,180	2,163	2,215	3,708
Total fixed assets	17,163	21,332	26,722	29,529	29,285	31,043	33,152	35,436	37,597	41,716
Total assets	37,992	44,331	52,664	57,278	61,122	64,183	69,517	74,263	77,940	81,676
Liabilities										
Notes and accounts payable	3,036	1,229	1,434	1,271	1,157	1,194	1,397	1,425	1,477	1,475
Electronically recorded monetary obligations	0	3,157	5,991	5,004	3,660	3,849	4,721	4,869	5,770	2,510
Short-term debt	511	905	879	1,218	2,153	1,802	1,460	1,490	1,989	1,987
Short-term borrowings	165	151	155	112	47	15	0	0	646	674
Current portion of bonds	339	730	702	1,082	2,083	1,765	1,447	1,447	1,297	1,258
Lease obligations	7	24	22	24	23	22	13	43	46	55
Income taxes payable	922	965	1,353	1,361	737	1,722	1,816	1,726	921	2,387
Accounts payable-other, and accrued expenses	2,131	2,745	2,555	2,755	1,854	1,970	2,170	2,497	2,437	3,161
Provision for bonuses	836	891	993	1,084	1,018	1,277	1,366	1,488	1,323	1,532
Other	441	-1,007	849	669	744	379	404	777	391	454
Total current liabilities	7,877	8,884	14,054	13,362	11,323	12,193	13,334	14,272	14,308	13,506
Long-term debt	117	2,419	1,701	3,337	6,045	4,267	2,825	1,449	3,114	1,888
Long-term borrowings	100	2,324	1,628	3,282	6,015	4,249	2,802	1,355	3,058	1,863
Lease obligations	17	95	73	55	30	18	23	94	56	25
Deferred tax assets	116	29	0	0	0	0	0	0	61	0
Provision for directors' retirement benefits	0	0	0	0	0	0	0	0	0	
Reserve for retirement benefits	790	724	745	876	1,085	789	853	839	468	472
Other	22	23	24	37	33	41	45	59	63	78
Total fixed liabilities	1,045	3,195	2,470	4,250	7,163	5,097	3,723	2,347	3,706	2,438
Total liabilities	8,922	12,079	16,524	17,613	18,487	17,291	17,058	16,620	18,015	15,944
Net assets										
Capital stock	2,659	2,659	2,659	2,659	2,658	2,658	2,658	2,658	2,658	2,658
Capital surplus	2,294	2,294	2,294	2,294	2,293	2,293	2,317	2,345	2,292	2,308
Retained earnings	23,187	26,117	29,547	33,165	35,898	39,841	44,166	48,628	51,061	55,666

Treasury stock	-773	-774	-774	-774	-773	-773	-766	-757	-1,946	-1,926
Shareholders' equity	27,365	30,296	33,726	37,343	40,076	44,020	48,377	52,874	54,066	58,706
Other	414	351	448	217	187	181	722	965	1,394	1,941
Non-controlling interests	1,291	1,606	1,965	2,105	2,371	2,690	3,360	3,804	4,464	5,084
Total net assets	29,070	32,253	36,139	39,665	42,634	46,891	52,459	57,643	59,924	65,731
Total liabilities and net assets	37,992	44,331	52,664	57,278	61,122	64,183	69,517	74,263	77,940	81,676
Working capital	7,953	10,694	13,113	13,647	13,136	12,218	14,310	15,808	17,192	19,453
Total interest-bearing debt	628	3,324	2,580	4,555	8,198	6,069	4,285	2,939	5,103	3,875
Net debt	-7,569	-5,063	-6,654	-8,105	-8,691	-10,158	-12,825	-13,973	-11,802	-10,608

Source: Shared Research based on company dataNote: Figures may differ from company materials due to differences in rounding methods.

Assets

- ▶ As of March 31, 2025, total assets stood at JPY81.7bn, up JPY3.7bn from JPY77.9bn at the end of the previous fiscal year. Current assets declined JPY382mn, while non-current assets increased JPY4.1bn. The decrease in current assets was primarily due to a decline in cash and deposits (-JPY2.4bn YoY), partially offset by increases in trade receivables (+JPY1.2bn) and inventories (+JPY1.1bn). The increase in fixed assets reflected growth in tangible fixed assets (+JPY2.3bn), intangible assets (+JPY300mn), and investments and other assets (+JPY1.5bn). The increase in tangible fixed assets was due to higher capital investment both in Japan and overseas, while the rise in intangible assets was mainly attributable to goodwill recognized in connection with the acquisition of Terada Kosakusho.
- ▶ As of March 31, 2025, cash and deposits stood at JPY14.5bn, down JPY2.4bn from JPY16.9bn at the end of the previous fiscal year. Cash and deposits accounted for 17.7% of total assets, a decline of 4.0pp from 21.7% in FY03/24. The 10-year average from FY03/15 to FY03/24 was 22.5%, making the FY03/25 figure 4.8pp below the historical average. The ratio of cash and deposits to total assets has been on a downtrend since peaking at 27.6% in FY03/20. The FY03/25 figure of 17.7% was the second-lowest level over the past decade, following 17.5% in FY03/18. Including marketable securities that can be liquidated at any time, the company's cash and cash equivalents ratio stood at 22.0% in FY03/25, 4.1pp below the 10-year average of 26.1%, showing a trend broadly in line with that of cash and deposits alone.

Liabilities

- ▶ As of March 31, 2025, liabilities stood at JPY15.9bn, down JPY2.1bn from JPY18.0bn at the end of the previous fiscal year. Current liabilities decreased JPY802mn, while fixed liabilities declined JPY1.3bn. The primary factors behind the decrease in total liabilities were a reduction in trade payables including electronically recorded monetary obligations (-JPY3.3bn YoY) and a decline in interest-bearing debt (-JPY1.2bn), partially offset by an increase in accrued expenses (+JPY851mn) and income taxes payable (+JPY1.5bn).
- ▶ As of March 31, 2025, interest-bearing debt (including lease liabilities) totaled JPY3.9bn, down JPY1.2bn from JPY5.1bn at the end of the previous fiscal year. The decline was mainly due to a decrease in long-term borrowings. With on-hand liquidity (cash and deposits plus marketable securities booked as current assets) of JPY18.0bn, the company continues to operate with no net interest-bearing debt and is effectively debt-free. TOCALO has maintained this virtually debt-free financial position for at least 17 consecutive years since FY03/08.

Capital

- ▶ As of March 31, 2025, the company's equity ratio stood at 74.3%, up 3.1pp from 71.2% at the end of the previous fiscal year. Equity increased JPY5.2bn YoY to JPY60.6bn, while total assets rose JPY3.7bn, resulting in the improvement in the equity ratio. The company's average equity ratio over the 10-year period from FY03/15 to FY03/24 was 69.4%, making the FY03/25 figure 4.9pp above the historical average. TOCALO's equity ratio has generally increased since bottoming at 64.9% in FY03/18, and the FY03/25 result of 74.3% marks the highest level since FY03/15.

Cash flow statement

Cash flow statement (JPYmn)	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25
	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.
Cash flows from operating activities (1)	4,534	5,238	7,611	8,044	6,621	10,588	9,873	9,894	7,877	9,077
Pre-tax profit	4,689	5,803	7,167	8,078	6,794	8,566	10,448	10,989	9,655	12,197
Depreciation	1,561	1,703	1,948	2,658	2,991	2,771	2,783	2,987	3,056	3,283
Amortization of goodwill	56	12	0	0	0	0	0	0	0	16
Change in accounts receivable	-586	-888	-1,607	-131	0	1,149	-1,418	-270	-1,002	-922
Change in inventories	54	-107	-925	-357	604	-252	-607	-1,191	-274	-989
Change in accounts payable	-146	173	1,228	-24	-961	-70	812	202	696	-2,018
Cash flows from investing activities (2)	-895	-6,537	-4,681	-4,617	-4,217	-4,615	-5,044	-5,094	-4,634	-6,194
Purchase of tangible fixed assets	-3,588	-5,512	-4,312	-6,943	-3,641	-4,348	-4,562	-4,610	-4,785	-5,524
Purchase of intangible assets	-4	-55	-137	-135	-152	-25	-66	-93	-104	-54
Purchase, sale, and redemption of investment securities	-1,360	30	-333	114	-435	0	0	-500	0	536
Increase in investments affecting scope of consolidation	0	0	0	0	0	0	0	0	0	-598
Free cash flow (1+2)	3,639	-1,299	2,930	3,427	2,404	5,973	4,829	4,800	3,243	2,883
Cash flows from financing activities	-1,743	1,581	-2,217	40	1,871	-3,798	-4,547	-4,561	-3,241	-5,124
Change in short-term borrowings	-394	0	0	-33	-63	-30	-17	0	631	-90
Change in long-term borrowings	-189	2,620	-730	2,042	3,734	-2,083	-1,766	-1,447	1,553	-1,326
Acquisition of treasury stock	0	0	0	0	0	0	0	0	-1,999	0
Dividends paid	-1,101	-1,142	-1,405	-1,822	-1,670	-1,520	-2,583	-2,888	-3,168	-3,446
Depreciation and amortization (A)	1,617	1,715	1,948	2,658	2,991	2,771	2,783	2,987	3,056	3,299
Capital expenditures (B)	-3,588	-5,512	-4,312	-6,943	-3,641	-4,348	-4,562	-4,610	-4,785	-5,524
Change in working capital (C)	624	2,741	2,419	534	-511	-918	2,092	1,498	1,384	2,261
Simple FCF (NI + A + B - C)	421	-2,468	53	622	4,265	4,804	3,038	4,229	3,213	3,566

Source: Shared Research based on company data Note: Figures may differ from company materials due to differences in rounding methods.

Cash flows from operating activities

- ▶ Net cash provided by operating activities in FY03/25 was JPY9.1bn, an increase of JPY1.2bn from JPY7.9bn in FY03/24. In addition to a rise in net income before income taxes (which contributed a JPY2.5bn increase in cash flow), other key factors included a smaller outflow from trade receivables (an improvement of JPY807mn YoY), a larger outflow due to a decline in trade payables (a JPY2.7bn reduction in cash inflow), a greater outflow related to inventories (an increase of JPY715mn YoY), a smaller outflow from changes in retirement benefit-related assets and liabilities (an improvement of JPY253mn YoY), and a smaller outflow from an increase in provision for bonuses (an improvement of JPY377mn YoY).

Cash flows from investing activities

- ▶ Net cash used in investing activities in FY03/25 totaled JPY6.2bn, an increase of JPY1.6bn in outflows compared to JPY4.6bn in FY03/24. Key factors included a decrease in outflows for the purchase of securities (improvement of JPY1.0bn YoY), offset by increases in outflows for the purchase of tangible fixed assets driven by higher capital investment (an increase of JPY739mn YoY), the acquisition of investment securities (JPY1.0bn YoY), and the purchase of shares in a newly consolidated subsidiary (JPY598mn YoY). The acquisition of shares in the newly consolidated subsidiary relates to the purchase of Terada Kosakusho.

Cash flows from financing activities

- ▶ Net cash used in financing activities in FY03/25 totaled JPY5.1bn, an increase of JPY1.9bn in outflows compared to JPY3.2bn in FY03/24. The main factors behind this increase included a decrease in proceeds from long-term borrowings (a JPY3.0bn reduction in inflows YoY), an increase in dividend payments due to a higher dividend payout (an additional outflow of JPY278mn YoY), and a decrease in outflows related to the purchase of treasury shares (an improvement of JPY2.0bn YoY). Notably, the company did not repurchase any treasury shares during FY03/25.

Historical performance

1H FY03/26 results (November 6, 2025)

1H (April–September) results

- Sales: JPY28.3bn (+9.5% YoY; company forecast: JPY28.0bn)
- Operating profit: JPY6.5bn (+21.1% YoY; JPY6.3bn)
- Recurring profit: JPY6.8bn (+22.4% YoY; JPY6.3bn)
 - RPM: 23.9% (+2.6pp YoY; 22.5%)
- Net income attributable to owners of the parent: JPY4.4bn (+24.5% YoY; JPY4.0bn)
- Orders: JPY28.1bn (+2.6% YoY)
- Order backlog: JPY11.2bn (+3.1% YoY)

Sales

- ▶ 1H (April–September) consolidated sales came to JPY28.3bn (+9.5% YoY), marking a record high for 1H. The figure was also broadly in line with the company's forecast.
- ▶ By segment, sales from Thermal Spraying (handled by TOCALO, the parent company), which accounted for around 71% of consolidated sales, increased 3.3% YoY. This was mainly due to a 5.2% YoY increase in sales for semiconductor and flat panel display (FPD) applications, the core business area, although the growth rate slowed to single digits. Among other applications within Thermal Spraying, sales for industrial machinery applications grew 12.0% YoY, while sales for steel-related applications declined 2.7% YoY, and sales for other applications fell 5.4% YoY. Outside the Thermal Spraying segment, sales from Overseas Subsidiaries (mainly in China and Taiwan) increased 45.2% YoY, sales from Domestic Subsidiaries were up 18.3% YoY, while sales from Other Surface Treatments declined 11.1% YoY.

Recurring profit and RPM

- ▶ Consolidated recurring profit for 1H (April–September) increased 22.4% YoY to JPY6.8bn, setting a new record high for 1H, in line with sales. RPM improved by 2.6pp YoY to 23.9%.
- ▶ By segment, profit from Thermal Spraying (TOCALO, the parent company) declined 3.6% YoY to JPY4.2bn. Profit from Overseas Subsidiaries surged 92.6% YoY to JPY2.3bn, while profit from Domestic Subsidiaries dipped 1.9% YoY to JPY154mn, and profit from Other Surface Treatments fell 22.6% YoY to JPY147mn. Although profit from Thermal Spraying remained at a high level, it fell short of the year-ago result, and profits from Domestic Subsidiaries and Other Surface Treatments were also sluggish. However, the sharp profit growth at Overseas Subsidiaries more than offset these declines, resulting in a record-high recurring profit on a consolidated basis. Segment profits are directly linked to recurring profit on the income statement.

1H results progress

- ▶ At the 1H (April–September) results announcement on November 6, 2025, the company left unchanged its full-year forecast for FY03/26. Progress rates against the forecast were 49.7% for sales, 50.1% for operating profit, 52.0% for recurring profit, and 53.1% for net income attributable to owners of the parent. Each figure was either around or slightly above the 50% benchmark. The company sees no particular cause for concern regarding achieving its FY03/26 targets, noting that adjustments for semiconductor and FPD-related demand in its core Thermal Spraying segment were completed in 1H.

Orders

- ▶ In 1H FY03/26, consolidated orders rose 2.6% YoY to JPY28.1bn, setting a new record high for 1H.
- ▶ In 1H FY03/26, orders in the core Thermal Spraying segment declined 3.8% YoY, but this was offset by a sharp increase in the Overseas Subsidiaries segment, while the Domestic Subsidiaries segment also recorded YoY growth. Within the Thermal Spraying segment, orders in the semiconductor and FPD fields—its main pillars—fell 6.3% YoY. However, the company noted that it had anticipated this decline based on major customers' production plans, and sees no cause for concern. In fact, it believes the drop was smaller than initially expected.
- ▶ The breakdown of 1H FY03/26 consolidated orders of JPY28.1bn (+2.6% YoY) is as follows. For details of orders by segment, see the section "Results by segment (April–September)" below.

- **Consolidated orders: JPY28.1bn (+2.6% YoY)**
 - Thermal Spraying segment (parent): JPY19.5bn (-3.8% YoY)
 - Semiconductor/FPD-related: JPY11.9bn (-6.3% YoY)
 - Industrial machinery-related: JPY2.5bn (+1.0% YoY)
 - Steelmaking-related: JPY2.1bn (+8.3% YoY)
 - Other businesses: JPY3.1bn (-4.9% YoY)
 - Domestic Subsidiaries segment: JPY1.3bn (+9.0% YoY)
 - Overseas Subsidiaries segment: JPY6.0bn (+35.9% YoY)
 - Other Surface Treatments segment: JPY1.2bn (-15.2% YoY)

Order backlog

- As of end-Q2 FY03/26 (end-September 2025), consolidated order backlog stood at JPY11.2bn, down 1.3% YoY, marking the second consecutive quarter of YoY decline. This followed end-Q1's YoY drop, which had been the first in 17 quarters. However, the backlog has remained above JPY10.0bn for six straight quarters, indicating continued high levels. By segment, backlog declined 5.1% YoY in Thermal Spraying, rose 24.0% in Domestic Subsidiaries, increased 32.8% in Overseas Subsidiaries, and fell 13.6% in Other Surface Treatments. The breakdown of the JPY11.2bn order backlog is provided below.

- **Consolidated order backlog: JPY11.2bn (-1.3% YoY)**
 - Thermal Spraying segment (parent): JPY7.6bn (-5.1% YoY)
 - Semiconductor/FPD-related: JPY5.2bn (-11.1% YoY)
 - Industrial machinery-related: JPY673mn (+33.0% YoY)
 - Steelmaking-related: JPY1.0bn (+15.1% YoY)
 - Other businesses: JPY647mn (-8.5% YoY)
 - Domestic Subsidiaries segment: JPY119mn (+24.0% YoY)
 - Overseas Subsidiaries segment: JPY3.2bn (+32.8% YoY)
 - Other Surface Treatments segment: JPY336mn (-13.6% YoY)

While still high, order backlog in semiconductor/FPD-related fields declined

- The order backlog for the mainstay Thermal Spraying segment declined 5.1% YoY, mainly due to an 11.1% drop in semiconductor/FPD-related backlog. According to the company, this was the result of progress in clearing the large backlog accumulated at end-Q4 FY03/25 (March 2025), as well as somewhat weaker orders in 1H. Outside the semiconductor/FPD category, backlog rose 33.0% YoY for industrial machinery-related, 15.1% YoY for steelmaking-related, and fell 8.5% YoY for other businesses. As a result, the Thermal Spraying segment's backlog fell below JPY8.0bn for the second consecutive quarter. However, the company views the end-Q2 level as within a normal range, citing seasonal factors such as the post-March decline in backlog through 1H.
- At end-Q2, the company noted that the Thermal Spraying segment backlog of JPY7.6bn (-5.1% YoY), including JPY5.2bn (-11.1% YoY) in semiconductor/FPD-related backlog, was by no means low, and should provide a solid basis for sales recognition in 2H (October–March). While order backlog is fundamentally an indicator of future sales, and the YoY decline at end-Q2 warrants attention, the company pointed out that the backlog increased compared to end-Q1. Given this and the production outlook of major customers in 2H, the company does not view the situation as cause for excessive concern.
- For details of order backlog by segment at end-Q2, see the section “Results by segment (April–September)” below.

Factors affecting changes (YoY) in recurring profit

- Consolidated recurring profit, which is closely linked to segment profit in each business, increased JPY1.2bn YoY, from JPY5.5bn in 1H FY03/25 to JPY6.8bn. The following factors contributed to the change.
 - 1) Upward impact of JPY1.6bn due to an increase in sales
 - 2) Upward impact of JPY366mn due to a decrease in the variable cost ratio
 - 3) Downward impact of JPY742mn due to an increase in personnel expenses
 - 4) Downward impact of JPY226mn due to an increase in depreciation
 - 5) Downward impact of JPY256mn due to foreign exchange effects
 - 6) Upward impact of JPY455mn due to other factors

Profit boosting factors

- ▶ In 1H FY03/26, the largest contribution came from a JPY1.6bn gain driven by higher gross profit on increased sales. The main factor was a 5.2% YoY rise in semiconductor/FPD-related sales within the Thermal Spraying segment, supported by a recovery in sales volumes and higher selling prices resulting from ongoing, timely price revisions. A decrease in the variable cost ratio also contributed JPY366mn to profit growth. While manufacturing costs such as materials and outsourcing expenses remained high, the improved product mix—driven by increased sales of high-margin semiconductor/FPD-related products—supported stronger profitability.

Higher sales, coupled with a decline in the variable cost ratio, contributed to recurring profit growth

- ▶ In FY03/24, recurring profit fell 12.2% YoY to JPY9.7bn, marking the first decline in four years. This was mainly attributable to two negative factors: lower sales and a higher variable cost ratio, stemming from a drop in semiconductor/FPD-related sales and the resulting deterioration in product mix. In FY03/25, however, relatively high-margin semiconductor/FPD-related sales recovered, turning these factors into positives—sales increased and the variable cost ratio decreased—which drove recurring profit to a record high.
- ▶ The company expects the shift seen in FY03/25—when two previously negative factors (declining sales and a rising variable cost ratio) turned positive (higher sales and a lower variable cost ratio)—will continue throughout FY03/26. Although the company anticipates continued increases in personnel costs, depreciation, and R&D expenses, it believes the dual positive impacts of sales growth and a lower variable cost ratio will be sufficient to absorb these negative factors. For details, see the “Company forecast for FY03/26” section.
- ▶ In 1H FY03/26, the two factors that drove profit growth in the previous fiscal year—higher sales and a lower variable cost ratio—continued to contribute, resulting in record-high earnings for 1H. Although personnel expenses, depreciation, and R&D costs continued to rise in 1H FY03/26 (see below), these increases were fully absorbed by the combined positive impact of higher sales and a lower variable cost ratio. At the beginning of the fiscal year, the company indicated that it aims to achieve record-high performance in FY03/26 for the second consecutive year, by offsetting various negative factors with the same drivers. For details, see the section “Company forecast for FY03/26.”

Other factors (subsidy income under non-operating income)

- ▶ The JPY455mn positive impact categorized as “other factors” reflected several elements, the main one being an increase in subsidy income recorded under non-operating income, which rose JPY275mn YoY from JPY11mn to JPY286mn. Other items included inventory valuation losses, changes in R&D expenses, and electricity costs. According to the company, however, aside from the increase in subsidy income, the remaining fluctuations were minor in aggregate and not significant drivers of profit variation.

Profit depressing factors

Foreign exchange effects

- ▶ In 1H FY03/26, foreign exchange effects had a negative impact of JPY256mn on profit. This consisted of a JPY186mn negative impact from deterioration in foreign exchange gains/losses under non-operating income, and a JPY70mn negative impact from exchange rate differences related to the translation of overseas subsidiary results and other factors. The deterioration in foreign exchange gains/losses (JPY186mn negative impact) was due to a shift from a JPY74mn gain in the same period last year to a JPY112mn loss in 1H FY03/26, reflecting yen appreciation. Although overseas subsidiaries recorded stronger earnings on the back of a recovery in the semiconductor market, the impact was partially offset by a decline in yen-converted earnings, resulting in the JPY70mn negative effect.

Over the medium term, the company expects foreign exchange fluctuations to have greater impact on its earnings

- ▶ Apart from the 1H results, the company expects that the impact of foreign exchange rates on consolidated earnings will gradually increase from FY03/27 onward. Historically, forex fluctuations have had only a limited impact on earnings, with gains from yen depreciation remaining modest. This was mainly due to the small scale of foreign exchange gains and losses booked under non-operating income, as well as the limited earnings contribution from overseas subsidiaries, which had been constrained by investment costs. However, as these subsidiaries continue to grow by capturing strong demand in the semiconductor sector, their earnings are rising significantly. Accordingly, the impact of exchange rates used to translate local-currency earnings into yen is expected to grow over time and have a greater influence on the company's consolidated results.

- ▶ In the medium to long term, the company aims to expand the performance of its overseas subsidiaries and has already made capital investments—some still ongoing—in new plants in China and Taiwan. Accordingly, the company believes that fluctuations in foreign exchange rates, particularly when converting overseas subsidiary earnings into yen, will soon have more than a limited impact on consolidated earnings.

Rise in personnel expenses and depreciation

- ▶ In 1H FY03/26, personnel expenses rose, resulting in a JPY742mn negative impact on profit. The increase reflected wage hikes, a rise in full-time employees, and higher operating activity in semiconductor/FPD-related production, including greater overtime costs. The company noted that while all of these factors contributed to higher personnel expenses, the entire impact was absorbed by the positive effect of higher sales, including an improved product mix driven by growth in semiconductor-related sales.
- ▶ At the same time, the company noted that rising personnel expenses, including labor costs, are not unique to 1H but are becoming a structural drag on profit amid the current economic environment and calls for sustained wage hikes. While seeking to curb cost increases through stronger cost control, the company also positions higher personnel spending as a broad investment in human capital, intended to boost employee motivation and support talent development.
- ▶ Depreciation expenses increased JPY226mn YoY, representing a negative impact on profit. This was due to active capital investment both in Japan and overseas, and the increase was in line with the company's initial forecast.

Results by segment (April–September)

- ▶ Below is a breakdown of individual segment performances. The sales shares provided for each segment represent percentages of the company's consolidated 1H FY03/26 sales of JPY28.3bn. Consolidated sales include royalty income (which is low and has minimal impact on overall sales performance); accordingly, these segment sales shares do not add up to 100% of consolidated sales. Segment profits do not reflect impact from consolidation adjustments. When consolidated adjustments are reflected, total profit generated through all segments directly corresponds to the company's consolidated recurring profit.

Thermal Spraying (handled by TOCALO, the parent company; 70.5% of consolidated sales)

The Thermal Spraying segment represents TOCALO's non-consolidated (parent) results and is the company's core business, accounting for 72.3% of consolidated sales in FY03/25. The segment centers on thermal spraying, a surface treatment process that forms a coating on a target surface by spraying molten metals or ceramics using high-temperature heat sources such as plasma or gas. In addition to thermal spraying, TOCALO also provides a range of ancillary surface modification services, including the Toyota Diffusion (TD) process, zinc alloy coating (ZAC), plasma transferred arc (PTA) processing, and physical vapor deposition (PVD). These treatments enhance the surface properties of materials by adding functions such as abrasion and heat resistance, conductivity or insulation, and thermal shielding or dissipation.

By application, semiconductors and flat panel displays (FPDs) account for approximately 62% of the segment's sales. TOCALO provides thermal spraying for components used in semiconductor and FPD manufacturing equipment—particularly for dry etching equipment used in semiconductor fabrication, where thermal spraying is required to prevent particle generation and enable electrostatic adsorption. Outside of semiconductors and FPDs, thermal spraying for industrial machinery components accounts for about 12%, steelmaking equipment for about 10%, and other applications for around 16%.

- Sales: JPY20.0bn (+3.3% YoY)
- Segment profit: JPY4.2bn (-3.6% YoY)
 - Segment profit margin: 20.9% (-1.5pp YoY)
- Orders: JPY19.5bn (-3.8% YoY)
- Order backlog: JPY7.6bn (-5.1% YoY)

Orders

- ▶ In 1H FY03/26, orders in the Thermal Spraying segment totaled JPY19.5bn (-3.8% YoY), the second-highest level for 1H on record. The company views the order environment as remaining strong.

Semiconductor- and FPD-related orders

- ▶ The YoY decline in 1H orders was mainly due to a 6.3% drop in semiconductor/FPD-related orders, which fell to JPY11.9bn. The company does not view this figure as low and believes the decline should not be seen as overly pessimistic. It also attributed the decrease in part to the record-high 1H result in the previous year.
- ▶ While the company recognizes the need to carefully monitor semiconductor/FPD-related orders from Q3 (October–December) onward, it does not expect them to fall significantly below JPY5.0bn per quarter. During the recent downturn—from January–March 2023 to January–March 2024—quarterly orders hovered slightly above or below JPY5.0bn, contributing to the decline in FY03/24 results. In contrast, orders totaled JPY5.9bn and JPY6.0bn in Q1 and Q2 FY03/26, respectively, remaining near the JPY6.0bn level the company sees as indicative of strong demand. Based on customers' production plans, the company expects orders to return to a growth trajectory from Q3 onward.
- ▶ The breakdown of Thermal Spraying orders of JPY19.5bn (-3.8% YoY) is as follows.
 - Thermal Spraying segment (parent): JPY19.5bn (-3.8% YoY)
 - Semiconductor/FPD-related: JPY11.9bn (-6.3% YoY)
 - Industrial machinery-related: JPY2.5bn (+1.0% YoY)
 - Steelmaking-related: JPY2.1bn (+8.3% YoY)
 - Other businesses: JPY3.1bn (-4.9% YoY)

Non-semiconductor/FPD-related orders

- ▶ Excluding semiconductor/FPD-related orders, industrial machinery-related orders rose 1.0% YoY, steelmaking-related orders increased 8.3% YoY, and orders for other businesses fell 4.9% YoY. Growth in industrial machinery-related orders was driven by bearings, which have been on an upward trend since FY03/25. Although the YoY growth rate was modest at 1.0%, the company believes the 1H FY03/26 result remains at a high level, given that 1H FY03/25 marked a record high for 1H.
- ▶ Steelmaking-related orders recorded the highest YoY growth rate among all applications, including semiconductor/FPD-related. While part of the increase reflected a rebound from the relatively low level in 1H FY03/25, the company believes that overall demand remained solid. In other applications, orders for energy-related uses such as power plants were also firm, although total orders declined YoY.

Sales

- ▶ The Thermal Spraying segment (parent), the company's largest segment, accounted for 70.5% of consolidated sales in 1H FY03/26. Sales in this segment rose 3.3% YoY to JPY20.0bn, marking a new record high for 1H. The breakdown of the JPY20.0bn in Thermal Spraying segment sales is as follows.
 - Thermal Spraying segment: JPY20.0bn (+3.3% YoY)
 - Semiconductor and FPD-related: JPY12.0bn (+5.2% YoY)
 - Semiconductors: JPY11.0bn (+3.0% YoY)
 - FPDs: JPY973mn (+39.6% YoY)
 - Industrial machinery-related: JPY2.7bn (+12.0% YoY)
 - Steelmaking-related: JPY2.0bn (-2.7% YoY)
 - Other businesses: JPY3.3bn (-5.4% YoY)

Semiconductor/FPD-related sales reached a record high

- ▶ The record-high 1H sales in the Thermal Spraying segment were primarily driven by a 5.2% YoY increase in semiconductor/FPD-related sales, the segment's mainstay. While orders for semiconductor/FPD-related applications declined 6.3% YoY in 1H (see "Orders" section above), sales grew YoY thanks in part to progress in reducing the order backlog that had accumulated by the end of the prior fiscal year. The company attributes this progress to the phased expansion of production capacity it began implementing in 1H FY03/25.

Production capacity expansion contributed to reducing the order backlog

- ▶ According to the company, the main reason sales lagged behind the recovery in orders as of end-Q2 was a shortage of production capacity, which had not yet reached a level sufficient to meet demand. This capacity includes not only production equipment but also workers on the manufacturing lines, including temporary staff. Although automation has advanced in semiconductor/FPD-related thermal spraying through new and upgraded equipment, a significant portion of the process remains labor-intensive and dependent on manual work.
- ▶ The company has been upgrading production equipment for semiconductor and FPD-related thermal spraying while also increasing headcount on the manufacturing lines. However, due to a recent labor shortage, staffing has not kept pace. In addition, workers on the production lines require time to reach the necessary skill level, which has also slowed workforce expansion. As a result, despite record-high orders and order backlog in 1H FY03/25 (April–September 2024), sales did not reach an all-time high.
- ▶ Nevertheless, in response to the recovery in semiconductor/FPD-related orders, the company began raising production capacity early in FY03/25. This included not only installing new equipment but also increasing the workforce on manufacturing lines, with capacity being gradually expanded from around May 2024, following the announcement of FY03/24 results. According to the company, these phased capacity enhancements began to show results in Q3 FY03/25 (October–December 2024).
- ▶ Supported by increased production capacity, the company made progress in clearing its order backlog, resulting in semiconductor and FPD-related sales of JPY12.0bn in 1H FY03/26—up 5.2% YoY despite a decline in new orders. However, this figure fell just short of the record-high JPY12.1bn posted in 1H FY03/23 (April–September 2022). According to the company, the primary factor behind this shortfall was the decline in order volume, but some sales recognition was also deferred to later periods due to timing adjustments with customers. The company believes that, in substance, sales remained at a record-high level.

Sales trends in non-semiconductor and FPD-related categories

- ▶ Excluding semiconductor/FPD-related sales, industrial machinery-related sales (accounting for 13.3% of the Thermal Spraying segment) rose 12.0% YoY to JPY2.7bn. Growth in bearing-related orders—one of the company's key customer segments—offset significant declines from certain other customers, resulting in record-high 1H sales for this category. Steelmaking-related sales (9.9%) declined 2.7% YoY to JPY2.0bn, but the company considers the result to be strong. Sales from other businesses (16.7%) fell 5.4% YoY to JPY3.3bn. According to the company, there were no specific negative factors behind the decline, and demand related to power plants and the energy sector remained generally firm.
- ▶ While the company focuses primarily on growth in semiconductor/FPD-related sales, which significantly contribute to overall performance, it also intends to actively pursue order acquisition and drive sales growth in non-semiconductor/FPD areas.

Segment profit, segment profit margins

- ▶ Although high-margin semiconductor/FPD-related sales increased within the Thermal Spraying segment, segment profit (linked to recurring profit on the consolidated income statement) declined 3.6% YoY to JPY4.2bn in 1H FY03/26. The segment profit margin also fell 1.5pp YoY to 20.9%.

Profit decline in Q2 weighed on 1H profit

- ▶ The decline in segment profit in 1H FY03/26 was primarily due to a drop in profit in Q2 (July–September 2025), when lower overall sales—including those in the semiconductor field—made it difficult for the company to fully offset increases in manufacturing costs and SG&A expenses. In Q2, semiconductor/FPD-related sales were nearly flat, rising just 0.4% YoY, while semiconductor-related sales excluding FPD declined 2.0% YoY. Sales related to industrial machinery, steelmaking, and other businesses also fell YoY. Although segment profit grew 18.2% YoY in Q1 (April–June 2025), the Q2 decline effectively offset the gains made in Q1. That said, the company attributes the Q2 profit decline to temporary, quarter-specific factors and does not view the modest drop in segment profit in 1H as a cause for concern.
- ▶ Apart from the 1H FY03/26 results (segment profit declined 3.6% YoY), the company expects rising manufacturing and SG&A costs, as well as higher depreciation stemming from increased capital investment for future growth to continue putting downward pressure on earnings. Among these factors, the company identifies rising personnel

- ▶ expenses—such as labor costs in manufacturing and indirect personnel costs in SG&A—as the most significant constraint on improving profitability. With fixed costs continuing to rise, any decline in sales is likely to weigh more heavily on earnings than in the past.

TOCALO aims to offset rising personnel expenses by expanding sales and improving productivity

- ▶ The company positions these rising personnel expenses as a form of human capital investment. It noted that once personnel expenses (per employee) increase, lowering them is difficult, and with production volumes expanding on the back of recovering orders, reducing headcount on manufacturing lines is also not feasible. As such, the company believes that improving profitability requires generating sufficient sales to absorb higher personnel costs, which in turn makes expanding production capacity essential.
- ▶ At the same time, the company is also working to limit headcount growth at its expanded production facilities (including new plants) by significantly increasing automation through the introduction of advanced equipment. Given that fluctuations in operating rates for semiconductor/FPD-related production are inevitable depending on order trends, the company plans to strengthen initiatives aimed at leveling production and improving productivity, with the goal of enhancing profitability.

Domestic Subsidiaries (5.0% of consolidated sales)

Domestic Subsidiaries segment: Accounted for 4.9% of consolidated sales in FY03/25. This segment includes the operations of Japan Coating Center Co., Ltd. (JCC), which was made a wholly owned subsidiary in September 2004. JCC specializes in surface modification using physical vapor deposition (PVD), whereby metals such as titanium and chromium are ionized in a vacuum together with reactive gases to form dense, high-adhesion ceramic coatings on the surfaces of cutting tools, molds, and other components—enhancing wear and corrosion resistance. While the majority of JCC's sales are from the automotive sector, it also serves customers in machine tools and other industries. In August 2024, TOCALO acquired 100% of the shares of Terada Kosakusho Co., Ltd. (unlisted), a manufacturer of machine tools and precision machinery parts, bringing the number of operating companies in this segment to two.

- Sales: JPY1.4bn (+18.3% YoY)
- Segment profit: JPY154mn (-1.9% YoY)
 - Segment profit margin: 10.9% (-2.3pp YoY)
- Orders: JPY1.3bn (+9.0% YoY)
- Order backlog: JPY119mn (+24.0% YoY)

Orders

- ▶ In 1H FY03/26, orders in the Domestic Subsidiaries segment rose 9.0% YoY to JPY1.3bn. The company believes this increase was partly due to signs of a bottoming out in domestic automobile production, which had been on a downward trend. While domestic automobile output in 1H was roughly flat YoY at -0.4%, the company sees emerging signs of stabilization following a period of decline caused by certification-related misconduct issues, including production suspensions for affected models. The company also noted that 1H performance was affected by US tariff policy, as certain automakers scaled back US-bound production ahead of Japan-US government negotiations.
- ▶ As a result, the company believes the underlying sense of recovery—or bottoming out—in domestic automobile production is stronger than the headline figure of a 0.4% YoY decline suggests. Domestic automobile production volume trends for 1H were as follows.
 - April–September 2020: 3.3mn units (-30.8% YoY)
 - April–September 2021: 3.6mn units (+8.0% YoY)
 - April–September 2022: 3.7mn units (+3.1% YoY)
 - April–September 2023: 4.4mn units (+17.3% YoY)
 - April–September 2024: 4.1mn units (-6.0% YoY)
 - April–September 2025: 4.1mn units (-0.4% YoY)

- ▶ The company acknowledges while the performance (orders) of the Domestic Subsidiaries segment is not determined solely by automobile production volumes, it is certainly the largest variable factor. The company believes the gradual strengthening of the bottoming-out trend in domestic automobile production was one reason behind the increase in orders in 1H FY03/26. At the same time, it notes absolute production volumes during the period were still not at a sufficiently high level, and thus the contribution of production trends to order growth in the Domestic Subsidiaries segment may have been limited.

Additional contribution from the newly consolidated subsidiary

- ▶ Another factor behind the increase in orders for the Domestic Subsidiaries segment in 1H FY03/26 was the contribution from a newly consolidated subsidiary. On August 26, 2024, the company acquired Terada Kosakusho Co., Ltd. (unlisted), a manufacturer of machine tools and precision machinery parts, making it a wholly owned subsidiary and consolidating it from Q3 FY03/25 (October–December 2024). Accordingly, Terada Kosakusho's orders were included on a net basis in 1H FY03/26, boosting orders in the Domestic Subsidiaries segment. However, given Terada Kosakusho's scale (with estimated annual sales of JPY450–500mn, according to Shared Research), the company indicated that the uplift to 1H orders was limited.
- ▶ The company believes that the turnaround to higher orders in the Domestic Subsidiaries segment in 1H was attributable to these two factors: the bottoming out of domestic automobile production and the addition of Terada Kosakusho.

Sales

- ▶ In 1H FY03/26, sales in the Domestic Subsidiaries segment rose 18.3% YoY to JPY1.4bn, setting a new record high for 1H. As with orders, the nearly 20% YoY increase in sales was primarily driven by the contribution from newly consolidated Terada Kosakusho.

Signs of recovery in domestic automobile production and contribution from the newly consolidated subsidiary

- ▶ Until the company acquired Terada Kosakusho (a manufacturer of machine tools and precision machinery parts) in August 2024, the Domestic Subsidiaries segment consisted solely of Japan Coating Center Co., Ltd. (JCC), a wholly owned subsidiary. JCC primarily performs surface modification processing using physical vapor deposition (PVD) technology on products such as cutting tools, blades, and molds.
- ▶ Within JCC's operations, the core business of surface modification processing for cutting tools is primarily geared toward the automotive industry. While sales in the Domestic Subsidiaries segment are not directly tied to domestic automobile production, the correlation is strong. Consequently, during periods of weak domestic production, the segment's performance—i.e., at JCC—was also sluggish, particularly in terms of profitability. Specifically, in 2H FY03/22 through FY03/23, supply constraints caused by semiconductor shortages, and in late FY03/24 through the end of calendar 2024, production disruptions stemming from a series of certification-related misconduct issues at automakers, led to lower domestic output, weighing heavily on the performance of the Domestic Subsidiaries segment.
- ▶ The company noted that performance of Terada Kosakusho, a newly consolidated subsidiary, is less dependent on domestic automobile production than JCC. Accordingly, from FY03/26 onward, it expects the performance of the Domestic Subsidiaries segment to become less aligned with domestic automobile production volumes over time. Terada Kosakusho was consolidated beginning in Q3 FY03/25 (October–December 2024), but due to a difference in fiscal year-ends, only eight months of its results were included in FY03/25. From 1H FY03/26 onward, its fiscal year has been aligned with that of the parent company.

Segment profit, segment profit margin

- ▶ Segment profit in the Domestic Subsidiaries segment in 1H FY03/26 declined 1.9% YoY to JPY154mn, while the segment profit margin fell 2.3pp YoY to 10.9%.
- ▶ The 1.9% YoY decline in segment profit in 1H FY03/26 was primarily due to sluggish performance in JCC's automotive-related business, despite the contribution from newly consolidated Terada Kosakusho. While domestic automobile production volumes were roughly flat YoY, the company believes the vehicle mix served by JCC worsened during the period. Additionally, it suggested the profit contribution from Terada Kosakusho was limited—possibly even slightly negative—due to the start of goodwill amortization.

Seeking a new medium-term direction for the Domestic Subsidiaries segment

- ▶ The company is exploring a new medium-term direction for the Domestic Subsidiaries segment. While JCC, the segment's core subsidiary, remains heavily dependent on automobile production, the company plans to reinforce the segment's business structure by expanding into non-automotive fields while maintaining its focus on automotive demand.
- ▶ The company sees Terada Kosakusho as an important piece in its strategy to expand business beyond the automotive sector. Under the company's leadership, Terada has already begun making medium-term capital investments, including the construction of a new plant. The company aims to grow Terada Kosakusho into a meaningful earnings driver, independently of its short-term contribution, including that in 1H FY03/26. In parallel, the company is also taking steps to strengthen the performance of JCC by investing to expand production capacity for non-automotive fields. Through these efforts, the company intends to gradually reduce its dependence on domestic automobile production while lifting the overall earnings base of the Domestic Subsidiaries segment.

Overseas Subsidiaries (20.0% of consolidated sales)

Overseas Subsidiaries segment: Accounted for 17.2% of consolidated sales in FY03/25. This segment covers subsidiaries in China (two companies), Taiwan, and the US; however, as the US subsidiary has yet to begin full-scale operations, the segment effectively consists of three companies in China and Taiwan. Like the Thermal Spraying segment (handled by the parent company), the business is primarily focused on semiconductor and FPD-related fields. In particular, the company is placing emphasis on supporting a major Taiwanese semiconductor device manufacturer by restoring and recoating used equipment components with high precision to extend the service life of semiconductor manufacturing equipment and optimize costs. The segment is also expanding into non-semiconductor areas, including the production and repair of components for steel, petroleum, and paper manufacturing equipment, as well as on-site thermal spraying repair work at natural gas plants.

- Sales: JPY5.6bn (+45.2% YoY)
- Segment profit: JPY2.3bn (+92.6% YoY)
 - Segment profit margin: 41.3% (+10.2pp YoY)
- Orders: JPY6.0bn (+35.9% YoY)
- Order backlog: JPY3.2bn (+32.8% YoY)

Orders

- ▶ Orders in the Overseas Subsidiaries segment in 1H FY03/26 rose 35.9% YoY to JPY6.0bn, setting a new record high for 1H. The increase was mainly driven by a recovery in semiconductor markets in overseas regions such as China and Taiwan, combined with proactive sales efforts that led to higher orders, including from new customers. Due to differences in fiscal year-ends, the company's 1H consolidated results include figures for overseas subsidiaries for the January–June 2025 period.

Sales

- ▶ This segment includes two subsidiaries in China, one in Taiwan, and one in the US, but as the US subsidiary has yet to begin full-scale operations, it effectively comprises the three entities in China and Taiwan. As the Chinese and Taiwanese subsidiaries have December fiscal year-ends, the company's 1H FY03/26 results include their performance for January–June 2025. In 1H FY03/26, sales in the Overseas Subsidiaries segment rose 45.2% YoY to JPY5.6bn, setting a new record high for 1H, in line with the record-high order levels. The increase was driven by a global expansion in the semiconductor market—including AI-related demand—which led to higher sales from existing customers as well as new order wins.
- ▶ In 1H FY03/26, sales growth in the Overseas Subsidiaries segment was primarily driven by increased sales volumes. However, the company noted there was some offsetting impact from foreign exchange, as the yen was relatively stronger during the January–June 2025 period covered by the subsidiaries in China, the segment's main market.

- ▶ Despite this, the positive impact from increased sales volume significantly outweighed the negative impact from forex. As a result, segment sales grew 45.2% YoY to JPY5.6bn—the highest growth rate among all segments.

Segment profit and segment profit margin

- ▶ In 1H FY03/26, segment profit in the Overseas Subsidiaries segment increased 92.6% YoY to JPY2.3bn, setting a new record high for 1H, in line with the record-high sales. In addition to higher sales, profit was boosted by an improved sales mix—particularly increased recoating of semiconductor/FPD manufacturing equipment components—and growth in non-semiconductor-related sales. These factors more than offset the minor negative impact of foreign exchange. As a result, the segment profit margin rose 10.2pp YoY to 41.3%, exceeding that of the Thermal Spraying segment (20.9%) by 20.4pp.

Positioning overseas operations as a new growth driver

Assuming five-year CAGR of 20% through FY03/26

- ▶ The Overseas Subsidiaries segment continues to expand. The segment's share of consolidated sales has risen from 12.2% in FY03/21 to 17.2% in FY03/25, and is projected to reach 21.1% in FY03/26 (company forecast). Over the five years from FY03/21 to FY03/26, the company expects sales CAGR for the segment of 20.1%, outpacing 5.4% in the Thermal Spraying segment and 7.7% for consolidated sales, making it the largest contributor.

Demand for TOCALO's thermal spraying is expanding

- ▶ The main driver of the expansion in overseas business has been the company's ability to efficiently capture rising demand for thermal spraying, fueled by robust semiconductor demand, from both existing and new customers. Another factor has been capital investment aimed at boosting production capacity and improving quality. In particular, the company is building a third plant in Taiwan and introducing new manufacturing equipment in China, measures that are expected to contribute materially to sales growth from 2H FY03/26 onward. The company expects demand for semiconductor-related thermal spraying in these regions to continue expanding and is considering further measures, including additional capacity increases.

Restructuring of the US business initiated

- ▶ In addition to its operations in East Asia (China and Taiwan), the company has also begun restructuring its business in the US, further stepping up efforts to expand its overseas operations. On August 22, 2025, the company announced that through its wholly owned subsidiary TOCALO USA, Inc. (TCA; California), it will establish a new company in Arizona. The Arizona subsidiary will provide surface modification processing for semiconductor manufacturing equipment parts, strengthening service capabilities for major customers building supply chains in the US, with the aim of expanding the company's US business. While the company is still assessing the contribution to earnings of this new subsidiary from FY03/27 onward, it expects the business to capture demand for thermal spraying in the US and become a new driver of overseas expansion.
- ▶ The company plans to present a concrete outlook for its overseas business from FY03/27 onward—including the recently announced restructuring of its US operations and the expansion of its existing businesses in China and Taiwan—in its next medium-term management plan, scheduled for release in or after May 2026.

Other Surface Treatments (4.3% of consolidated sales)

Other Surface Treatments segment: Accounted for 5.3% of consolidated sales in FY03/25. This segment provides various types of surface treatment processing, with its core business being the Toyota Diffusion (TD) process applied to agricultural equipment parts. The TD process is a surface modification method in which the target workpiece is immersed in a high-temperature molten salt bath, allowing vanadium and other carbides to diffusely permeate the surface of the base material to form a functional coating.

- Sales: JPY1.2bn (-11.1% YoY)
- Segment profit: JPY147mn (-22.6% YoY)
 - Segment profit margin: 12.0% (-1.8pp YoY)

- Orders: JPY1.22bn (-15.2% YoY)
- Order backlog: JPY336mn (-13.6% YoY)

Order backlog

- ▶ In 1H FY03/26, orders in the Other Surface Treatments segment declined 15.2% YoY to JPY1.2bn. The decrease was primarily due to inventory adjustments by customers in the core agricultural equipment parts business. The 1H order total of JPY1.2bn represents the lowest 1H level since April–September 2020 (JPY967mn), when orders were directly impacted by the COVID-19 outbreak. The company remains concerned that inventory adjustments—particularly in agricultural equipment parts—will continue for some time.

Sales, segment profit, segment profit margin

- ▶ In 1H FY03/26, sales in the Other Surface Treatments segment declined 11.1% YoY to JPY1.2bn. Segment profit also fell 22.6% YoY to JPY147mn, as the impact of lower sales could not be fully absorbed. The segment profit margin decreased 1.8pp YoY to 12.0%.
- ▶ The YoY decline in sales was mainly due to reduced orders for the Toyota Diffusion (TD) process applied to agricultural equipment parts, as customers undertook inventory adjustments. The TD process is a surface modification method in which the target workpiece is immersed in a high-temperature molten salt bath, allowing vanadium and other carbides to diffusely permeate the surface of the base material to form a functional coating. The company performs this surface treatment (TD process) for agricultural equipment parts and supplies them to Japanese agricultural equipment manufacturers, who then export their products to the US and other markets.
- ▶ While TD processing was sluggish, the company noted that CDC-ZAC processing—a chemical densification method that forms a composite ceramic coating through chemical reactions, characterized by ceramics' superior corrosion resistance and high hardness—remained relatively firm, particularly in medical-related applications (declining less than TD processing). Although this was not sufficient to fully offset the weakness in TD processing in 1H, the company sees potential for improvement from Q3 onward.

Q2 (July–September) results

TOCALO reported the following results for Q2 FY03/26 (July–September 2025).

- Sales: JPY13.2bn (+1.2% YoY)
- Operating profit: JPY2.7bn (-0.6% YoY)
- Recurring profit: JPY2.7bn (+4.1% YoY)
 - RPM: 20.5% (+0.5pp YoY)
- Net income attributable to owners of the parent: JPY1.8bn (+10.5% YoY)
- Orders: JPY13.7bn (-0.6% YoY)

Overview

- ▶ Consolidated sales in Q2 FY03/26 rose 1.2% YoY to JPY13.2bn, marking the seventh consecutive quarter of YoY sales growth and the highest Q2 sales on record.
- ▶ By business segment, the Thermal Spraying segment (parent), which accounts for approximately 74% of consolidated sales, declined 5.2% YoY. This was mainly due to a 6.3% YoY decrease in orders and only marginal growth in sales (+0.4% YoY) for semiconductor and FPD-related operations, which are the segment's core businesses. Among the other segments, sales in the Overseas Subsidiaries segment (mainly China and Taiwan) rose 30.4% YoY, sales in the Domestic Subsidiaries segment increased 16.7% YoY, while sales in the Other Surface Treatments segment declined 6.9% YoY.
- ▶ Consolidated recurring profit in Q2 FY03/26 increased 4.1% YoY to JPY2.7bn, marking the seventh consecutive quarter of YoY growth. RPM also improved by 0.5pp YoY to 20.5%.
- ▶ By business segment, profit in the Thermal Spraying segment declined 26.6% YoY, while the Overseas Subsidiaries segment recorded strong growth of 49.5% YoY. In contrast, profit in the Domestic Subsidiaries segment fell 37.3% YoY, and profit in the Other Surface Treatments segment dropped 16.7% YoY. The company's

- ▶ segment profit is linked to recurring profit on the income statement. Although the decline in profit from the core Thermal Spraying segment was a significant negative factor, it was largely offset by profit growth in the Overseas Subsidiaries segment, allowing the company to maintain YoY profit growth on a quarterly basis. That said, the rate of profit growth narrowed to the low single digits (+4.1% YoY), which the company attributes in part to the weak performance of the Thermal Spraying segment.

Order trend

- ▶ In Q2 FY03/26, consolidated orders declined 0.6% YoY to JPY13.7bn, marking the first YoY decrease in seven quarters, though the level remained largely flat. The decline was primarily due to temporary inventory adjustments by major customers, which led to a 6.3% YoY drop in orders for semiconductor and FPD-related products—the core business of the Thermal Spraying segment (parent). Nevertheless, semiconductor/FPD-related orders in Q2 totaled JPY6.0bn, which the company views as solid, noting that it is roughly in line with the JPY6.0bn threshold it uses as a benchmark for strong demand.
- ▶ Outside the Thermal Spraying segment, orders in the Overseas Subsidiaries segment rose 20.8% YoY, supported by continued strength in the semiconductor market. Orders in the Domestic Subsidiaries segment also increased 10.2% YoY. In contrast, orders in the Other Surface Treatments segment (e.g., agricultural machinery) remained weak, falling 10.2% YoY due to ongoing inventory adjustments by customers. The breakdown of Q2 FY03/26 orders, which totaled JPY13.7bn, is as follows.
 - Consolidated orders: JPY13.7bn (-0.6% YoY)
 - Thermal Spraying segment (parent): JPY9.4bn (-5.9% YoY)
 - Semiconductor/FPD-related: JPY6.0bn (-6.3% YoY)
 - Industrial machinery-related: JPY1.2bn (+0.9% YoY)
 - Steelmaking-related: JPY844mn (-12.2% YoY)
 - Other businesses: JPY1.4bn (-5.6% YoY)
 - Domestic Subsidiaries segment: JPY701mn (+10.2% YoY)
 - Overseas Subsidiaries segment: JPY3.0bn (+20.8% YoY)
 - Other Surface Treatments segment: JPY609mn (-10.2% YoY)

Results by segment (July–September)

- ▶ Below is a breakdown of individual segment performances for Q2 FY03/26. The sales shares provided for each segment represent percentages of the company's consolidated Q2 FY03/26 sales of JPY13.2bn. Consolidated sales include royalty income (which is low and has minimal impact on overall sales performance); accordingly, these segment sales shares do not add up to 100% of consolidated sales. Segment profits do not reflect impact from consolidation adjustments. When consolidated adjustments are reflected, total profit generated through all segments directly corresponds to the company's consolidated recurring profit.

Thermal Spraying (handled by TOCALO, the parent company; 69.7% of consolidated sales)

- Sales: JPY9.2bn (-5.2% YoY)
- Segment profit: JPY1.5bn (-26.6% YoY)
 - Segment profit margin: 16.9% (-4.9pp YoY)
- Orders: JPY9.4bn (-5.9% YoY)

Overview

- ▶ The Thermal Spraying segment (parent), the company's largest business segment, accounted for 69.7% of consolidated sales in Q2 FY03/26. Segment sales declined 5.2% YoY to JPY9.2bn, marking the first YoY decline in six quarters. The decrease was mainly due to soft performance across several categories: while sales in the core semiconductor/FPD-related business rose slightly by 0.4% YoY to JPY5.7bn, sales for industrial machinery fell 14.1% YoY to JPY984mn, steelmaking-related sales declined 5.3% YoY to JPY988mn, and sales from other businesses dropped 17.3% YoY to JPY1.5bn. The breakdown of the JPY9.2bn in Thermal Spraying segment sales is as follows.
 - Thermal Spraying segment: JPY9.2bn (-5.2% YoY)
 - Semiconductors and FPDs: JPY5.7bn (+0.4% YoY)

- Semiconductors: JPY5.3bn (-2.0% YoY)
 - FPDs: JPY450mn (+42.4% YoY)
 - Industrial machinery-related: JPY984mn (-14.1% YoY)
 - Steelmaking-related: JPY988mn (-5.3% YoY)
 - Other businesses: JPY1.5bn (-17.3% YoY)
- ▶ Segment profit in Q2 FY03/26 declined 26.6% YoY to JPY1.5bn, due in part to lower sales. The segment profit margin also fell 4.9pp YoY to 16.9%. While semiconductor/FPD-related sales remained roughly flat YoY, a 2.0% decline in sales from the more profitable semiconductor category weighed on overall profitability. At 16.9%, the segment margin marked the lowest level since July–September 2019 (15.5%), when results were impacted by US–China trade tensions. However, the company views the margin decline in Q2 as temporary, partly due to one-off cost increases, and expects profitability to improve from Q3 onward.
- ▶ As the business performance in Q2 was generally in line with the 1H trend, please refer to the earlier "Results by segment (April–September)" section for details on the Thermal Spraying segment.

Domestic Subsidiaries (5.2% of consolidated sales)

- Sales: JPY679mn (+16.7% YoY)
- Segment profit: JPY37mn (-37.3% YoY)
 - Segment profit margin: 5.4% (-4.7pp YoY)
- Orders: JPY701mn (+10.2% YoY)

Overview

- ▶ Sales in Q2 FY03/26 increased 16.7% YoY to JPY679mn, marking the fourth consecutive quarter of YoY sales growth. Although orders declined due to a 2.8% YoY drop in domestic automobile production during the quarter, the increase in sales was driven by the consolidation of Terada Kosakusho, which contributed to a net gain.
- ▶ Segment profit in Q2 FY03/26 declined 37.3% YoY to JPY37mn, marking the first YoY decline in three quarters. The segment profit margin also fell 4.7pp YoY to 5.4%. At JPY37mn, Q2 segment profit was the lowest on record for a quarterly period, falling below the JPY52mn recorded in July–September 2020, which had been affected by the COVID-19 pandemic. In addition to weak performance in the automotive-related business, the start of goodwill amortization related to newly consolidated Terada Kosakusho also contributed to the decline.
- ▶ As the business performance in Q2 was generally in line with the 1H trend, please refer to the earlier "Results by segment (April–September)" section for details on the Domestic Subsidiaries segment.

Overseas Subsidiaries (20.1% of consolidated sales)

- Sales: JPY2.6bn (+30.4% YoY)
- Segment profit: JPY993mn (+49.5% YoY)
 - Segment profit margin: 37.5% (+4.8pp YoY)
- Orders: JPY3.0bn (+20.8% YoY)

Overview

- ▶ This segment includes two subsidiaries in China, one in Taiwan, and one in the US, but effectively consists of the three entities in China and Taiwan, as the US subsidiary has yet to begin full-scale operations. As subsidiaries in China and Taiwan have December fiscal year-ends, the company's Q2 results include the April–June performance of these overseas subsidiaries. In Q2 FY03/26, sales in the Overseas Subsidiaries segment increased 30.4% YoY to JPY2.6bn, driven by continued global expansion in the semiconductor market, including AI-related demand. This marked the 19th consecutive quarter of YoY sales growth.
- ▶ In Q2 FY03/26, segment profit rose 49.5% YoY to JPY993mn, marking the ninth consecutive quarter of YoY profit growth. Profit growth was driven by an improved sales mix—particularly increased recoating in semiconductor/FPD-related business—as well as higher sales in non-semiconductor areas. The segment profit margin also improved by 4.8pp YoY to 37.5%.

- ▶ As the business performance in Q2 was generally in line with the 1H trend, please refer to the earlier "Results by segment (April–September)" section for details on the Overseas Subsidiaries segment.

Other Surface Treatments (4.7 of consolidated sales)

- Sales: JPY618mn (-6.9% YoY)
- Segment profit: JPY60mn (-16.7% YoY)
 - Segment profit margin: 9.7% (-1.1pp YoY)
- Orders: JPY609mn (-10.2% YoY)

Overview

- ▶ Sales decreased 6.9% YoY to JPY618mn, marking the second consecutive quarter of YoY decline. Segment profit fell 16.7% YoY to JPY60mn, as the impact of lower sales could not be fully offset, resulting in the sixth consecutive quarter of profit decline. Consequently, the segment profit margin declined by 1.1pp YoY to 9.7%.
- ▶ The YoY decline in sales was primarily due to reduced orders for the Toyota Diffusion (TD) process applied to agricultural equipment parts, caused by customer inventory adjustments. The TD process is a surface modification method that forms a functional film by immersing the target workpiece in a high-temperature molten salt bath and allowing vanadium and other carbides to diffusely permeate the surface of the base material.
- ▶ As the business performance in Q2 was generally in line with the 1H trend, please refer to the earlier "Results by segment (April–September)" section for details on the Other Surface Treatments segment.

Q1 FY03/26 results (August 5, 2025)

Q1 (April–June) results

- Sales: JPY15.2bn (+17.8% YoY)
- Operating profit: JPY3.8bn (+42.8% YoY)
- Recurring profit: JPY4.1bn (+38.6% YoY)
 - RPM: 26.8% (+4.1pp YoY)
- Net income attributable to owners of the parent: JPY2.6bn (+36.9% YoY)
- Orders: JPY14.4bn (+5.8% YoY)
- Order backlog: JPY10.6bn (-6.7% YoY)

Sales

- ▶ Q1 (April–June) consolidated sales were JPY15.2bn, up 17.8% YoY, setting a new all-time high for any quarter and marking the sixth consecutive quarter of YoY sales growth.
- ▶ By segment, sales from Thermal Spraying (handled by TOCALO, the parent company), which accounted for about 71.2% of consolidated sales, grew 11.8% YoY, driving the overall sales growth. This was mainly due to a 10.0% YoY rise in sales from the core sectors of semiconductor and flat panel displays (FPDs). Outside the semiconductor and FPD fields, industrial machinery-related sales grew 36.4% YoY, showing a significant increase, while steelmaking-related sales remained flat YoY. Sales from other businesses grew 6.9% YoY.
- ▶ In Overseas Subsidiaries (mainly in China and Taiwan), sales grew 61.4% YoY, while in Domestic Subsidiaries, sales rose 19.9% YoY. Sales in Other Surface Treatments decreased 14.9% YoY. Sales growth in Overseas Subsidiaries was particularly strong, with their share of consolidated sales reaching 19.8%, the highest quarterly level on record.

Recurring profit and RPM

- ▶ Consolidated recurring profit for Q1 (April–June) rose 38.6% YoY to JPY4.1bn, setting a new all-time high for any quarter and marking the sixth consecutive quarter of YoY profit growth. RPM improved by 4.1pp YoY to 26.8%.
- ▶ By segment, profit from Thermal Spraying (TOCALO, the parent company) increased 18.2% YoY to JPY2.6bn, profit from Overseas Subsidiaries grew approximately 2.4x to JPY1.3bn, profit from Domestic Subsidiaries increased

- ▶ 19.4% to JPY117mn, and profit from Other Surface Treatments declined 26.3% YoY to JPY87mn. Both Thermal Spraying and Overseas Subsidiaries set new records for all quarters (note: the Overseas Subsidiaries result matched the January–March 2025 figure), with particularly strong contributions from the expanded profitability of Overseas Subsidiaries. Segment profits are directly linked to recurring profit on the income statement.
- ▶ Operating profit rose 42.8% YoY to JPY3.8bn, while net income attributable to owners of the parent increased 36.9% YoY to JPY2.6bn. Both figures, like recurring profit, marked record highs for any quarter.

Q1 results progress

- ▶ At the announcement of its Q1 (April–June) results on August 5, 2025, the company left unchanged its full-year forecast for FY03/26. Against this forecast, Q1 results represented progress rates of 26.6% for sales, 29.5% for operating profit, 31.2% for recurring profit, and 31.0% for net income attributable to owners of the parent. Each figure exceeded the 25% benchmark, with profit categories in particular surpassing it by around 5pp. However, the company decided to keep its initial projection unchanged, judging it necessary to assess potential indirect impacts in 2H (October–March) from US tariff policies, such as changes in demand for customer products and possible revisions to customers' sales plans.
- ▶ Against the company's 1H (April–September) forecast announced at the beginning of the fiscal year, Q1 results represented progress rates of 54.1% for sales, 60.9% for operating profit, 64.3% for recurring profit, and 63.9% for net income attributable to owners of the parent. All figures exceeded the 50% benchmark, and the company stated it has no particular concerns regarding its 1H results.

Orders

- ▶ In Q1 (April–June), consolidated orders rose 5.8% YoY to JPY14.4bn, marking the fifth consecutive quarter of YoY growth. Orders of JPY14.4bn also set a new record high for Q1 and, across all quarters, represented the second-highest level on record after JPY14.6bn in Q3 (October–December) FY03/25.
- ▶ In Q1, orders in the core Thermal Spraying segment declined by just under 2% YoY, but this was offset by strong growth in the Overseas Subsidiaries segment, with orders in the Domestic Subsidiaries segment also up YoY. Although consolidated orders remained at a high level, the company noted that orders in the semiconductor and FPD fields, the main pillars of the Thermal Spraying segment, fell 6.3% YoY, and stated it would continue to take a cautious stance toward 2H (October–March) performance.
- ▶ The breakdown of Q1 (April–June) orders of JPY14.4bn is as follows. For details of orders by segment, see the section "Results by segment (April–June)" below.
 - Thermal Spraying segment (parent): JPY10.2bn (-1.7% YoY)
 - Semiconductor/FPD-related: JPY5.9bn (-6.3% YoY)
 - Industrial machinery-related: JPY1.4bn (+1.0% YoY)
 - Steelmaking-related: JPY1.3bn (+28.1% YoY)
 - Other businesses: JPY1.6bn (-4.3% YoY)
 - Domestic Subsidiaries segment: JPY647mn (+7.7% YoY)
 - Overseas Subsidiaries segment: JPY3.0bn (+55.7% YoY)
 - Other Surface Treatments segment: JPY607mn (-19.7% YoY)

Order backlog

- ▶ As of end-Q1 FY03/26 (end-June 2025), consolidated order backlog fell 6.7% YoY to JPY10.6bn. While the backlog remained above JPY10.0bn for the fifth consecutive quarter, it marked the first YoY decline in 17 quarters. By segment, order backlog fell 4.1% YoY in Thermal Spraying, rose to 2.4x the year-ago level in Domestic Subsidiaries, increased 46.0% YoY in Overseas Subsidiaries, and declined 8.2% YoY in Other Surface Treatments. The breakdown of the JPY10.6bn order backlog is provided below.
 - Thermal Spraying segment (parent): JPY7.4bn (-4.1% YoY)
 - Semiconductor/FPD-related: JPY5.0bn (-4.4% YoY)
 - Industrial machinery-related: JPY494mn (-0.4% YoY)
 - Steelmaking-related: JPY1.2bn (+20.1% YoY)
 - Other businesses: JPY714mn (-28.5% YoY)

- Domestic Subsidiary segment: JPY98mn (approx. 2.4x YoY)
- Overseas Subsidiaries segment: JPY2.8bn (+46.0% YoY)
- Other Surface Treatments segment: JPY345mn (-8.2% YoY)

Order backlog in semiconductor/FPD-related fields, while remaining at a high level, declined

- ▶ The order backlog for the mainstay Thermal Spraying segment fell 4.1% YoY, reflecting a 4.4% decline in semiconductor/FPD-related backlog. According to the company, this was due to the smooth fulfillment of the large backlog accumulated at end-Q4 FY03/25 (March 2025), combined with somewhat weaker orders in Q1. Among other categories, industrial machinery-related backlog declined 0.4% YoY, steelmaking-related backlog rose 20.1% YoY, and other businesses backlog fell 28.5% YoY. As a result, the Thermal Spraying segment's backlog, which had exceeded JPY8.0bn for three consecutive quarters since end-Q2 FY03/25 (September 2024), slipped below JPY8.0bn for the first time in four quarters.
- ▶ At end-Q1, the company noted that the Thermal Spraying segment backlog stood at JPY7.4bn (-4.1% YoY), including JPY5.0bn (-4.4% YoY) in semiconductor/FPD-related backlog, which it emphasized was by no means low and should be sufficient to support sales recognition in Q2 (July–September). However, order backlog is fundamentally an indicator of future sales trends. Accordingly, given the decline in backlog at end-Q1, the company indicated it will need to closely monitor the order backlog at end-Q2 (September 2025), particularly in semiconductor/FPD-related business, while also taking into account Q2 orders, to assess sales recognition from Q3 (October–December) onward.
- ▶ For details of order backlog by segment at end-Q1, see the section “Results by segment (April–June)” below.

Factors affecting changes (YoY) in recurring profit

- ▶ Consolidated recurring profit, which is closely linked to segment profit in each business, increased JPY1.1bn YoY, from JPY2.9bn in Q1 FY03/25 to JPY4.1bn. The following factors contributed to the change.
 - 1) Upward impact of JPY1.5bn due to an increase in sales
 - 2) Upward impact of JPY244mn due to a decrease in the variable cost ratio
 - 3) Downward impact of JPY449mn due to an increase in personnel expenses
 - 4) Downward impact of JPY97mn due to an increase in depreciation
 - 5) Downward impact of JPY291mn due to foreign exchange effects
 - 6) Upward impact of JPY240mn due to other factors

Profit boosting factors

- ▶ In Q1 (April–June), profit increased JPY1.5bn, driven by higher gross profit due to higher sales, primarily from a 10.0% YoY increase in semiconductor/FPD-related sales within the Thermal Spraying segment. This growth was supported by a recovery in sales volumes and timely price revisions, which led to higher selling prices. Additionally, a decrease in the variable cost ratio contributed JPY244mn to profit growth. While manufacturing costs, including material and outsourcing expenses, remained high, the shift in sales mix toward high-margin semiconductor/FPD-related products supported improved profitability.

An increase in sales, coupled with a decline in the variable cost ratio, contributed to recurring profit growth

- ▶ In FY03/24, recurring profit fell 12.2% YoY to JPY9.7bn, marking the first decline in four years. This was mainly attributable to two negative factors: lower sales and a higher variable cost ratio, stemming from a drop in semiconductor/FPD-related sales and the resulting deterioration in product mix. In FY03/25, however, semiconductor/FPD-related sales recovered, turning these factors into positives—sales increased and the variable cost ratio decreased—which drove recurring profit to a record high.
- ▶ The company expects that these two factors—higher sales and a lower variable cost ratio—which had been negative (lower sales and a higher variable cost ratio) in Q1 FY03/25, will continue to act as positive drivers in FY03/26. Although the company anticipates continued increases in personnel costs, depreciation, and R&D expenses, it believes that the dual positive impacts of sales growth and a lower variable cost ratio will be sufficient to absorb these negative factors. For details, see the “Company forecast for FY03/26” section.
- ▶ In Q1, the two factors that drove profit growth in the previous fiscal year—higher sales and a lower variable cost ratio—continued to contribute, resulting in record-high earnings not only for the quarter but also across all past quarters.

- ▶ Although personnel expenses, depreciation, and R&D costs continued to rise in Q1 (see below), these increases were fully absorbed by the combined positive impact of higher sales and a lower variable cost ratio. At the beginning of the fiscal year, the company indicated that it aims to achieve record-high performance in FY03/26 for the second consecutive year, by offsetting various negative factors with the same drivers. For details, see the section "Company forecast for FY03/26."

Other factors (subsidy income under non-operating income)

- ▶ The JPY240mn positive impact categorized as "other factors" reflected several elements, the main one being an increase in subsidy income booked under non-operating income, which rose JPY277mn YoY from JPY8mn to JPY285mn. Other items included inventory valuation losses, higher R&D expenses, and increased electricity costs. According to the company, however, fluctuations in these items during Q1 were limited and not material as drivers of profit variation.

Profit depressing factors

Foreign exchange effects

- ▶ In Q1 (April–June), foreign exchange effects had a negative impact of JPY291mn on profit. This consisted of a JPY300mn negative impact from deterioration in foreign exchange gains/losses under non-operating income, partially offset by a JPY9mn positive impact from exchange rate differences related to the translation of overseas subsidiary results and other factors. The deterioration in foreign exchange gains/losses (JPY300mn negative impact) reflected the shift from a JPY208mn gain in the same period last year to a JPY92mn loss in Q1 FY03/26, due to yen appreciation. Although overseas subsidiaries posted stronger results on the back of a recovery in the semiconductor market, the company indicated that yen conversion of local currency earnings limited the impact to a minor positive factor.
- ▶ The company expects the impact of foreign exchange fluctuations on consolidated earnings (exposure) to gradually increase from FY03/26 onward. Historically, forex effects have had little influence on performance, and even during periods of yen depreciation, their contribution to profit was limited. This was mainly because foreign exchange gains and losses booked under non-operating income were small in scale, and overseas subsidiaries generated relatively modest earnings, partly weighed down by investment burdens. However, as overseas subsidiaries continue to capture demand in the semiconductor market, their earnings are expanding significantly, and the exchange rates used to translate local-currency earnings into yen are increasingly having a greater impact on consolidated performance.
- ▶ In the medium to long term, the company aims to expand the performance of its overseas subsidiaries and has already made capital investments—some still ongoing—in new plants in China and Taiwan. Accordingly, the company believes that fluctuations in foreign exchange rates, particularly when converting overseas subsidiary earnings into yen, will soon have more than a limited impact on consolidated earnings.

Rise in personnel expenses and depreciation

- ▶ In Q1, personnel expenses rose, resulting in a JPY449mn negative impact on profit. The increase reflected wage hikes, a rise in full-time employees, and higher operating activity in semiconductor/FPD-related production, including greater overtime costs. The company noted that while all of these factors contributed to higher personnel expenses, the entire impact was absorbed by the positive effect of higher sales, including an improved product mix driven by growth in semiconductor-related sales.
- ▶ At the same time, the company noted that rising personnel expenses, including labor costs, are not unique to Q1 but are becoming a structural drag on profit amid the current economic environment and calls for sustained wage hikes. While seeking to curb cost increases through stronger cost control, the company also positions higher personnel spending as a broad investment in human capital, intended to boost employee motivation and support talent development.
- ▶ Depreciation expenses increased JPY97mn YoY, representing a negative impact on profit. This was due to active capital investment both in Japan and overseas, and the increase was in line with the company's initial forecast.

Results by segment (April–June)

- ▶ Below is a breakdown of individual segment performances. The sales shares provided for each segment represent percentages of the company's consolidated Q1 FY03/26 sales of JPY15.2bn. Consolidated sales include royalty income (which is low and has minimal impact on overall sales performance); accordingly, these segment sales shares do not add up to 100% of consolidated sales. Segment profits do not reflect impact from consolidation adjustments. When consolidated adjustments are reflected, total profit generated through all segments directly corresponds to the company's consolidated recurring profit.

Thermal Spraying (handled by TOCALO, the parent company; 71.2% sales share)

- Sales: JPY10.8bn (+11.8% YoY)
- Segment profit: JPY2.6bn (+18.2% YoY)
 - Segment profit margin: 24.3% (+1.3pp YoY)
- Orders: JPY10.2bn (-1.7% YoY)
- Order backlog: JPY7.4bn (-4.1% YoY)

Orders

- ▶ In Q1 (April–June), orders in the Thermal Spraying segment fell 1.7% YoY to JPY10.2bn, marking the first quarterly YoY decline in six quarters.

Semiconductor- and FPD-related orders

- ▶ The decline in orders for the first time in six quarters was mainly due to a 6.3% YoY decrease in semiconductor/FPD-related orders, which fell to JPY5.9bn. The company emphasized, however, that the Q1 result of JPY5.9bn is by no means low, noting that it exceeded the Q4 FY03/25 (January–March 2025) result of JPY5.5bn and should not be viewed as overly pessimistic. It also attributed part of the decline to the record-high Q1 result in the previous year. That said, as orders fell below JPY6.0bn—a level maintained for three consecutive quarters from Q1 to Q3 FY03/25—and with major customers having revised down their supply-demand outlook for FY03/26, the company acknowledged the need to carefully monitor orders from Q2 (July–September) onward.
- ▶ While the company recognizes the need to carefully monitor orders from Q2 (July–September) onward, it noted that it does not expect orders to fall significantly below JPY5.0bn on a quarterly basis. The company recalled that during the temporary downturn in the semiconductor market from Q4 FY03/23 (October–December 2022) to Q4 FY03/24 (January–March 2024), quarterly orders fell below JPY5.0bn several times, leading to a decline in FY03/24 results. However, even if orders were to weaken temporarily from Q2 onward, the company believes they will not fall substantially below the JPY5.0bn level.
- ▶ The breakdown of Thermal Spraying orders of JPY10.2bn (-1.7% YoY) is as follows.
 - Thermal Spraying segment (parent): JPY10.2bn (-1.7% YoY)
 - Semiconductor/FPD-related: JPY5.9bn (-6.3% YoY)
 - Industrial machinery-related: JPY1.4bn (+1.0% YoY)
 - Steelmaking-related: JPY1.3bn (+28.1% YoY)
 - Other businesses: JPY1.6bn (-4.3% YoY)

Excluding semiconductor/FPD-related orders

- ▶ Excluding semiconductor/FPD-related, industrial machinery-related orders rose 1.0% YoY, steelmaking-related orders increased 28.1% YoY, and orders for other businesses fell 4.3% YoY. Within industrial machinery-related orders, growth was driven by bearings, orders for which had been growing since FY03/25. Although the YoY growth rate for industrial machinery-related orders was limited to 1.0%, the company noted that, given the record-high Q1 result in the previous year, the pace of recovery exceeded its initial expectations.
- ▶ Steelmaking-related orders reached an all-time high across all quarters. However, the company explained that this was mainly due to a rebound from the low level in Q4 FY03/25 (January–March 2025) and the inclusion of one-time orders. As such, it does not expect steelmaking-related orders to remain at the same level as in Q1 going forward. For other businesses, orders for energy-related applications such as power plants remained firm, but overall orders fell YoY.

Sales

- ▶ The Thermal Spraying segment (parent), the company's largest segment, accounted for 71.2% of consolidated sales in Q1. Sales in this segment rose 11.8% YoY to JPY10.8bn, setting a new record high for any quarter. It was also the second time that quarterly sales exceeded JPY10.0bn, following JPY10.2bn in Q3 FY03/25 (October–December 2024). The breakdown of the JPY10.8bn in Thermal Spraying segment sales is as follows.
 - Semiconductors and FPDs: JPY6.3bn (+10.0% YoY)
 - Semiconductors: JPY5.7bn (+8.0% YoY)
 - FPDs: JPY523mn (+37.3% YoY)
 - Industrial machinery-related: JPY1.7bn (+36.4% YoY)
 - Steelmaking-related: JPY986mn (flat YoY)
 - Other businesses: JPY1.9bn (+6.9% YoY)

Semiconductor/FPD-related sales reached a record high on a quarterly basis

- ▶ The record-high sales in the Thermal Spraying segment in Q1 were primarily driven by a recovery and expansion in orders from key customers, which lifted semiconductor/FPD-related sales 10.0% YoY. According to the company, the sales increase in Q1 was also strongly supported by the phased expansion of production capacity implemented from 1H FY03/25. This capacity expansion allowed the company to steadily work through accumulated order backlog and translate it into sales.
 - ▶ According to the company, the main reason sales lagged behind the recovery in orders as of end-Q2 was a shortage of production capacity, which had not yet reached a level sufficient to meet demand. This capacity includes not only production equipment but also workers on the manufacturing lines, including temporary staff. Although automation has advanced in semiconductor/FPD-related thermal spraying through new and upgraded equipment, a significant portion of the process remains labor-intensive and dependent on manual work.
 - ▶ The company is also working to increase headcount while enhancing production equipment for semiconductor and FPD-related thermal spraying. However, a recent labor shortage has stifled efforts to bolster staffing. Moreover, workers on the manufacturing lines require a certain amount of time to reach the necessary skill level for operations, further contributing to delays in strengthening manpower. Due to these constraints, despite record-high orders and order backlog in 1H (April–September) FY03/25, sales did not reach an all-time high.
 - ▶ Nevertheless, in response to the recovery in semiconductor/FPD-related orders, particularly from major customers, the company began raising production capacity early in FY03/25. This included not only installing new equipment but also increasing the workforce on manufacturing lines, with capacity being gradually expanded from around May 2024, following the announcement of FY03/24 results. According to the company, these phased capacity enhancements began to show results in Q3 FY03/25 (October–December 2024), as production volumes started to catch up with order levels. As a result, the company recorded record-high sales in Q1 FY03/26.

Sales in non-semiconductor and FPD-related categories

- ▶ Excluding semiconductor/FPD-related sales, industrial machinery-related sales (accounting for 15.5% of the Thermal Spraying segment) rose 36.4% YoY to JPY1.7bn, steelmaking-related sales (9.1%) were flat YoY at JPY986mn, and sales from other businesses (17.3%) increased 6.9% YoY to JPY1.9bn. Industrial machinery-related sales reached a record high for any quarter, driven by growth in orders for bearings, one of the company's key customer bases. Steelmaking-related sales held steady at the prior-year level, supported by growth outside the automotive sector. Meanwhile, the increase in sales from other businesses reflected contributions from large-scale project orders in the power plant and energy sectors.
- ▶ While the company focuses primarily on growth in semiconductor/FPD-related sales, which significantly contribute to overall performance, it also intends to actively pursue order acquisition and drive sales growth in non-semiconductor/FPD areas.

Segment profit, segment profit margins

- ▶ In Q1 (April–June), segment profit in the Thermal Spraying segment (linked to recurring profit on the consolidated income statement) rose 18.2% YoY to JPY2.6bn, supported by growth in high-margin semiconductor/FPD-related sales. This marked the fifth consecutive quarter of YoY profit growth. Segment profit of JPY2.6bn also set a new all-time high for any quarter, mirroring the record-high sales result.

- ▶ The segment profit margin improved 1.3pp YoY to 24.3%. However, this fell short of the 24.6% recorded in Q3 FY03/25 (October–December 2024), and the company noted that during the roughly two years prior to the semiconductor market adjustment (FY03/22–FY03/23), quarterly margins often exceeded 25%. It therefore believes there is still room for further improvement in profitability. According to the company, the margin has not yet fully recovered because of higher manufacturing costs and SG&A expenses over the past two to three years, as well as increased capital investment for future growth. Of these factors, the company views rising personnel expenses—including direct labor costs in manufacturing and indirect personnel expenses under SG&A—as the main constraint on improving profitability.
- ▶ However, the company positions these rising personnel expenses as a form of human capital investment. It noted that once personnel expenses (per employee) increase, lowering them is difficult, and with production volumes expanding on the back of recovering orders, reducing headcount on manufacturing lines is also not feasible. As such, the company believes that improving profitability requires generating sufficient sales to absorb higher personnel costs, which in turn makes expanding production capacity essential. In addition, given inevitable fluctuations in utilization rates for semiconductor/FPD-related operations depending on order trends, the company aims to raise productivity by leveling operations while pursuing further profitability gains.

Domestic Subsidiaries (4.8% sales share)

- Sales: JPY730mn (+19.9% YoY)
- Segment profit: JPY117mn (+19.4% YoY)
 - Segment profit margin: 16.0% (-0.1pp YoY)
- Orders: JPY647mn (+7.7% YoY)
- Order backlog: JPY98mn (approx. 2.4x YoY)

Orders

- ▶ In Q1 (April–June), orders in the Domestic Subsidiaries segment rose 7.7% YoY to JPY647mn, marking the fourth consecutive quarter of YoY growth. The company believes this increase partly reflected a bottoming out in domestic automobile production. Domestic automobile output in Q1 FY03/26 grew 2.2% YoY, suggesting signs of recovery after a prolonged decline triggered by certification-related misconduct issues (including production halts for affected models). Quarterly domestic automobile production volumes for the past year were as follows.
 - January–March 2024: 1,905,000 units (-14.4% YoY)
 - April–June 2024: 1,989,000 units (-5.2% YoY)
 - July–September 2024: 2,107,000 units (-6.7% YoY)
 - October–December 2024: 2,234,000 units (-7.6% YoY)
 - January–March 2025: 2,139,000 units (+12.3% YoY)
 - April–June 2025: 2,032,000 units (+2.2% YoY)
- ▶ The company acknowledges that while the performance (orders) of the Domestic Subsidiaries segment is not determined solely by automobile production volumes, it is certainly the largest variable factor. Domestic production had already turned upward in Q4 FY03/25 (January–March 2025), but the company noted that the rebound was less convincing given that production in Q4 FY03/24 (January–March 2024), which was directly hit by the series of misconduct scandals, had been at such a low level. However, with domestic production rising 2.2% YoY in Q1 FY03/26, the company sees a stronger sense of bottoming out in the market, and believes this contributed in part to the increase in Q1 orders. That said, as production volumes in Q1 remained at a relatively low level, the company judged that the contribution to order growth in the Domestic Subsidiaries segment was limited.

Additional contribution from the newly consolidated subsidiary

- ▶ Another factor behind the increase in orders for the Domestic Subsidiaries segment in Q1 FY03/26 was the contribution from a newly consolidated subsidiary. On August 26, 2024, the company acquired Terada Kosakusho Co., Ltd. (unlisted), a manufacturer of machine tools and precision machinery parts, making it a wholly owned subsidiary and consolidating it from Q3 FY03/25 (October–December 2024). Accordingly, Terada Kosakusho's orders were included on a net basis in Q1 FY03/26, boosting orders in the Domestic Subsidiaries segment. However, given Terada Kosakusho's scale (with estimated annual sales of JPY450–500mn, according to Shared Research), the company indicated that the uplift to Q1 orders was limited.

- ▶ The company believes that the turnaround to higher orders in the Domestic Subsidiaries segment in Q1 was attributable to these two factors: the bottoming out of domestic automobile production and the addition of Terada Kosakusho.

Sales

- ▶ In Q1 (April–June), sales in the Domestic Subsidiaries segment rose 19.9% YoY to JPY730mn, marking the third consecutive quarter of YoY growth. Sales of JPY730mn set a new record high for Q1 and came close to the all-time quarterly high of JPY737mn posted in Q4 FY03/25 (January–March 2025). The nearly 20% YoY increase in sales was mainly attributable to the same two factors as for orders: the bottoming out of domestic automobile production and the contribution from newly consolidated Terada Kosakusho.

Recovery in domestic automobile production and contribution from the newly consolidated subsidiary

- ▶ Until the company acquired Terada Kosakusho (a manufacturer of machine tools and precision machinery parts) in August 2024, the Domestic Subsidiaries segment consisted solely of Japan Coating Center Co., Ltd. (JCC), a wholly owned subsidiary. JCC primarily performs surface modification processing using physical vapor deposition (PVD) technology on products such as cutting tools, blades, and molds.
- ▶ Within JCC's operations, the core business of surface modification processing for cutting tools is primarily geared toward the automotive industry. While sales in the Domestic Subsidiaries segment are not directly tied to domestic automobile production, the correlation is strong. Consequently, during periods of weak domestic production, the segment's performance—i.e., at JCC—was also sluggish, particularly in terms of profitability. Specifically, in 2H FY03/22 through FY03/23, supply constraints caused by semiconductor shortages, and in late FY03/24 through the end of calendar 2024, production disruptions stemming from a series of certification-related misconduct issues at automakers, led to lower domestic output, weighing heavily on the performance of the Domestic Subsidiaries segment.
- ▶ The company noted that performance of Terada Kosakusho, a newly consolidated subsidiary, is less dependent on automobile production than JCC. Accordingly, from FY03/26 onward, it expects the performance of the Domestic Subsidiaries segment to become less aligned with domestic automobile production volumes over time. Due to a difference in fiscal year-ends, only eight months of Terada Kosakusho's results were included in the previous fiscal year starting from Q3 FY03/25 (October–December 2024). From Q1 FY03/26, its fiscal year has been aligned with that of the company.

Segment profit, segment profit margin

- ▶ Segment profit in the Domestic Subsidiaries segment in Q1 (April–June) rose 19.4% YoY to JPY117mn, marking the second consecutive quarter of YoY profit growth. However, the segment profit margin fell 0.1pp to 16.0%, remaining roughly flat YoY.
- ▶ Segment profit in Q1 (April–June) rose 19.4% YoY, mainly due to higher sales, including the contribution from newly consolidated Terada Kosakusho. Given the lackluster recovery in domestic automobile production, the company sees Terada Kosakusho's contribution as a meaningful driver of profit growth. However, goodwill amortization related to the consolidation, though limited in scale, offset part of the positive impact and was cited as one reason the segment profit margin remained roughly flat YoY.

Seeking a new medium-term direction for the Domestic Subsidiaries segment

- ▶ The company is exploring a new medium-term direction for the Domestic Subsidiaries segment. While JCC, the segment's core subsidiary, remains heavily dependent on automobile production, the company plans to reinforce the segment's business structure by expanding into non-automotive fields while maintaining its focus on automotive demand. In this strategy, Terada Kosakusho—acquired in August 2024—is expected to play a key role and has already begun medium-term investment, including construction of a new plant. The company intends to develop Terada Kosakusho into a distinct earnings contributor, separate from its short-term impact such as in Q1. At the same time, it is also working to enhance JCC's performance by investing in production capacity expansion to address both automotive and non-automotive demand.

Overseas Subsidiaries (19.8% sales share)

- Sales: JPY3.0bn (+61.4% YoY)

- Segment profit: JPY1.3bn (approx. 2.4x YoY)
 - Segment profit margin: 44.6% (+15.2pp YoY)
- Orders: JPY3.0bn (+55.7% YoY)
- Order backlog: JPY2.8bn (+46.0% YoY)

Orders

- ▶ Orders in the Overseas Subsidiaries segment in Q1 (April–June) rose 55.7% YoY to JPY3.0bn, marking the sixth consecutive quarter of YoY growth and a record high for Q1. Orders also remained near the record-high level of JPY3.3bn posted in Q4 FY03/25 (January–March 2025). The increase was driven mainly by a recovery in semiconductor markets in regions such as China and Taiwan, together with proactive sales efforts, which boosted orders including those from new customers. Due to differences in fiscal year-ends, the company's Q1 results include figures for its overseas subsidiaries for January–March 2025.

Sales

- ▶ This segment includes two subsidiaries in China, one in Taiwan, and one in the US, but is essentially made up of the three entities in China and Taiwan, as the US subsidiary is not yet fully operational. As subsidiaries in China and Taiwan have December fiscal year-ends, the company's Q1 (April–June) results include their performance for January–March 2025. In Q1, as with orders, sales in the Overseas Subsidiaries segment expanded 61.4% YoY to JPY3.0bn, marking a record high for Q1. The increase reflected both higher sales to existing customers and new order acquisitions, as the global semiconductor market's adjustment phase came to an end.
- ▶ In Q1, in addition to higher sales volumes, foreign exchange effects (conversion gains from yen depreciation) also contributed to growth, as results for China—where the January–March 2025 period is included—still reflected some yen weakness during that quarter. However, the company noted that the contribution from higher sales outweighed that of forex effects. Under these conditions, sales in the Overseas Subsidiaries segment rose 61.4% YoY, representing the highest growth rate among all segments.

Segment profit and segment profit margin

- ▶ In Q1 (April–June), segment profit surged to approximately 2.4x the year-ago level to JPY1.3bn, marking the eighth consecutive quarter of YoY profit growth. The increase was driven not only by higher sales but also by an improved sales mix, including growth in semiconductor/FPD-related re-coating, as well as contributions from mild yen depreciation and increased sales in non-semiconductor-related areas. As a result, segment profit reached a record high for Q1 and matched the all-time high of JPY1.3bn posted in Q4 FY03/25 (January–March 2025). The segment profit margin also improved 15.2pp YoY to 44.6%, exceeding that of the Thermal Spraying segment (24.3%) by 20.3pp.

Positioning overseas operations as a new growth driver

Assuming five-year CAGR of 20% through FY03/26

- ▶ The Overseas Subsidiaries segment continues to expand. The segment's share of consolidated sales has risen from 12.2% in FY03/21 to 17.2% in FY03/25, and is projected to reach 21.1% in FY03/26 (company forecast). Over the five years from FY03/21 to FY03/26, the company expects sales CAGR for the segment of 20.1%, outpacing 5.4% in the Thermal Spraying segment and 7.7% for consolidated sales, making it the largest contributor.

Demand for TOCALO's thermal spraying is expanding

- ▶ The main driver of the expansion in overseas business has been the company's ability to efficiently capture rising demand for thermal spraying, fueled by robust semiconductor demand, from both existing and new customers. Another factor has been capital investment aimed at boosting production capacity and improving quality. In particular, the company is building a third plant in Taiwan and introducing new manufacturing equipment in China, measures that are expected to contribute materially to sales growth from 2H FY03/26 onward. The company expects demand for semiconductor-related thermal spraying in these regions to continue expanding and is considering further measures, including additional capacity increases.

Restructuring of the US business initiated

- ▶ In addition to its businesses in East Asia (China and Taiwan), the company is further stepping up initiatives to expand its overseas operations through a new venture in the US. On August 22, 2025, the company announced that through

- ▶ its wholly owned subsidiary TOCALO USA, Inc. (TCA; California), it will establish a new company in Arizona. The Arizona subsidiary will provide surface modification processing for semiconductor manufacturing equipment parts, strengthening service capabilities for major customers building supply chains in the US, with the aim of expanding the company's US business. While the company is still assessing the contribution to earnings of this new subsidiary from FY03/27 onward, it expects the business to capture demand for thermal spraying in the US and become a new driver of overseas expansion.
- ▶ The company plans to present a concrete outlook for its overseas business from FY03/27 onward—including the newly announced entry into the US market and the expansion of existing operations in China and Taiwan—in its next medium-term management plan, scheduled for release in May 2026 or later.

Other Surface Treatments (4.0% sales share)

- Sales: JPY610mn (-14.9% YoY)
- Segment profit: JPY87mn (-26.3% YoY)
 - Segment profit margin: 14.3% (-2.2pp YoY)
- Orders: JPY607mn (-19.7% YoY)
- Order backlog: JPY345mn (-8.2% YoY)

Order backlog

- ▶ In Q1 (April–June), orders in the Other Surface Treatments segment fell 19.7% YoY to JPY607mn. The decline was mainly attributable to inventory adjustments by customers in the core agricultural equipment parts business. At JPY607mn, Q1 orders marked the lowest quarterly level in 17 quarters, since January–March 2021 (JPY545mn). The company remains concerned that inventory adjustments, particularly in agricultural equipment parts, will continue for some time.

Sales, segment profit, segment profit margin

- ▶ In Q1 (April–June), sales in the Other Surface Treatments segment fell 14.9% YoY to JPY610mn. Segment profit also declined 26.3% YoY to JPY87mn, as the impact of lower sales could not be fully absorbed. This marked the fifth consecutive quarter of profit decline on a YoY basis. The segment profit margin dropped 2.2pp YoY to 14.3%.
 - ▶ The YoY decline in sales was mainly due to reduced orders for the Toyota Diffusion (TD) process applied to agricultural equipment parts, as customers undertook inventory adjustments. The TD process is a surface modification method in which the target workpiece is immersed in a high-temperature molten salt bath, allowing vanadium and other carbides to diffusely permeate the surface of the base material to form a functional coating. The company performs this surface treatment (TD process) for agricultural equipment parts and supplies them to Japanese agricultural equipment manufacturers, who then export their products to the US and other markets.
 - ▶ While TD processing was sluggish, the company noted that CDC-ZAC processing—a chemical densification method that forms a composite ceramic coating through chemical reactions, characterized by ceramics' superior corrosion resistance and high hardness—remained relatively firm, particularly in medical-related applications (declining less than TD processing). Although this was not sufficient to fully offset the weakness in TD processing in Q1 (April–June), the company sees potential for improvement from Q2 (July–September) onward.

Full-year FY03/25 results (out May 9, 2025)

FY03/25 results overview

Results for FY03/25 (April 2024–March 2025) were as follows.

- Sales: JPY54.2bn (+16.0% YoY; previous forecast: JPY54.0bn)
- Operating profit: JPY12.3bn (+33.4% YoY; previous forecast: JPY11.5bn)
- Recurring profit: JPY12.6bn (+30.0% YoY; previous forecast: JPY11.8bn)
 - RPM: 23.2% (+2.5pp YoY; previous forecast: 21.9%)
- Net income attributable to owners of the parent: JPY8.1bn (+27.3% YoY; previous forecast: JPY7.7bn)
- Orders: JPY56.2bn (+18.2% YoY)

- Order backlog: JPY11.3bn (+22.6% vs. end-FY03/24)

The company achieved record-high results for the first time in two fiscal years

- ▶ Driven primarily by a recovery in semiconductor-related orders, sales and all profit categories, including operating profit, reached record highs for the first time in two fiscal years, exceeding the company's revised forecast announced on February 4, 2025. EPS was JPY135.5. The company plans to pay an annual dividend of JPY68.0 per share (previous forecast: JPY65.0; FY03/24 actual: JPY53.0), resulting in a payout ratio of 50.2% (unchanged YoY).

Sales

- ▶ Consolidated sales for FY03/25 rose 16.0% YoY to JPY54.2bn, marking a new record for the first time in two fiscal years. By segment, sales from Thermal Spraying (handled by TOCALO, the parent company), which accounted for approximately 72% of consolidated sales, increased 15.8% YoY and was the primary driver of overall growth. This was largely due to a recovery in orders (+22.8% YoY) and sales (+23.3% YoY) for semiconductors and flat panel displays (FPDs), which represent the segment's core business areas. Outside the semiconductor and FPD fields, industrial machinery-related sales remained largely flat (-1.0% YoY), while steel-related sales increased 7.6% YoY, and sales from other applications grew 10.0% YoY.
- ▶ Among other segments than Thermal Spraying, sales from Overseas Subsidiaries (primarily in China and Taiwan) grew 28.4% YoY, sales from Domestic Subsidiary rose 8.1% YoY, and sales from Other Surface Treatments declined 4.6% YoY.

Recurring profit and RPM

- ▶ Consolidated recurring profit for FY03/25 rose 30.0% YoY to JPY12.6bn, setting a new record for the first time in two fiscal years, in line with strong top-line growth. RPM improved 2.5pp YoY to 23.2%, reflecting a favorable shift in the sales mix, notably an increase in high-margin semiconductor and FPD-related sales. While RPM fell short of the all-time high of 24.1% recorded in FY03/22, it marked the second-highest level on record, as the company successfully absorbed rising costs, including personnel expenses.
- ▶ By segment, recurring profit from Thermal Spraying (parent) rose 41.1% YoY, while recurring profit from Overseas Subsidiaries surged 76.0%. In contrast, recurring profit from Domestic Subsidiary declined 29.1%, and that from Other Surface Treatments fell 21.0%. Segment profits are directly linked to recurring profit on the income statement. The 41.1% increase in recurring profit from the core Thermal Spraying segment, driven by a recovery in high-margin semiconductor and FPD-related sales, more than offset the declines in recurring profit from the Domestic Subsidiary and other segments, contributing to overall profitability.

Orders

- ▶ In FY03/25, consolidated orders rose 18.2% YoY to JPY56.2bn, surpassing the FY03/23 result of JPY48.4bn and reaching a record high.
- ▶ The main factor behind the increase was a 22.8% YoY recovery in semiconductor and FPD-related orders in the core Thermal Spraying segment (parent), following the completion of inventory adjustments by major customers. Orders in this category outpaced the company's initial projections and were the key driver of the upward revision to the FY03/25 forecast announced with the Q3 (April–December) results in February 2025. Backed by the sharp rebound in semiconductor and FPD-related demand, orders in the Thermal Spraying segment rose 15.3% YoY to JPY40.2bn, setting a new record high.
- ▶ Outside the Thermal Spraying segment, orders in the Overseas Subsidiaries segment rose 43.6% YoY, supported by a recovery in the semiconductor market. Orders in the Domestic Subsidiary segment, which focuses primarily on the automotive sector, increased 12.7% YoY, while the Other Surface Treatments segment (e.g., agricultural machinery) saw a 3.9% YoY decline. The breakdown of orders in FY03/25, totaling JPY56.2bn, is as follows. For detailed order data by segment, see the section "Results by segment (full year, 12 months)" below.
- Thermal Spraying segment (parent): JPY40.2bn (+15.3% YoY)
 - Semiconductor/FPD-related: JPY24.9bn (+22.8% YoY)
 - Industrial machinery-related: JPY5.3bn (+8.4% YoY)
 - Steelmaking-related: JPY3.8bn (+5.1% YoY)

- Other businesses: JPY6.2bn (+2.2% YoY)
- Domestic Subsidiary segment: JPY2.8bn (+12.7% YoY)
- Overseas Subsidiaries segment: JPY10.3bn (+43.6% YoY)
- Other Surface Treatments segment: JPY2.9bn (-3.9% YoY)

Order backlog

- ▶ As of end-FY03/25, the consolidated order backlog rose 22.6% YoY to JPY11.3bn, setting an all-time high for any quarter-end. The breakdown of the JPY11.3bn order backlog is provided below.

- Thermal Spraying segment (parent): JPY8.0bn (+14.1% YoY)
 - Semiconductor/FPD-related: JPY5.4bn (+15.9% YoY)
 - Industrial machinery-related: JPY808mn (approx. 2.1x YoY)
 - Steelmaking-related: JPY895mn (-8.3% YoY)
 - Other businesses: JPY938mn (-8.8% YoY)
- Domestic Subsidiary segment: JPY180mn (approx. 3.6x YoY)
- Overseas Subsidiaries segment: JPY2.8bn (+51.6% YoY)
- Other Surface Treatments segment: JPY348mn (+3.6% YoY)

Order backlog reached a record-high level

- ▶ The order backlog for the mainstay Thermal Spraying segment rose 14.1% YoY, supported by a recovery in orders—particularly a 15.9% increase in the semiconductor and FPD-related backlog. Among other categories, the backlog for industrial machinery increased approximately 2.1x YoY, while those for steelmaking and other businesses declined 8.3% and 8.8%, respectively. As a result, the Thermal Spraying segment's backlog exceeded JPY8.0bn for the third consecutive quarter as of end-Q4. Although the semiconductor/FPD-related backlog edged down slightly to JPY8.0bn at end-Q4 from JPY8.2bn at end-Q3, it remained near a record high. The company sees the efficient fulfillment of this JPY8.0bn-plus backlog as one of its key short-term operational priorities.
- ▶ Outside the Thermal Spraying segment, the order backlog rose approximately 3.6x YoY for the Domestic Subsidiary segment, 51.6% YoY for the Overseas Subsidiaries segment, and 3.6% YoY for the Other Surface Treatments segment. As a result, the consolidated order backlog climbed 22.6% YoY to JPY11.3bn. Although the Q4-end consolidated backlog declined slightly from JPY11.4bn at end-Q3 (December 2024), it remained near a record high. These order backlog trends largely mirror those seen in semiconductor/FPD-related orders.

The company expects clearing the accumulated order backlog will drive earnings growth in FY03/26

- ▶ When excluding the impact from the Domestic Subsidiary segment, the order backlog expansion is essentially an indicator of future sales growth. The semiconductor/FPD-related order backlog, a core activity within the Thermal Spraying segment, reached near-record levels, at JPY4.7bn at end-Q3 (October–December 2023) and JPY4.6bn at end-Q4 (January–March 2024), despite the softening of the semiconductor market in FY03/24. However, due to temporary stagnation in the semiconductor market, the company had to adjust shipments for some customers. Additionally, the company reported a shift within its semiconductor/FPD-related order backlog: a decline in backlogged mass-produced product orders (which significantly impact business performance), an increase in backlogged development product-related orders (which have a relatively smaller impact on performance), and growth in backlogged orders for products in transition toward mass production (which have slightly later delivery dates). As a result, despite near-record order backlog levels during 2H FY03/24, the number of orders recognized as sales was lower YoY and did not drive a recovery in the company's performance.
- ▶ However, according to the company, the order backlog as of end-FY03/25 included an increasing proportion of mass-produced products, which have a significant impact on earnings. As such, the company expects the clearing of the current backlog, combined with continued strong order intake from April 2025 onward, will sustain strong performance into FY03/26 and beyond.

Factors affecting changes (YoY) in recurring profit

- ▶ Consolidated recurring profit, which is closely linked to segment profit in each segment, grew JPY2.9bn YoY, from JPY9.7bn in FY03/24 to JPY12.6bn. The following factors contributed to the change.

- 1) Upward impact of JPY3.6bn due to an increase in sales
- 2) Upward impact of JPY1.8bn due to a decrease in the variable cost ratio
- 3) Downward impact of JPY1.9bn due to an increase in personnel expenses
- 4) Downward impact of JPY205mn due to an increase in depreciation
- 5) Downward impact of JPY66mn due to foreign exchange effects
- 6) Downward impact of JPY304mn due to other factors

Increasing factors

- ▶ In FY03/25, profit increased JPY3.6bn, driven by higher gross profit due to higher sales, primarily from a 23.3% YoY increase in semiconductor/FPD-related sales within the Thermal Spraying segment. This growth was supported by a recovery in sales volumes and timely price revisions, which led to higher selling prices. Additionally, a decrease in the variable cost ratio contributed JPY1.8bn to profit growth. While manufacturing costs, including material and outsourcing expenses, remained high, the shift in sales mix toward high-margin semiconductor/FPD-related products supported improved profitability.

An increase in sales, coupled with a decline in the variable cost ratio, contributed to recurring profit growth

- ▶ In FY03/24, recurring profit fell 12.2% YoY to JPY9.7bn, marking the first profit decline in four years. This drop was primarily due to two negative factors: a decrease in sales and an increase in the variable cost ratio. However, in FY03/25, these factors reversed—sales increased, and the variable cost ratio decreased. According to the company, this shift was the key driver behind the 30.0% YoY recovery in recurring profit.
- ▶ The company expects that these two factors—higher sales and a lower variable cost ratio—which had been negative (lower sales and a higher variable cost ratio) in FY03/24, will continue to act as positive drivers in FY03/26. Although the company anticipates continued increases in personnel costs, depreciation, and R&D expenses, it believes that the dual positive impacts of sales growth and a lower variable cost ratio will be sufficient to absorb these negative factors. For details, see the “Company forecast for FY03/26” section.

Foreign exchange effects

- ▶ In FY03/25, foreign exchange effects resulted in a JPY66mn negative impact on profit. This consisted of a JPY243mn decline in foreign exchange gains recorded under non-operating income (negative factor), partially offset by a JPY177mn positive impact from exchange rate differences related to the translation of overseas subsidiary results and other factors.
- ▶ The company expects the impact of foreign exchange fluctuations on its consolidated earnings (exposure) to gradually increase from FY03/26 onward. Historically, forex effects have had minimal influence on the company's performance, and even during periods of yen depreciation, the contribution to profit remained limited. This was primarily due to the low proportion of foreign exchange gains and losses recorded under non-operating income, as well as sluggish performance of overseas subsidiaries. However, as overseas subsidiaries continue to capture demand in the semiconductor market, their earnings are expanding, and the exchange rates used to convert local currency into yen are gradually having a greater impact on the company's consolidated performance.
- ▶ In the medium to long term, the company aims to expand the performance of its overseas subsidiaries and has already made capital investments—some still ongoing—in new plant facilities in China and Taiwan. Accordingly, the company expects foreign exchange fluctuations will have a more pronounced impact on its consolidated earnings in the future.

Decreasing factors

Rise in personnel expenses and depreciation

- ▶ In FY03/25, personnel expenses increased, resulting in a JPY1.9bn negative impact on profit. The rise stemmed from wage hikes, an increase in full-time employees, and higher operational activity for semiconductor/FPD-related production, including increased overtime costs. The company had accounted for wage increases and additional full-time staff in its initial forecast but incurred extra personnel expenses due to greater-than-expected operational activity in semiconductor-related production. That said, the company believes the entire increase in personnel expenses was offset by higher sales, including an improved product mix due to growth in semiconductor-related sales.
- ▶ Of the JPY1.9bn increase in personnel expenses that negatively impacted profit in FY03/25, a portion was attributable to the effects of retirement benefit accounting. According to the company, excluding these effects, the increase in

- ▶ personnel expenses would have reduced profit by JPY1.7bn. The company adopts a policy of fully amortizing actuarial differences arising from retirement benefit accounting at the end of each fiscal year (March). In FY03/24, actuarial differences resulted in a gain—partly due to pension asset returns exceeding the expected rate and a decline in future retirement benefit obligations stemming from rising interest rates—which helped offset higher personnel expenses. However, in FY03/25, the actuarial gain was smaller YoY, resulting in a YoY negative impact on profit.
- ▶ Depreciation expenses slightly exceeded the company's initial forecast, resulting in a JPY205mn negative impact on profit, but the increase remained broadly within the expected range.

Inventory valuation losses, R&D expenses, and electricity costs

- ▶ The “other factors,” which had a JPY304mn negative impact on profit, included various elements. The main contributors were a rise in inventory valuation losses (approximately JPY200mn negative impact YoY) and an increase in electricity costs (around JPY100mn negative impact YoY). Although the government continued to provide subsidies for electricity expenses, the increase in operating rates for semiconductor and FPD-related production led to higher electricity usage, resulting in a YoY drag on profit. Changes in R&D spending were also included in this category, but R&D expenses rose only JPY35mn YoY in FY03/25, making it a limited negative factor.

Results by segment (full-year, 12 months)

- ▶ Below is a breakdown of individual segment performances. The sales shares provided for each segment represent percentages of the company's consolidated FY03/25 sales of JPY54.2bn. Consolidated sales include royalty income (which is low and has minimal impact on overall sales performance); accordingly, these segment sales shares do not add up to 100% of consolidated sales. Segment profits do not reflect impact from consolidation adjustments. When consolidated adjustments are reflected, total profit generated through all segments directly corresponds to the company's consolidated recurring profit.

Thermal Spraying (handled by TOCALO, the parent company; 72.3% sales share)

- Sales: JPY39.2bn (+15.8% YoY)
- Segment profit: JPY8.9bn (+41.1% YoY)
 - Segment profit margin: 22.6% (+4.0pp YoY)
- Orders: JPY40.2bn (+15.3% YoY)
- Order backlog: JPY8.0bn (+14.1% YoY)

Orders

- ▶ In FY03/25, orders in the Thermal Spraying segment rose 15.3% YoY to JPY40.2bn, surpassing the FY03/23 result of JPY36.2bn and setting a new all-time high for the first time in two fiscal years. The main driver was a 22.8% YoY increase in semiconductor/FPD-related orders to JPY24.9bn, as key customers completed inventory adjustments amid a recovery in the semiconductor market. Semiconductor/FPD-related orders also hit a record high. While the company had expected a recovery in semiconductor/FPD-related orders in its initial forecast announced in May 2024, it believes the actual pace of recovery has exceeded expectations.
- ▶ Industrial machinery-related orders rose 8.4% YoY, steelmaking-related orders increased 5.1% YoY, and orders for other applications grew 2.2% YoY. Industrial machinery-related orders, in particular, remained high, rising about 8% from the record-high result in FY03/24.

Sales

- ▶ The Thermal Spraying segment (parent), the company's largest segment, accounted for 72.3% of consolidated sales in FY03/25. Sales in this segment rose 15.8% YoY to a record-high JPY39.2bn, driving the company's all-time high in consolidated sales for FY03/25 (as mentioned earlier). The breakdown of the JPY39.2bn in Thermal Spraying segment sales is as follows.
 - Semiconductors and FPDs: JPY24.1bn (+23.3% YoY)
 - Of which, semiconductors: JPY22.4bn (+24.1% YoY)
 - Of which, FPDs: JPY1.7bn (+13.5% YoY)
 - Industrial machinery-related: JPY4.9bn (-1.0% YoY)
 - Steelmaking-related: JPY3.9bn (+7.6% YoY)

- Other businesses: JPY6.3bn (+10.0% YoY)

Semiconductor and FPD-related orders and sales hit record-highs

- ▶ The record-high sales in the Thermal Spraying segment for FY03/25 were primarily driven by a recovery in semiconductor/FPD-related sales, which accounted for 61.5% of the segment's total. Sales in this category rose 23.3% YoY to a record-high JPY24.1bn, supported by a rebound and expansion in orders from key customers. Notably, around 93% of these sales were semiconductor-related, with the share of FPD-related sales continuing to decline.
- ▶ Sales to key customers grew further, supported by continued expansion in sales to foreign semiconductor production equipment manufacturers—which had already risen in FY03/24—and a strong recovery in sales to the largest domestic semiconductor production equipment manufacturer. This customer, the company's largest, had a significant negative impact in FY03/24 due to shipment reductions during inventory adjustments amid a semiconductor market slowdown. In FY03/25, however, the completion of these adjustments and the customer's upward revision of its production plans, including a reassessment of inventory levels, led to a sharp rebound in orders and a corresponding increase in sales.

Gradual expansion of production capacity contributed to record-high sales

- ▶ In FY03/25, semiconductor/FPD-related sales totaled JPY24.1bn, setting a new record for the first time in two fiscal years. However, in 1H (April–September 2024), sales fell short of the previous 1H record of JPY12.1bn set in April–September 2022. This was because, despite orders reaching a record high in 1H, production could not keep up, resulting in longer lead times for shipments.

Scaling up production capacity takes time

- ▶ According to the company, the main reason sales lagged behind the recovery in orders as of end-Q2 was a shortage of production capacity, which had not yet reached a level sufficient to meet demand. This capacity includes not only production equipment but also workers on the manufacturing lines, including temporary staff. Although automation has advanced in semiconductor/FPD-related thermal spraying through new and upgraded equipment, a significant portion of the process remains labor-intensive and dependent on manual work.
- ▶ The company is also working to increase headcount while enhancing production equipment for semiconductor and FPD-related thermal spraying. However, a recent labor shortage has stifled efforts to bolster staffing. Moreover, workers on the manufacturing lines require a certain amount of time to reach the necessary skill level for operations, further contributing to delays in strengthening manpower. Due to these constraints, despite record-high orders and order backlog in 1H (April–September), sales did not reach an all-time high.
- ▶ Nevertheless, in response to the recovery in semiconductor and FPD-related orders, particularly from major customers, the company began increasing production capacity early in FY03/25. This effort included not only installing new equipment but also expanding the workforce involved in manufacturing lines, with production capacity being gradually scaled up from Q1 (April–June 2024) onward. According to the company, these gradual capacity enhancements began yielding results in Q3 (October–December 2024), as production volumes started to catch up with order levels. This led to record-high full-year sales in FY03/25.

Trends in non-semiconductor and FPD-related categories

- ▶ Excluding semiconductor and FPD-related sales, industrial machinery-related sales (accounting for 12.4% of the Thermal Spraying segment) declined 1.0% YoY to JPY4.9bn. Steelmaking-related sales (10.0%) rose 7.6% YoY to JPY3.9bn, while sales from other businesses (16.1%) grew 10.0% YoY to JPY6.3bn. Industrial machinery-related sales remained roughly flat YoY, supported by growth in the bearing sector, one of the company's key customer bases. Steelmaking-related sales of JPY3.9bn also reached a record-high level, driven in part by growth outside the automotive sector. Meanwhile, the rise in sales from other businesses was attributed to large-scale project orders in the power plant and energy sectors.
- ▶ While the company focuses primarily on growth in semiconductor/FPD-related sales, which significantly contribute to overall performance, it also intends to actively pursue order acquisition and drive sales growth in non-semiconductor/FPD areas.

Segment profit, segment profit margins

- ▶ In FY03/25, segment profit in the Thermal Spraying segment (linked to recurring profit on the consolidated income statement) rose 41.1% YoY to a record-high JPY8.9bn, driven by a recovery in high-margin semiconductor/FPD-related sales. Similar to sales, 1H (April–September 2024) segment profit fell short of the previous record set in April–September 2022. However, as gradual production capacity expansions took effect, sales recognition accelerated starting in Q3 (October–December). As a result, both full-year sales and segment profit reached record highs.
- ▶ Additionally, the segment profit margin improved 4.0pp to 22.6%. However, the company acknowledges that profitability has not yet fully recovered, as the margin consistently exceeded 24.0% during the two years before the semiconductor market adjustment (FY03/22–FY03/23). According to the company, the insufficient recovery in profitability is primarily due to higher manufacturing costs and SG&A expenses over the past two to three years, as well as increased capital investment for future growth. Among these factors, the company sees rising personnel expenses—including direct labor costs in manufacturing and indirect personnel expenses under SG&A—as the biggest obstacle to improving profitability.
- ▶ However, the company regards these personnel expense increases as human capital investment. It acknowledges once personnel expenses (per employee) rise, reducing them becomes challenging, particularly during periods of increasing production volumes driven by order recovery, which also makes the manufacturing workforce reductions difficult. Consequently, the company believes boosting sales to absorb rising personnel expenses is critical for enhancing profitability. To achieve higher sales, it recognizes the need to expand production capacity. Furthermore, as utilization rates for semiconductor and FPD-related operations continue to climb, the company intends to improve productivity by leveling operations while also working to enhance profitability.

Domestic Subsidiary (4.9% sales share)

- Sales: JPY2.7bn (+8.1% YoY)
- Segment profit: JPY349mn (-29.1% YoY)
 - Segment profit margin: 13.1% (-6.9pp YoY)
- Orders: JPY2.8bn (+12.7% YoY)
- Order backlog: JPY180mn (approx. 3.6x)

Orders

- ▶ Orders in the Domestic Subsidiary segment in FY03/25 rose 12.7% YoY to JPY2.8bn. Although orders declined YoY in 1H (April–September), they rebounded from Q3 (October–December) onward, resulting in full-year growth. The main factor behind the 2H (October–March) recovery was a bottoming out of domestic automobile production. Domestic production volumes for 1H (April–September 2024) and 2H (October 2024–March 2025) were as follows.
 - FY03/25: 8.5mn units (-2.4% YoY)
 - 1H: 4.1mn units (-6.0% YoY)
 - 2H: 4.4mn units (+1.2% YoY)
- ▶ While the performance of the Domestic Subsidiary segment is not determined solely by automobile production volumes, the company acknowledges it remains the most significant variable. In 1H, domestic production was sluggish due to the direct impact of model suspensions following a series of certification-related misconduct issues at multiple automakers. However, as the impact of these issues gradually subsided in 2H, signs of recovery became more evident—particularly in Q4 (January–March 2025), when domestic automobile production rose 12.3% YoY. Reflecting this trend, orders in this segment recovered in 2H, offsetting the weak performance in 1H and ending FY03/25 with a 12.7% YoY increase.

Additional contribution from the newly consolidated subsidiary

- ▶ Another factor behind the recovery in orders for the Domestic Subsidiary segment in 2H was the addition of a newly consolidated subsidiary. Terada Kosakusho, a manufacturer of machine tools and precision machinery parts, was made a subsidiary in August 2024, and its performance was factored into segment results as a net addition from Q3 (October–December). According to the company, the impact of consolidating Terada Kosakusho was not particularly large, but it still contributed positively to the 2H results. The company believes the increase in orders for the Domestic Subsidiary segment in FY03/25 was driven by these two factors: the bottoming out of domestic automobile production and the inclusion of the new subsidiary results.

Sales

- ▶ In FY03/25, sales rose 8.1% YoY to JPY2.7bn. As with orders, sales declined YoY in 1H, but recovered in 2H, supported by a bottoming out of domestic automobile production and the contribution from a newly consolidated subsidiary. As a result, the company achieved full-year sales growth.

Recovery in domestic automobile production and contribution from the newly consolidated subsidiary

- ▶ Until the company acquired Terada Kosakusho (a manufacturer of machine tools and precision machinery parts) in August 2024, the Domestic Subsidiary segment consisted solely of Japan Coating Center Co., Ltd. Japan Coating Center primarily performs surface modification processing using physical vapor deposition (PVD) technology on products such as cutting tools, blades, and molds. Its core business—surface treatment of cutting tools—is mainly geared toward the automotive industry. While the segment's sales are not perfectly linked to domestic automobile production, the correlation is significant. As such, sales declined YoY in 1H, when domestic automobile production was sluggish. However, supported by a recovery in production in 2H and the contribution from newly consolidated Terada Kosakusho, sales recovered in 2H, resulting in full-year sales growth for the fourth consecutive fiscal year (+8.1% YoY).
- ▶ Terada Kosakusho, which became a consolidated subsidiary in Q3 (October–December), was included in the FY03/25 results for eight months due to a difference in fiscal year-ends. According to the company, excluding the contribution from Terada Kosakusho, sales from the existing subsidiary, Japan Coating Center, fell slightly YoY. Although domestic automobile production bottomed out in 2H, the full-year total was still down 2.4% YoY, which continued to weigh on sales.
- ▶ In FY03/25, the primary reason for the decline in domestic automobile production was the certification frauds at Daihatsu Motor, a non-listed subsidiary of Toyota Motor Corporation (TSE Prime: 7203), which led to the suspension of domestic production for affected vehicle models. Furthermore, from late May 2024 onward, similar certification irregularities were uncovered at other automakers, including Toyota, exacerbating the decline in domestic production volumes. Given that automotive-related sales at Japan Coating Center, which is included in the Domestic Subsidiary segment, are highly correlated with domestic auto production volumes, the company believes these certification issues had a significant negative impact on segment sales.

Segment profit, segment profit margin

- ▶ In FY03/25, segment profit decreased 29.1% YoY to JPY349mn. As a result, the segment profit margin declined 6.9pp to 13.1%.
- ▶ Segment profit in FY03/25 declined 29.1% YoY, primarily due to the impact of reduced domestic automobile production resulting from the certification misconduct at automakers. In addition, the profit contribution from newly consolidated Terada Kosakusho was limited, as goodwill amortization and related expenses largely offset the positive effect on earnings.
- ▶ The company responded to the reduction in orders caused by fraudulent certification testing at automakers (which led to the suspension of production for certain vehicle models) by implementing cost-cutting measures, such as reviewing personnel allocation, improving productivity, and adjusting prices. However, these efforts were insufficient to fully absorb the impact of declining sales. The company had introduced new production equipment at a factory established in FY03/22. While smaller in scale compared to those in the Thermal Spraying segment, the factory has steadily contributed to productivity improvements. While the order decline in FY03/25 could not be fully absorbed, the company believes performance will recover in FY03/26 as the impact of the misconduct subsides and orders begin to rebound.

Overseas Subsidiaries (17.2% sales share)

- Sales: JPY9.3bn (+28.4% YoY)
- Segment profit: JPY3.3bn (+76.0% YoY)
 - Segment profit margin: 35.7% (+9.6pp YoY)
- Orders: JPY10.3bn (+43.6% YoY)
- Order backlog: JPY2.8bn (+51.6% YoY)

Orders

- ▶ Orders in the Overseas Subsidiaries segment in FY03/25 rose 43.6% YoY to JPY10.3bn, marking a new all-time high. The record was driven primarily by a recovery in semiconductor markets in overseas regions such as China and Taiwan, combined with the company's proactive sales efforts, which led to increased orders—including from new customers. Foreign exchange effects (conversion gains from yen depreciation) also contributed to the growth to some extent. Due to differences in fiscal year-end, the company's FY03/25 results reflect the overseas subsidiaries' performance for the 12 months from January to December 2024.

Sales

- ▶ This segment includes two subsidiaries in China, one in Taiwan, and one in the US, but essentially consists of the two subsidiaries in China and the one in Taiwan, as the US business is not fully operational. As China and Taiwan have a December fiscal year-end, the company's FY03/25 results include the financial results of these overseas subsidiaries for January–December. In FY03/25, sales in the Overseas Subsidiaries segment rose 28.4% YoY to JPY9.3bn, setting a new all-time high—driven by a surge in orders following the end of the global semiconductor market's adjustment phase.
- ▶ Foreign exchange effects (conversion gains due to yen depreciation) also contributed to the strong performance, making this segment the highest in sales growth among all segments, surpassing the 15.8% YoY increase in the Thermal Spraying segment. According to the company, even excluding the impact of foreign exchange gains, the Overseas Subsidiaries segment still recorded the highest YoY sales growth rate among all segments in FY03/25.

Segment profit, segment profit margin

- ▶ In FY03/25, segment profit surged 76.0% YoY to JPY3.3bn, setting a new all-time high in line with record sales. The sharp increase was driven by an improved sales mix, including growth in semiconductor/FPD-related re-coating, as well as positive contributions from foreign exchange effects and increased sales in non-semiconductor-related areas. As a result, the segment profit margin rose 9.6pp to 35.7%, maintaining profitability 13.1pp higher than that of the Thermal Spraying segment (22.6%).

Other Surface Treatments (5.3% sales share)

- Sales: JPY2.9bn (-4.6% YoY)
- Segment profit: JPY422mn (-21.0% YoY)
 - Segment profit margin: 14.7% (-3.0pp YoY)
- Orders: JPY2.9bn (-3.9% YoY)
- Order backlog: JPY348mn (+3.6% YoY)

Order backlog

- ▶ In FY03/25, orders in the Other Surface Treatments segment declined 3.9% YoY to JPY2.9bn. The decrease was primarily due to inventory adjustments by customers in the core agricultural equipment parts business. Despite the YoY decline, the FY03/25 order total of JPY2.9bn was the second highest on record. The company expects inventory adjustments—particularly in agricultural equipment parts—to continue for some time.

Sales, segment profit, segment profit margin

- ▶ In FY03/25, sales in the Other Surface Treatments segment declined 4.6% YoY to JPY2.9bn. Segment profit also fell 21.0% YoY to JPY422mn, as the impact of lower sales could not be fully offset. As a result, the segment profit margin dropped 3.0pp to 14.7%.
 - ▶ The YoY decline in sales was primarily attributed to reduced orders for the Toyota Diffusion (TD) process applied to agricultural equipment parts, which had grown significantly in FY03/24. The TD process is a surface modification method that forms a functional film by immersing the target workpiece in a high-temperature molten salt bath and allowing vanadium and other carbides to diffusely permeate the surface of the base material. This drop in orders was largely driven by customer inventory adjustments. The company applies surface treatments (TD process) to agricultural equipment parts and supplies these to Japanese agricultural equipment makers, who then sell their products to the US and other markets. The company believes that it benefited from the expansion of the agricultural

- ▶ industry in North America during FY03/24. Despite the decrease in sales and profit in FY03/25, the company remains optimistic about future growth in the agricultural equipment parts business.

Q4 (January–March, three months) results

TOCALO reported the following results for Q4 FY03/25 (January–March 2025).

- Sales: JPY14.3bn (+20.1% YoY)
- Operating profit: JPY3.8bn (+35.4% YoY)
- Recurring profit: JPY3.8bn (+29.2% YoY)
 - RPM: 26.5% (+1.9pp YoY)
- Net income attributable to owners of the parent: JPY2.3bn (+11.0% YoY)
- Orders: JPY14.2bn (+25.2% YoY)

Overview

- ▶ Consolidated sales for Q4 (January–March) rose 20.1% YoY to JPY14.3bn, marking the fifth consecutive quarter of YoY sales growth and a record high for any quarter. This was also the second straight quarter in which sales exceeded JPY14.0bn. The company attributes this strong performance to the positive impact of its increased production capacity for semiconductor/FPD-related orders.
- ▶ By business segment, sales in the Thermal Spraying segment (parent), which accounts for approximately 68% of consolidated sales, grew 13.0% YoY, driving overall consolidated sales growth. This was mainly supported by a recovery in orders (+10.5% YoY) and sales (+22.7% YoY) in the segment's core semiconductor and FPD-related operations. Among other segments, sales in the Overseas Subsidiaries segment (primarily China and Taiwan) increased 57.1% YoY, while the Domestic Subsidiary segment sales rose 23.2% YoY. Sales in the Other Surface Treatments segment grew 3.3% YoY.
- ▶ Consolidated recurring profit for Q4 (January–March) increased 29.2% YoY to JPY3.8bn, marking the fifth consecutive quarter of YoY profit growth, in line with sales. Recurring profit reached a record high for any quarter.
- ▶ By business segment, profit in the Thermal Spraying segment rose 28.0% YoY, while the Overseas Subsidiaries segment posted approximately 2.6x YoY growth. Profit in the Domestic Subsidiary segment also grew 69.4% YoY. In contrast, the Other Surface Treatments segment saw a 21.8% YoY decline. The company's segment profit is linked to recurring profit in the income statement. Profit growth in the core Thermal Spraying segment was driven by a recovery in high-margin semiconductor/FPD-related sales, while the sharp increase in profit from the Overseas Subsidiaries segment also contributed. Recovery in the Domestic Subsidiary segment provided further support. In addition, positive factors such as overall sales growth and a more favorable sales mix—driven by an increase in high-margin semiconductor/FPD-related sales—contributed to performance, resulting in a 1.9pp YoY improvement in RPM to 26.5%.

Order trend

- ▶ In Q4 (January–March), consolidated orders rose 25.2% YoY to JPY14.2bn, marking the fifth consecutive quarter of YoY growth. While this was slightly below the record-high JPY14.6bn posted in Q3 (October–December), the company sees the level as broadly comparable, indicating a continued upward trend. The strength was primarily driven by a 10.5% YoY increase in semiconductor/FPD-related orders—the core business of the Thermal Spraying segment—which reached a new quarterly record. As a result, orders in the Thermal Spraying segment increased 13.1% YoY to JPY9.5bn.
- ▶ By segment, orders in the core Thermal Spraying segment rose 13.1% YoY. The Overseas Subsidiaries segment saw a 92.3% YoY increase, supported by a recovery in the semiconductor market. The Domestic Subsidiary segment orders grew 43.1% YoY, while orders in the Other Surface Treatments segment (e.g., agricultural machinery) declined 8.1% YoY. The breakdown of Q4 (January–March) orders, which totaled JPY14.2bn, is as follows.
 - Thermal Spraying segment (parent): JPY9.5bn (+13.1% YoY)
 - Semiconductor/FPD-related: JPY5.5bn (+10.5% YoY)
 - Industrial machinery-related: JPY1.4bn (+39.7% YoY)
 - Steelmaking-related: JPY795mn (-2.6% YoY)

- Other businesses: JPY1.7bn (+11.9% YoY)
- Domestic Subsidiary segment: JPY773m (+43.1% YoY)
- Overseas Subsidiaries segment: JPY3.3bn (+92.3% YoY)
- Other Surface Treatments segment: JPY659m (-8.1% YoY)

Results by segment (January–March, three months)

- ▶ Below is a breakdown of individual segment performances. The sales shares provided for each segment represent percentages of the company's consolidated Q4 (January–March) sales of JPY14.3bn. Consolidated sales include royalty income (which is low and has minimal impact on overall sales performance); accordingly, these segment sales shares do not add up to 100% of consolidated sales. Segment profits do not reflect impact from consolidation adjustments. When consolidated adjustments are reflected, total profit generated through all segments directly corresponds to the company's consolidated recurring profit.

Thermal Spraying (handled by TOCALO, the parent company; 67.5% sales share)

- Sales: JPY9.7bn (+13.0% YoY)
- Segment profit: JPY2.0bn (+28.0% YoY)
 - Segment profit margin: 21.0% (+2.4pp YoY)
- Orders: JPY9.5bn (+13.1% YoY)

Overview

- ▶ The Thermal Spraying segment (parent), the company's largest segment, accounted for 67.5% of consolidated sales in Q4 (January–March). Sales in this segment rose 13.0% YoY to JPY9.7bn, marking the fourth consecutive quarter of YoY growth. By category, sales in the core semiconductor and FPD-related operations grew 22.7% YoY to JPY6.2bn. Steelmaking-related sales declined 9.2% YoY to JPY988m, industrial machinery-related sales fell 7.5% YoY to JPY1.1bn, while sales in other areas increased 12.2% YoY to JPY1.4bn. The breakdown of the JPY9.7bn in Thermal Spraying segment sales is as follows.
 - Semiconductors and FPDs: JPY6.2bn (+22.7% YoY)
 - Semiconductors: JPY5.6bn (+22.4% YoY)
 - FPDs: JPY547mn (+25.7% YoY)
 - Industrial machinery-related: JPY1.1bn (-7.5% YoY)
 - Steelmaking-related: JPY988m (-9.2% YoY)
 - Other businesses: JPY1.4bn (+12.2% YoY)
- ▶ Segment profit for Q4 (January–March) increased 28.0% YoY to JPY2.0bn, primarily driven by higher sales and an improved sales mix. This marked the fourth consecutive quarter of YoY profit growth and set a new record high for any quarter, as did sales. The segment profit margin also improved 2.4pp YoY to 21.0%. While rising personnel costs and expenses related to production capacity expansion dampened profit in Q4, the company believes higher sales and an improved sales mix fully offset these cost increases.

Domestic Subsidiary (5.1% sales share)

- Sales: JPY737mn (+23.2% YoY)
- Segment profit: JPY122mn (+69.4% YoY)
 - Segment profit margin: 16.6% (+4.6pp YoY)
- Orders: JPY773mn (+43.1% YoY)

Overview

- ▶ Sales in Q4 (January–March) rose 23.2% YoY to JPY737mn, marking the second consecutive quarter of YoY sales growth. The increase was supported by the addition of sales from Terada Kosakusho, which became a consolidated subsidiary in August 2024, as well as a rise in domestic automobile production—up 12.3% YoY in January–March 2025—which helped lift sales.

- ▶ In Q4 (January–March), segment profit in the Domestic Subsidiary segment rose 69.4% YoY to JPY122mn, marking the first YoY profit increase in five quarters. The segment profit margin also improved by 4.6pp YoY to 16.6%. According to the company, the main driver of the profit recovery was the rebound in domestic automobile production, as previously noted. While the newly consolidated Terada Kosakusho contributed to sales, its impact on profit was limited due to goodwill amortization and related expenses.

Overseas Subsidiaries (21.6% sales share)

- Sales: JPY3.1bn (+57.1% YoY)
- Segment profit: JPY1.3bn (approx. 2.6x YoY)
 - Segment profit margin: 43.3% (+17.2pp YoY)
- Orders: JPY3.3bn (+92.3% YoY)

Overview

- ▶ This segment includes two subsidiaries in China, one in Taiwan, and one in the US, but effectively consists of the three subsidiaries in China and Taiwan, as the US business is not yet fully operational. Additionally, because China and Taiwan have a December fiscal year-end, the company's Q4 (January–March) financial results include the performance of these subsidiaries for October–December. In Q4, sales from the Overseas Subsidiaries segment increased 57.1% YoY to JPY3.1bn, driven by the stabilization of the global semiconductor market and the positive impact of foreign exchange rates. This marked the 16th consecutive quarter of YoY sales growth and set a record high for any quarter.
- ▶ In Q4 (January–March), segment profit increased 2.6x YoY to JPY1.3bn, marking the seventh consecutive quarter of YoY profit growth. As with sales, segment profit reached a record high for any quarter. This growth was driven by an improved sales mix, including increased semiconductor/FPD-related re-coating, as well as contributions from foreign exchange effects and growth in non-semiconductor-related sales. As a result, the segment profit margin improved 17.2pp YoY to 43.3%.

Other Surface Treatments (5.3% sales share)

- Sales: JPY757mn (+3.3% YoY)
- Segment profit: JPY97mn (-21.8% YoY)
 - Segment profit margin: 12.8% (-4.1pp YoY)
- Orders: JPY659mn (-8.1% YoY)

Overview

- ▶ Sales rose 3.3% YoY to JPY757mn in Q4 (January–March), marking the first YoY sales increase in four quarters. However, segment profit declined 21.8% YoY to JPY97mn due to rising costs, resulting in the fourth consecutive quarter of YoY profit decline. As a result, the segment profit margin fell 4.1pp YoY to 12.8%.

Cumulative Q3 FY03/25 results (out February 4, 2025)

Cumulative Q3 FY03/25 (April–December) results summary

Cumulative Q3 FY03/25 (April–December 2024) results are as follows.

- Sales: JPY39.9bn (+14.7% YoY)
- Operating profit: JPY8.5bn (+32.6% YoY)
- Recurring profit: JPY8.8bn (+30.3% YoY)
 - RPM: 22.0% (+2.7pp YoY)
- Net income attributable to owners of the parent: JPY5.8bn (+35.1% YoY)
- Orders: JPY42.0bn (+16.0% YoY)
- Order backlog: JPY11.4bn (+16.7% YoY)

Sales

- ▶ Consolidated sales for cumulative Q3 (April–December) rose 14.7% YoY to JPY39.9bn, marking a record high for cumulative Q3. By business segment, the Thermal Spraying (handled by TOCALO, the parent company) segment, which accounts for approximately 74% of consolidated sales, increased 16.8% YoY, driving overall sales growth. This was primarily due to a recovery in orders (+26.8% YoY) and sales (+23.5% YoY) for semiconductors and flat panel displays (FPDs), the segment's core markets. Outside the semiconductor and FPD fields, industrial machinery-related sales remained largely flat (+1.0% YoY), while steel-related sales increased 14.7% YoY, and sales from other applications grew 9.3% YoY, modestly contributing to overall growth. Among other segments, sales from the Overseas Subsidiaries segment (primarily in China and Taiwan) grew 17.7% YoY, sales from the Domestic Subsidiary segment rose 3.2% YoY, and sales from the Other Surface Treatments segment declined 7.1% YoY.

Recurring profit and RPM

- ▶ Consolidated recurring profit for cumulative Q3 (April–December) rose 30.3% YoY to JPY8.8bn, marking a record high for cumulative Q3, in line with sales growth. The previous record was JPY8.7bn in April–December 2022. Due to a shift in the sales mix, with an increase in high-margin semiconductor and FPD-related sales, RPM improved 2.7pp YoY to 22.0%. By business segment, profit from the Thermal Spraying segment rose 45.6% YoY to JPY6.8bn, while profit from the Overseas Subsidiaries segment increased 44.5% YoY to JPY2.0bn. In contrast, profit from the Domestic Subsidiary segment declined 46.0% YoY to JPY227mn, and profit from the Other Surface Treatments segment fell 20.7% YoY to JPY325mn. The company's segment profit is linked to recurring profit in the income statement. The mainstay Thermal Spraying segment posted a 45.6% YoY profit increase, driven by the recovery in high-margin semiconductor and FPD-related sales. This growth effectively offset the weaker performances in Domestic Subsidiary and other segments, contributing to overall profitability improvements.

Orders

- ▶ In cumulative Q3 (April–December) FY03/25, consolidated orders rose 16.0% YoY to JPY42.0bn, surpassing the JPY37.9bn recorded in April–December 2022 and marking a record high for cumulative Q3. The main driver was a 26.8% YoY recovery in orders for semiconductors and flat panel displays (FPDs) in the Thermal Spraying segment (parent), as key customers completed their inventory adjustments. Although the company had initially projected a recovery in semiconductor and FPD-related orders for FY03/25 in May 2024, the pace of recovery in cumulative Q3 exceeded expectations. The strong rebound in semiconductor and FPD-related orders also contributed to a record-high order volume for the Thermal Spraying segment in cumulative Q3.
- ▶ Outside the Thermal Spraying segment, orders in the Overseas Subsidiaries segment rose 28.2% YoY, reflecting a recovery in the semiconductor market. Orders in the Domestic Subsidiary segment, which focuses primarily on the automotive sector, grew 4.1% YoY, while orders in the Other Surface Treatments segment (e.g., agricultural machinery) declined 2.6% YoY. The breakdown of cumulative Q3 (April–December) orders, totaling JPY42.0bn, is as follows. For detailed order information by segment, refer to the section “Results by segment (April–December, nine months)” below.
 - Thermal Spraying segment (parent): JPY30.8bn (+16.0% YoY)
 - Semiconductor/FPD-related: JPY19.4bn (+26.8% YoY)
 - Industrial machinery-related: JPY3.9bn (+0.1% YoY)
 - Steelmaking-related: JPY3.1bn (+7.3% YoY)
 - Other businesses: JPY4.5bn (-1.2% YoY)
 - Domestic Subsidiary segment: JPY2.0bn (+4.1% YoY)
 - Overseas Subsidiaries segment: JPY7.0bn (+28.2% YoY)
 - Other Surface Treatments segment: JPY2.2bn (-2.6% YoY)

Order backlog

- ▶ As of end-Q3 FY03/25 (end-December 2024), the consolidated order backlog increased 16.7% YoY to JPY11.4bn, marking a quarterly record high. The breakdown of the JPY11.4bn order backlog as of end-Q3 is provided below.
 - Thermal Spraying segment (parent): JPY8.2bn (+14.0% YoY)
 - Semiconductor/FPD-related: JPY6.1bn (+28.8% YoY)
 - Industrial machinery-related: JPY472mn (-12.1% YoY)
 - Steelmaking-related: JPY1.1bn (-12.8% YoY)

- Other businesses: JPY598mn (-17.2% YoY)
- Domestic Subsidiary segment: JPY143mn (+33.6% YoY)
- Overseas Subsidiaries segment: JPY2.6bn (+23.6% YoY)
- Other Surface Treatments segment: JPY446mn (+26.3% YoY)

Order backlog reached a record-high level

- ▶ The order backlog for the mainstay Thermal Spraying segment rose 14.0% YoY, driven by a recovery in orders, with the semiconductor/FPD-related backlog increasing significantly by 28.8% YoY. Meanwhile, order backlogs for industrial machinery-related, steelmaking-related, and other businesses declined by 12.1%, 12.8%, and 17.2% YoY, respectively. However, these declines were fully offset by the strong growth in semiconductor/FPD-related orders. As a result, the Thermal Spraying segment's order backlog exceeded JPY8.0bn for the second consecutive quarter, reaching a record high of over JPY8.2bn as of end-Q3. The company recognizes efficiently managing and fulfilling this backlog is one of its immediate operational priorities.
- ▶ The Domestic Subsidiary segment's order backlog increased 33.6% YoY, the Overseas Subsidiaries segment's backlog rose 23.6% YoY, and the Other Surface Treatments segment's backlog grew 26.3% YoY. As a result, the consolidated order backlog, including semiconductor/FPD-related orders, increased 16.7% YoY to a record high of JPY11.4bn.

The company expects clearing the accumulated order backlog will drive earnings growth starting from Q4

- ▶ When excluding the impact from the Domestic Subsidiary segment, the order backlog expansion is essentially an indicator of future sales growth. The semiconductor/FPD-related order backlog, a core activity within the Thermal Spraying segment, reached near-record levels, at JPY4.7bn at end-Q3 (October–December 2023) and JPY4.6bn at end-Q4 (January–March 2024), despite the softening of the semiconductor market in FY03/24. However, due to temporary stagnation in the semiconductor market, the company had to adjust shipments for some customers. Additionally, the company reported a shift within its semiconductor/FPD-related order backlog: a decline in backlogged mass-produced product orders (which significantly impact business performance), an increase in backlogged development product-related orders (which have a relatively smaller impact on performance), and growth in backlogged orders for products in transition toward mass production (which have slightly later delivery dates). As a result, despite near-record order backlog levels during 2H FY03/24, the number of orders recognized as sales was lower YoY and did not drive a recovery in the company's performance.
- ▶ However, according to the company, backlogged orders for mass-produced products, which significantly contribute to its performance, increased as of end-Q3 FY03/25. As a result, the company expects clearing the existing backlog at end-Q3, along with continued strong order volumes from Q4 (January–March) onward, will support strong performance not only in FY03/25 but also beyond FY03/26.

Factors affecting changes (YoY) in recurring profit

- ▶ Consolidated recurring profit, which is closely linked to segment profit in each segment, grew by JPY2.0bn YoY, from JPY6.7bn in cumulative Q3 FY03/24 to JPY8.8bn. The following factors contributed to the change.
 - 1) Upward impact of JPY2.4bn due to an increase in sales
 - 2) Upward impact of JPY887mn due to a decrease in the variable cost ratio
 - 3) Downward impact of JPY808mn due to an increase in personnel expenses
 - 4) Downward impact of JPY146mn due to an increase in depreciation
 - 5) Upward impact of JPY9mn due to foreign exchange effects
 - 6) Downward impact of JPY251mn due to other factors

Increasing factors

- ▶ In cumulative Q3 (April–December) FY03/25, profit increased by JPY2.4bn, driven by higher gross profit due to higher sales, primarily from a 23.5% YoY increase in semiconductor/FPD-related sales within the Thermal Spraying segment. This growth was supported by a recovery in sales volumes and timely price revisions, which led to higher selling prices. Additionally, a decrease in the variable cost ratio contributed JPY887mn to profit growth. While manufacturing

- costs, including material and outsourcing expenses, remained high, the strong increase in highly profitable semiconductor/FPD-related sales significantly improved the overall sales mix (product mix), offsetting cost pressures.

An increase in sales, coupled with a decline in the variable cost ratio, contributed to recurring profit growth

- In FY03/24, recurring profit fell 12.2% YoY to JPY9.7bn, marking the first profit decline in four years. This drop was primarily due to two negative factors: a decrease in sales and an increase in the variable cost ratio. However, in 1H FY03/25, these factors reversed—sales increased, and the variable cost ratio decreased. According to the company, this shift was the key driver behind the 30.3% YoY recovery in recurring profit.
- The company expects that these two factors—higher sales and a lower variable cost ratio—which had been negative (lower sales and a higher variable cost ratio) in FY03/24, will continue to act as positive drivers in Q4 (January–March) FY03/25 and beyond. Although the company anticipates continued increases in personnel costs, depreciation, and R&D expenses in Q4 and beyond, it believes that the dual positive impacts of sales growth and a lower variable cost ratio will be sufficient to absorb these negative factors.

Foreign exchange effects

- In cumulative Q3 (April–December) FY03/25, foreign exchange effects contributed JPY9mn to profit growth but were generally a neutral factor overall. The JPY9mn profit increase from forex impacts consisted of a JPY113mn decline in foreign exchange gains recorded under non-operating income (negative factor), offset by a JPY122mn positive impact from exchange rate differences related to the conversion of overseas subsidiary results and other factors.
- The company expects the impact of foreign exchange fluctuations on its consolidated earnings to gradually increase from FY03/26 onward. Historically, forex effects have had minimal influence on the company's performance, and even during periods of yen depreciation, the contribution to profit remained limited. This was primarily due to the low proportion of foreign exchange gains and losses recorded under non-operating income, as well as sluggish performance of overseas subsidiaries. However, as overseas subsidiaries continue to capture demand in the semiconductor market, their earnings are expanding, and the exchange rates used to convert local currency into yen are gradually having a greater impact on the company's consolidated performance. In the medium to long term, the company aims to further grow its overseas subsidiaries and is currently investing in new plant facilities in China and Taiwan. As a result, the company believes that, in the future, fluctuations in exchange rates will have an increasingly significant impact on its consolidated earnings.

Decreasing factors

The rise in personnel expenses and depreciation was largely in line with the initial forecast

- In cumulative Q3 FY03/25 (April–December), personnel expenses increased, resulting in a JPY808mn negative impact on profit. The rise stemmed from wage hikes, an increase in full-time employees, and higher operational activity for semiconductor/FPD-related production, including overtime costs. The company had accounted for wage increases and additional full-time staff in its initial forecast but incurred extra personnel expenses due to greater-than-expected operational activity in semiconductor-related production. However, the company successfully offset nearly all of these increased personnel costs through higher sales. Additionally, the initial forecast anticipated a YoY increase in depreciation costs of JPY144mn for FY03/25, which aligned with the observed rise.

Inventory valuation losses, R&D expenses, and electricity costs

- The "other factors," which had a JPY251mn negative impact on profit, included various elements. The primary contributors were an increase in inventory valuation losses and higher R&D expenses. Additionally, regarding electricity costs, which were part of "other factors" in FY03/24 results, the company continued receiving government subsidies in cumulative Q3 FY03/25. However, due to higher operating rates for semiconductor/FPD-related production, overall electricity consumption increased, depressing profit YoY.

Results by segment (April–December, nine months)

- Below is a breakdown of individual segment performances. The sales shares provided for each segment represent percentages of the company's consolidated cumulative Q3 FY03/25 (April–December) sales of JPY39.9bn. Consolidated sales include royalty income (which is low and has minimal impact on overall sales performance); accordingly, these segment sales shares do not add up to 100% of consolidated sales. Segment profits do not reflect

- ▶ impact from consolidation adjustments. When consolidated adjustments are reflected, total profit generated through all segments directly corresponds to the company's consolidated recurring profit.

Thermal Spraying (handled by TOCALO, the parent company; 74.0% sales share) —

- Sales: JPY29.5bn (+16.8% YoY)
- Segment profit: JPY6.8bn (+45.6% YoY)
 - Segment profit margin: 23.1% (+4.5pp YoY)
- Orders: JPY30.8bn (+16.0% YoY)
- Order backlog: JPY8.2bn (+14.0% YoY)

Orders

- ▶ In cumulative Q3 (April–December) FY03/25, orders in the Thermal Spraying segment rose 16.0% YoY to JPY30.8bn, surpassing the April–December 2022 total of JPY28.4bn and setting a new record high for cumulative Q3. The primary driver was a 26.8% YoY increase in semiconductor/FPD-related orders to JPY19.4bn, reflecting the completion of inventory adjustments by key customers amid a recovering semiconductor market. Semiconductor/FPD-related orders also reached a record high for cumulative Q3. The company had projected a recovery in semiconductor/FPD-related orders for FY03/25 in its initial forecast announced in May 2024, but cumulative Q3 results have exceeded expectations.
- ▶ Other than semiconductor/FPD-related orders, industrial machinery-related orders increased 0.1% YoY and steelmaking-related orders rose 7.3% YoY, while orders for other applications declined 1.2% YoY. The company partially attributes the increase in steelmaking-related orders to weak results in cumulative Q3 FY03/24. Industrial machinery-related orders remained roughly flat YoY, but considering that the prior-year level was a record high for cumulative Q3, the company believes order volume remains strong.

Sales

- ▶ The Thermal Spraying segment (parent company), the company's largest segment, accounted for 74.0% of consolidated sales in cumulative Q3 (April–December) FY03/25. Sales in this segment grew 16.8% YoY to JPY29.5bn, setting a new record high for cumulative Q3. The record-breaking consolidated sales in cumulative Q3 (as mentioned earlier) were largely driven by the Thermal Spraying segment, which achieved its highest-ever sales. The breakdown of the JPY29.5bn in Thermal Spraying segment sales is as follows.
 - Semiconductors and FPDs: JPY17.9bn (+23.5% YoY)
 - Of which, semiconductors: JPY16.7bn (+24.7% YoY)
 - Of which, FPDs: JPY1.2bn (+8.7% YoY)
 - Industrial machinery-related: JPY3.8bn (+1.0% YoY)
 - Steelmaking-related: JPY2.9bn (+14.7% YoY)
 - Other businesses: JPY4.9bn (+9.3% YoY)

Semiconductor and FPD-related orders and sales hit record-highs for cumulative Q3

- ▶ The record-high sales in the Thermal Spraying segment were primarily driven by a recovery in semiconductor/FPD-related sales, fueled by a recovery and expansion in orders from key customers. These sales, which accounted for 60.7% of the segment's total sales in cumulative Q3 FY03/25, increased by 23.5% YoY to JPY17.9bn, marking a new record high for cumulative Q3. Notably, approximately 93% of semiconductor/FPD-related sales were semiconductor-related, reflecting a continued decline in the proportion of FPD-related sales.
- ▶ Sales to key customers grew further, driven by continued expansion in sales to foreign semiconductor production equipment manufacturers, which had already increased in FY03/24, and a recovery in sales to the largest domestic semiconductor production equipment manufacturer. The latter, the company's largest customer, had significantly impacted FY03/24 results due to shipment restrictions during inventory adjustments prompted by a semiconductor market slowdown. However, with the completion of these inventory adjustments and an upward revision of the customer's production plans, including adjustments to inventory levels, the company's orders rebounded sharply, contributing to increased sales.

Gradual expansion of production capacity underway

- ▶ In cumulative Q3 (April–December) FY03/25, semiconductor/FPD-related sales reached JPY17.9bn, setting a new record high for cumulative Q3. However, in 1H (April–September), sales did not surpass the previous record of JPY12.1bn, achieved in April–September 2022. This was primarily because, although orders had already hit an all-time high in 1H, production could not keep pace, leading to longer lead times for shipments.
- ▶ According to the company, the primary reason sales have not yet caught up with the recovery in orders is a shortage of production capacity, which has not yet reached the level needed to meet the increased demand. This production capacity includes not only manufacturing equipment but also the workers (including temporary staff) involved in the production lines. While automation has progressed in thermal spraying processes for semiconductors and FPDs through the introduction and upgrading of production equipment, there remain significant labor-intensive processes reliant on manual work. The company is also working to increase the workforce while enhancing production equipment for semiconductor and FPD-related thermal spraying. However, a recent labor shortage has delayed efforts to bolster staffing. Moreover, workers on the manufacturing lines require a certain amount of time to reach the necessary skill level for operations, further contributing to delays in strengthening manpower. As a result, despite record-high orders and order backlog in 1H (April–September), sales did not reach an all-time high.
- ▶ Nevertheless, in response to the recovery in semiconductor and FPD-related orders, particularly from major customers, the company began increasing production capacity early in FY03/25. This effort included not only installing new equipment but also expanding the workforce involved in manufacturing lines, with production capacity being gradually scaled up from Q1 (April–June) onward. According to the company, these gradual capacity enhancements began yielding results in Q3 (October–December), allowing production volumes to start catching up with order levels. As a result, the company recorded its highest-ever cumulative Q3 sales.

Trends in non-semiconductor and FPD-related categories

- ▶ Excluding semiconductor and FPD-related sales, industrial machinery-related sales (accounting for 12.8% of the Thermal Spraying segment) increased 1.0% YoY to JPY3.8bn. Steelmaking-related sales (10.0%) grew 14.7% YoY to JPY2.9bn, while sales from other businesses (16.6%) rose 9.3% YoY to JPY4.9bn. The increase in industrial machinery-related sales was driven by growth in the bearing sector, a key customer base for the company, allowing sales to remain roughly flat YoY. Steelmaking-related sales of JPY2.9bn also reached a record high for cumulative Q3, supported by growth in non-automotive sectors. Meanwhile, the rise in sales from other businesses was attributed to large-scale project orders in the power plant and energy sectors.
- ▶ While the company focuses primarily on growth in semiconductor/FPD-related sales, which significantly contribute to overall performance, it aims to actively acquire orders in non-semiconductor/FPD areas to ensure that these areas also meet its recovery expectations.

Segment profit, segment profit margins

- ▶ In the Thermal Spraying segment, segment profit (linked to recurring profit in the consolidated income statement) for cumulative Q3 (April–December) FY03/25 increased 45.6% YoY to JPY6.8bn, driven by a recovery in highly profitable semiconductor/FPD-related sales. This JPY6.8bn segment profit set a new record high for cumulative Q3. Similar to sales, 1H (April–September) segment profit fell short of the previous record set in April–September 2022. However, as gradual production capacity expansions took effect, sales recognition accelerated in Q3 (October–December). As a result, segment profit reached a new cumulative Q3 record, backed by sales growth.
- ▶ Additionally, the segment profit margin improved 4.5pp to 23.1%. However, the company acknowledges that profitability has not yet fully recovered, as the margin consistently exceeded 24.0% during the two years before the semiconductor market adjustment (FY03/22–FY03/23), with a record high of 24.5% in cumulative Q3 (April–December) FY03/22. According to the company, the insufficient recovery in profitability is primarily due to higher manufacturing costs and SG&A expenses over the past two to three years, as well as increased capital investment for future growth. Among these factors, the company sees rising personnel expenses—including direct labor costs in manufacturing and indirect personnel expenses under SG&A—as the biggest obstacle to improving profitability.
- ▶ However, the company regards these personnel expense increases as human capital investment. It acknowledges once personnel expenses (per employee) rise, reducing them becomes challenging, particularly during periods of increasing production volumes driven by order recovery, which also makes the manufacturing workforce reductions difficult. Consequently, the company believes boosting sales to absorb rising personnel expenses is

- ▶ critical for enhancing profitability. To achieve higher sales, it recognizes the need to expand production capacity. Furthermore, as utilization rates for semiconductor and FPD-related operations continue to climb, the company is concentrating on improving productivity by leveling operations while also working to enhance profitability.

Domestic Subsidiary (4.8% sales share)

- Sales: JPY1.9bn (+3.2% YoY)
- Segment profit: JPY227mn (-46.0% YoY)
 - Segment profit margin: 11.8% (-10.8pp YoY)
- Orders: JPY2.0bn (+4.1% YoY)
- Order backlog: JPY143mn (+33.6% YoY)

Orders

- ▶ Orders in the Domestic Subsidiary segment for cumulative Q3 (April–December) FY03/25 increased 4.1% YoY to JPY2.0bn. While orders declined YoY in 1H (April–September), they recovered in Q3 (October–December), increasing YoY in cumulative Q3.

Sales

- ▶ In cumulative Q3 (April–December) FY03/25, sales increased 3.2% YoY to JPY1.9bn. Although automotive-related sales remained weak, overall sales grew due to contributions from a newly consolidated subsidiary.
- ▶ The company's domestic subsidiary (Japan Coating Center Co., Ltd.) primarily uses physical vapor deposition (PVD) technology for surface modification of cutting tools, knives, molds, and other products. Among these, surface modification for cutting tools, the core business, is mainly targeted at the automotive industry. While sales in the Domestic Subsidiary are not directly correlated with domestic automobile production volume, there is a notable level of linkage. Given that cumulative Q3 domestic automobile production was sluggish (down 6.3% YoY for June–November, with December data yet to be released, based on figures from the Japan Automobile Manufacturers Association), the company believes sales from its existing business in the Domestic Subsidiary segment declined YoY.

Newly consolidated subsidiary contributed to overall sales

- ▶ However, the performance of Terada Kosakusho, a manufacturer of machine tools and precision machinery components, which became a subsidiary in August 2024, was added to the results starting in Q3 (October–December). This contributed to overall sales growth for cumulative Q3. In addition to this boost from Terada Kosakusho, steady performance in non-automotive sectors also supported sales, resulting in YoY sales growth for cumulative Q3.
- ▶ In cumulative Q3 (April–December), the primary reason for the decline in domestic automobile production was the certification frauds at Daihatsu Motor, a non-listed subsidiary of Toyota Motor Corporation (TSE Prime: 7203), which led to the suspension of domestic production for affected vehicle models. Furthermore, from late May 2024 onward, similar certification irregularities were uncovered at other automakers, including Toyota, exacerbating the decline in domestic production volumes. Given that sales in the Domestic Subsidiary segment's automotive-related business are highly correlated with domestic auto production volumes, the company believes these certification issues had a significant negative impact on segment sales.

Segment profit, segment profit margin

- ▶ In cumulative Q3 (April–December), segment profit decreased 46.0% YoY to JPY227mn. As a result, the segment profit margin declined 10.8pp to 11.8%.
- ▶ Cumulative Q3 segment profit nearly halved, primarily due to the decline in domestic automobile production caused by the certification misconduct at automakers. While cumulative Q3 sales increased YoY, the company indicated that excluding the contribution from newly consolidated Terada Kosakusho, sales would have declined slightly YoY. According to the company, sales in the segment's core automotive-related business were particularly weak due to the drop in domestic production, further amplifying the negative impact on profit. Additionally, the consolidation of Terada Kosakusho had little positive impact on profit, as goodwill amortization and other related expenses offset most of its contribution.

- ▶ The company responded to the reduction in orders caused by fraudulent certification testing at automakers (which led to the suspension of production for certain vehicle models) by implementing cost-cutting measures, such as reviewing personnel allocation, improving productivity, and adjusting prices. However, these efforts were insufficient to fully absorb the impact of declining sales. The company had introduced new production equipment at a factory established in FY03/22. While smaller in scale compared to those in the Thermal Spraying segment, the factory has steadily contributed to productivity improvements. Although the impact of reduced orders in cumulative Q3 could not be fully mitigated, the company believes that performance will recover once the certification issues are resolved and orders rebound.

Overseas Subsidiaries (15.6% sales share)

- Sales: JPY6.2bn (+17.7% YoY)
- Segment profit: JPY2.0bn (+44.5% YoY)
 - Segment profit margin: 32.0% (+6.0pp YoY)
- Orders: JPY7.0bn (+28.2% YoY)
- Order backlog: JPY2.6bn (+23.6% YoY)

Orders

- ▶ Orders in the Overseas Subsidiaries segment for cumulative Q3 (April–December) increased 28.2% YoY to JPY7.0bn, marking a record high for cumulative Q3. This growth was primarily driven by a recovery in the semiconductor markets in overseas regions, including China and Taiwan, alongside the company's active sales efforts, which led to increased orders, including from new customers. Additionally, foreign exchange effects (conversion gains due to yen depreciation) also contributed to the increase in orders. Due to differences in fiscal year-end, the company's cumulative Q3 results reflect orders received during January–September for overseas subsidiaries.

Sales

- ▶ This segment includes two subsidiaries in China, one in Taiwan, and one in the US, but essentially consists of subsidiaries in China and Taiwan, as the US business is not fully operational. As China and Taiwan have a December fiscal year-end, the company's cumulative Q3 (April–December) results include the financial results of these overseas subsidiaries for January–September. In cumulative Q3 (April–December), sales in the Overseas Subsidiaries segment increased by 17.7% YoY to JPY6.2bn, marking a record high for cumulative Q3. This growth was driven by increased orders following the recovery of the global semiconductor market, as the market's adjustment phase came to an end.
- ▶ Additionally, foreign exchange effects (a boost from conversion gains due to yen depreciation) contributed to the strong performance, making this segment the highest in sales growth among all segments, surpassing the 16.8% YoY increase in the Thermal Spraying segment. According to the company, even excluding the impact of foreign exchange gains, cumulative Q3 sales still recorded double-digit YoY growth (over 10%).

Segment profit, segment profit margin

- ▶ In cumulative Q3 (April–December), segment profit increased 44.5% YoY to JPY2.0bn, marking a record high for cumulative Q3, as was the case for sales. This growth was driven by an improved sales mix, including increased semiconductor/FPD-related re-coating, as well as contributions from foreign exchange effects and growth in non-semiconductor-related sales. As a result, the segment profit margin improved 6.0pp to 32.0%, maintaining profitability 8.9pp higher than that of the Thermal Spraying segment (23.1%).

Other Surface Treatments (5.3% sales share)

- Sales: JPY2.1bn (-7.1% YoY)
- Segment profit: JPY325mn (-20.7% YoY)
 - Segment profit margin: 15.3% (-2.6pp YoY)
- Orders: JPY2.2bn (-2.6% YoY)
- Order backlog: JPY446mn (+26.3% YoY)

Order backlog

- ▶ Orders in the Other Surface Treatments segment for cumulative Q3 (April–December) decreased 2.6% YoY to JPY2.2bn. The decline was primarily due to inventory adjustments by customers in the core agricultural equipment parts business. However, as orders recovered in Q3 (October–December), the rate of the cumulative Q3 decline narrowed from the 8.1% drop in 1H (April–September).

Sales, segment profit, segment profit margin

- ▶ Sales in the Other Surface Treatments segment for cumulative Q3 (April–December) declined 7.1% YoY to JPY2.1bn. Segment profit also fell 20.7% YoY to JPY325mn, as the company was unable to fully absorb the impact of lower sales. As a result, the segment profit margin declined 2.6pp to 15.3%.
- ▶ The YoY decline in sales was primarily attributed to reduced orders for the Toyota Diffusion (TD) process applied to agricultural equipment parts, which had grown significantly in FY03/24. The TD process is a surface modification method that forms a functional film by immersing the target workpiece in a high-temperature molten salt bath and allowing vanadium and other carbides to diffusely permeate the surface of the base material. This drop in orders was largely driven by customer inventory adjustments. The company applies surface treatments (TD process) to agricultural equipment parts and supplies these to Japanese agricultural equipment makers, who then sell their products to the US and other markets. The company believes that it benefitted from the expansion of the agricultural industry in North America during FY03/24. Despite the decrease in sales and profit in cumulative Q3 FY03/25, the company remains optimistic about future growth in the agricultural equipment parts business.

Q3 (October–December, three months) results

TOCALO reported the following results for Q3 FY03/25 (October–December 2024).

- Sales: JPY14.0bn (+18.7% YoY)
- Operating profit: JPY3.1bn (+47.3% YoY)
- Recurring profit: JPY3.3bn (+52.0% YoY)
 - RPM: 23.2% (+5.1pp YoY)
- Net income attributable to owners of the parent: JPY2.2bn (+71.8% YoY)
- Orders: JPY14.6bn (+22.9% YoY)

Overview

- ▶ Consolidated sales for Q3 (October–December) increased 18.7% YoY to JPY14.0bn, marking the fourth consecutive quarter of YoY sales growth. Additionally, sales reached a record high for any quarter, surpassing JPY14.0bn for the first time.
- ▶ By business segment, the Thermal Spraying segment (parent), which accounts for approximately 73% of consolidated sales, saw a 19.5% YoY increase, driving overall consolidated sales growth. This was primarily due to a recovery in orders (+34.8% YoY) and sales (+36.7% YoY) in the segment's core semiconductor and FPD-related operations. Among other segments, sales in the Overseas Subsidiaries segment (mainly China and Taiwan) grew 25.2% YoY, while the Domestic Subsidiary segment increased 15.7% YoY. Meanwhile, sales in the Other Surface Treatments segment declined 3.8% YoY.
- ▶ Consolidated recurring profit for Q3 (October–December) increased 52.0% YoY to JPY3.3bn, marking the fourth consecutive quarter of YoY profit growth, in line with sales. Additionally, recurring profit reached a record high for any quarter.
- ▶ By business segment, profit in the Thermal Spraying segment increased 64.7% YoY, while profit in the Overseas Subsidiaries segment grew 58.9% YoY. In contrast, profit in the Domestic Subsidiary segment declined 48.5% YoY, and profit in the Other Surface Treatments segment fell 10.0% YoY. The company's segment profit is linked to recurring profit in the income statement. The significant profit growth in the core Thermal Spraying segment, driven by the recovery in high-margin semiconductor and FPD-related sales, was sufficient to offset the weaker performance in segments such as the Domestic Subsidiary segment. Additionally, positive factors such as sales growth and a shift in the sales mix toward higher-margin semiconductor and FPD-related products contributed to the results. As a result, RPM improved by 5.1pp YoY to 23.2%.

Order trend

- ▶ In Q3 (October–December), consolidated orders increased 22.9% YoY to JPY14.6bn, marking the fourth consecutive quarter of YoY growth and achieving a record high for any quarter. The primary driver was a 34.8% YoY recovery in orders for semiconductors and FPDs, the core business of the Thermal Spraying segment, which also set a new quarterly record. This recovery followed the completion of inventory adjustments by key customers. As a result, orders in the Thermal Spraying segment rose 18.6% YoY to JPY10.4bn.
- ▶ Outside the Thermal Spraying segment, orders in the Overseas Subsidiaries segment increased 52.3% YoY, driven by a recovery in the semiconductor market. Orders in the Domestic Subsidiary segment rose 21.6% YoY, while orders in the Other Surface Treatments segment (e.g., agricultural machinery) grew 9.2% YoY. The breakdown of Q3 (October–December) orders, which totaled JPY14.6bn, is as follows.
 - Thermal Spraying segment (parent): JPY10.4bn (+18.6% YoY)
 - Semiconductor/FPD-related: JPY6.7bn (+34.8% YoY)
 - Industrial machinery-related: JPY1.4bn (-3.6% YoY)
 - Steelmaking-related: JPY1.1bn (+14.4% YoY)
 - Other businesses: JPY1.3bn (-12.9% YoY)
 - Domestic Subsidiary segment: JPY776m (+21.6% YoY)
 - Overseas Subsidiaries segment: JPY2.6bn (+52.3% YoY)
 - Other Surface Treatments segment: JPY799m (+9.2% YoY)

Results by segment (October–December, three months)

- ▶ Below is a breakdown of individual segment performances. The sales shares provided for each segment represent percentages of the company's consolidated Q3 (October–December) FY03/25 sales of JPY14.0bn. Consolidated sales include royalty income (which is low and has minimal impact on overall sales performance); accordingly, these segment sales shares do not add up to 100% of consolidated sales. Segment profits do not reflect impact from consolidation adjustments. When consolidated adjustments are reflected, total profit generated through all segments directly corresponds to the company's consolidated recurring profit.

Thermal Spraying (handled by TOCALO, the parent company; 72.7% sales share)

- Sales: JPY10.2bn (+19.5% YoY)
- Segment profit: JPY2.5bn (+64.7% YoY)
 - Segment profit margin: 24.6% (+6.8pp YoY)
- Orders: JPY10.4bn (+18.6% YoY)

Overview

- ▶ The Thermal Spraying segment (parent), the company's largest segment, accounted for 72.7% of consolidated sales in Q3 (October–December). Sales in this segment increased 19.5% YoY to JPY10.2bn, marking the third consecutive quarter of YoY growth and achieving a record high for any quarter. This was also the first time quarterly sales in the segment exceeded JPY10.0bn. By business category, sales in the core semiconductor and FPD-related operations expanded 36.7% YoY to JPY6.5bn. Steelmaking-related sales increased 11.4% YoY to JPY910m, while industrial machinery-related sales declined 7.2% YoY to JPY1.4bn. Sales in other businesses fell 5.1% YoY to JPY1.4bn. The breakdown of the JPY10.2bn in Thermal Spraying segment sales is as follows.
 - Semiconductors and FPDs: JPY6.5bn (+36.7% YoY)
 - Of which, semiconductors: JPY6.0bn (+36.6% YoY)
 - Of which, FPDs: JPY501m (+38.4% YoY)
 - Industrial machinery-related: JPY1.4bn (-7.2% YoY)
 - Steelmaking-related: JPY910m (+11.4% YoY)
 - Other businesses: JPY1.4bn (-5.1% YoY)
- ▶ Segment profit for Q3 (October–December) increased 64.7% YoY to JPY2.5bn, primarily driven by higher sales and an improved sales mix. This marked the third consecutive quarter of YoY profit growth and set a new record high for any quarter, as did sales. The segment profit margin also improved 6.8pp YoY to 24.6%. While rising personnel costs and

- ▶ expenses related to production capacity expansion dampened profit in Q3, the company believes higher sales and an improved sales mix fully offset these cost increases.

Domestic Subsidiary (5.2% sales share)

- Sales: JPY728mn (+15.7% YoY)
- Segment profit: JPY70mn (-48.5% YoY)
 - Segment profit margin: 9.6% (-12.0pp YoY)
- Orders: JPY776mn (+21.6% YoY)

Overview

- ▶ Sales in Q3 (October–December) increased 15.7% YoY to JPY728mn, marking the first YoY sales growth in three quarters. However, this increase was primarily driven by the consolidation of Terada Kosakusho, which became a subsidiary in August 2024 and began contributing to sales in Q3. The company indicated that excluding this impact, sales from existing businesses declined YoY.
- ▶ The weak performance of existing businesses was primarily due to a decline in orders resulting from lower domestic automobile production. While the company made some recovery in non-automotive sectors, it was not enough to fully offset the decline in automotive-related orders. The decrease in domestic production (down 7.1% YoY in October–November, with December data yet to be released) was largely due to certification frauds at multiple automakers, which led to suspended production of affected vehicle models. As sales in the Domestic Subsidiary segment's automotive-related business are highly correlated with domestic auto production volumes, the impact of the domestic production decline was significant.
- ▶ The impact of the underlying sales decline (excluding the contribution from the newly consolidated subsidiary) could not be fully offset, resulting in a 48.5% YoY decrease in segment profit for the Domestic Subsidiary segment in Q3 (October–December) to JPY70mn. This marked the fourth consecutive quarter of YoY profit decline. The segment profit margin also deteriorated 12.0pp YoY to 9.6%. Q3 segment profit of JPY70mn was the second lowest for a Q3 on record, following the JPY52mn recorded in July–September 2020, which was severely impacted by the COVID-19 pandemic (Note: April–June 2020 profit was also JPY70mn). However, the company expects the Domestic Subsidiary segment to recover once automaker misconduct issues are resolved and domestic automobile production volumes rebound.

Overseas Subsidiaries (16.7% sales share)

- Sales: JPY2.3bn (+25.2% YoY)
- Segment profit: JPY780mn (+58.9% YoY)
 - Segment profit margin: 33.3% (+7.0pp YoY)
- Orders: JPY2.5bn (+29.0% YoY)

Overview

- ▶ This segment includes two subsidiaries in China, one in Taiwan, and one in the US, but effectively consists of the three subsidiaries in China and Taiwan, as the US business is not yet fully operational. Additionally, because China and Taiwan have a December fiscal year-end, the company's Q3 (October–December) financial results include the performance of these subsidiaries for July–September. In Q3 (October–December), sales from the Overseas Subsidiaries segment increased 25.2% YoY to JPY2.3bn, driven by the stabilization of the global semiconductor market and the positive impact of foreign exchange rates. This marked the 16th consecutive quarter of YoY sales growth and set a record high for any quarter.
- ▶ In Q3 (October–December), segment profit increased 58.9% YoY to JPY780mn, marking the sixth consecutive quarter of YoY profit growth. As with sales, segment profit reached a record high for any quarter. This growth was driven by an improved sales mix, including increased semiconductor/FPD-related re-coating, as well as contributions from foreign exchange effects and growth in non-semiconductor-related sales. As a result, the segment profit margin improved 7.0pp YoY to 33.3%.

Other Surface Treatments (5.3% sales share)

- Sales: JPY742mn (-3.8% YoY)
- Segment profit: JPY135mn (-10.0% YoY)
 - Segment profit margin: 18.2% (-1.3pp YoY)
- Orders: JPY799mn (+9.2% YoY)

Overview

- ▶ Sales decreased 3.8% YoY to JPY742mn, marking the third consecutive quarter of YoY decline. Segment profit also fell 10.0% YoY to JPY135mn, as the impact of lower sales could not be fully offset, resulting in the third consecutive quarter of YoY profit decline. Consequently, the segment profit margin deteriorated 1.3pp YoY to 18.2%.
- ▶ The three consecutive quarters of YoY sales and profit declines were primarily due to reduced orders for the Toyota Diffusion (TD) process applied to agricultural equipment parts, as customers adjusted their inventories. The TD process is a surface modification method that forms a functional film by immersing the target workpiece in a high-temperature molten salt bath and allowing vanadium and other carbides to diffusely permeate the surface of the base material.

Other information

History

Date	Description
June 1973	Established as Kizai Service Co., Ltd. in Yokohama, Kanagawa, with a capital of JPY10mn; started marketing industrial chemicals and chemical machinery equipment, offering related technical services
July 2000	Stopped operation, and became a dormant company
January 2001	Became wholly owned by JAFECO Buyout Number One Investment Limited Partnership operated by JAFECO Co., Ltd.; renamed to JAFECO SIG Co., Ltd.; changed the registered location of head office to Chiyoda, Tokyo; started tender offer of shares in TOCALO Co., Ltd. as a part of management buyout by the management of the substantial surviving company (TOCALO Co., Ltd., a OTC company)
March 2001	Completed tender offer of TOCALO Co., Ltd., making it a 97.9% subsidiary of JAFECO SIG.; changed registered location of the head office to Kobe, Hyogo
August 2001	Merged with TOCALO Co., Ltd. in an absorption-type merger, and renamed the new company as TOCALO Co., Ltd.
December 2003	Listed shares on the Second Section of the Tokyo Stock Exchange
September 2004	Acquired all shares in Japan Coating Center Co., Ltd. (now a consolidated subsidiary) and made it a subsidiary
March 2005	Listed shares on the First Section of the Tokyo Stock Exchange

Former TOCALO Co., Ltd.

Date	Description
July 1951	Toyo Calorizing Industry Co., Ltd. established in Kobe, Hyogo, with a capital of JPY1mn; established Kobe Plant and started marketing calorize processing
March 1958	Started research on metal thermal spraying
November 1959	Established Tokyo Plant in Funabashi, Chiba
October 1960	Started full-scale operation of metal thermal spraying
September 1981	Changed name to TOCALO Co., Ltd.
February 1996	New head office building completed
October 1996	Registered shares as an Over-The-Counter stock at Japan Securities Dealers Association
August 2001	Absorbed by JAFECO SIG Co., Ltd. in an absorption-type merger and delisted the OTC shares

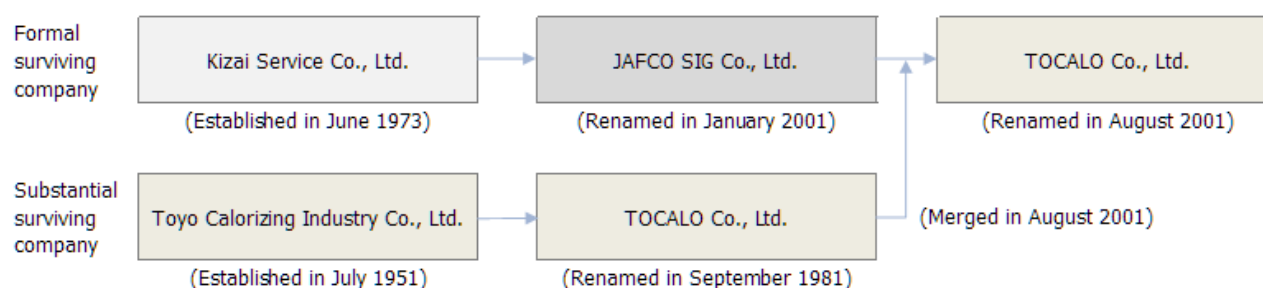
Source: Shared Research based on company data

MBO history

TOCALO Co., Ltd. (the formal surviving company) was founded in June 1973 as Kizai Service Co., Ltd., a company that sold chemical machinery and provided associated technical services. Kizai Service suspended its business activities in July 2000. In January 2001, JAFECO Buyout No. 1 Investment Limited Partnership (operated by JAFECO Co., Ltd. [now, JAFECO Group Co., Ltd.; TSE Prime: 8595]) acquired 100% of the outstanding shares in Kizai Service and changed its name to JAFECO SIG Co., Ltd. Between late January and early March of 2001, JAFECO SIG made a tender offer to the former TOCALO Co., Ltd. (the substantial surviving company), and acquired 97.9% of its outstanding shares. In August 2001, JAFECO SIG absorbed this new subsidiary and renamed itself TOCALO Co., Ltd.

The tender offer and the absorption-type merger were part of an MBO the management team of the former TOCALO Co., Ltd. conducted in a bid to maintain its independence from a potential takeover by an overseas heavy machinery manufacturer (Sulzer Metco). The shares of former TOCALO Co., Ltd. were mainly acquired from the then parent, Nittetsu Shoji Co., Ltd. (currently, Nippon Steel Trading Corporation [TSE Prime: 9810]).

MBO overview



Source: Shared Research based on company data

Corporate governance and top management

Top management

Kazuya Kobayashi, Representative Director, President and CEO (born December 24, 1964)

April 1989	Joined the company
April 2014	Plant manager, Kitakyushu Plant
April 2017	General manager, Quality Control Department
April 2018	Plant manager, Akashi Plant
June 2019	Director, Plant manager, Kitakyushu Plant
April 2020	Director, Deputy general manager, Manufacturing Department
June 2021	Managing executive officer, General manager, Manufacturing Department
June 2023	Representative Director, President and CEO (current)

Source: Shared Research based on company data

Takayuki Yoshizumi, Representative Director, Senior executive officer (born March 25, 1961)

April 1984	Joined the company
April 2006	Sales manager, Tokyo Plant
April 2013	Plant manager, Nagoya Plant
April 2018	Plant manager, Tokyo Plant
June 2019	Director, Plant manager of Tokyo Plant
April 2020	Director, Deputy general manager, Sales Department
June 2021	Managing executive officer, General manager, Sales Department
July 2021	TOCALO USA, Inc. Chairman of the Board
June 2023	Director, Managing executive officer, Sales Department
April 2025	Director, Managing executive officer, TOCALO & HAN TAI TW Co., Ltd.(current)
June 2025	Representative director, Senior executive officer(current)

Corporate governance

Form of organization and capital structure	
Form of organization	Company with Audit & Supervisory Board
Foreign shareholding	30%
Controlling shareholder	None
Directors and Audit & Supervisory Board members	
Number of directors under Articles of Incorporation	15
Number of directors	9
Directors' term of office under Articles of Incorporation	2 years
Chairperson of the Board of Directors	President
Number of outside directors	4
Number of independent outside directors	4
Number of members of Audit & Supervisory Board	4
Number of outside members of Audit & Supervisory Board	2
Other	
Participation in electronic voting platform	Yes
Providing convocation notice in English	Yes
Implementation of measures regarding director incentives	Performance-linked compensation
Eligible for stock option	None
Disclosure of directors' compensation	None
Policy to determine amount and calculation method of remuneration	Yes
Corporate takeover defenses	None

Source: Shared Research based on company data

Dividend policy

TOCALO considers returning profit to shareholders an important management policy. The company intends to actively improve shareholder returns while placing an emphasis on ensuring continuously stable dividends grounded in distribution that is backed by business results. The company's policy until FY03/23 was to pay a stable dividend, aiming for dividends equivalent to about one third of net income (net income attributable to owners of the parent). However, in order to further enhance the return of profits to shareholders, it changed its policy to aim for a dividend payout ratio of around 50% from FY03/24. In FY03/25, the company expects to pay dividends of JPY63.0 per share (versus JPY53 per share in FY03/24), including an interim dividend of JPY30.0 per share (versus JPY25.0 per share in FY03/24), for a consolidated payout ratio of 49.9%.

	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25
(JPY)	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.	Cons.
Dividend per share	18.8	21.3	26.3	30.0	25.0	35.0	45.0	50.0	53.0	68.0
Payout ratio	37.8%	31.7%	33.0%	33.5%	34.5%	38.9%	39.6%	41.4%	50.2%	50.2%
DOE	4.2%	4.4%	4.9%	5.1%	3.9%	5.0%	5.9%	5.9%	5.8%	6.9%
ROE	11.2%	13.9%	14.9%	15.2%	11.3%	12.9%	14.8%	14.3%	11.6%	13.9%

Source: Shared Research based on company data

Major shareholders

Top shareholders	Shares held(000 shares)	Shareholding ratio
The Master Trust Bank of Japan, Ltd.	10,831	18.22%
Custody Bank of Japan, Ltd.	6,447	10.84%
BBH FOR FIDELITY LOW-PRICED STOCK FUND (PRINCIPAL ALL SECTOR SUBPORTFOLIO) (Standing proxy: MUFG Bank, Ltd.)	2,736	4.60%
TOCALO Employees Shareholding Association	2,563	4.31%
NORTHERN TRUST CO.(AVFC) RE FIDELITY FUNDS (Standing proxy: The Hongkong and Shanghai Banking Corporation, Ltd. Tokyo Branch)	2,088	3.51%
GOVERNMENT OF NORWAY (Standing Proxy: Citibank, N.A Tokyo Branch)	1,447	2.43%
STATE STREET BANK AND TRUST COMPANY 505001 (Standing proxy: Mizuho Bank, Ltd. Settlement Sales Department)	1,406	2.37%
Kumiko Saijo	1,036	1.74%
STATE STREET BANK WEST CLIENT - TREATY 505234 (Standing proxy: Mizuho Bank, Ltd. Settlement Sales Department)	916	1.54%
KIA FUND F149 (Standing proxy: Citibank Japan, Ltd., N.A Tokyo Branch)	778	1.31%
Total	30,251	50.88%

Source: Shared Research based on company data

As of end-March 2025

Employees

Number of employees, other (JPYmn)	FY03/16	FY03/17	FY03/18	FY03/19	FY03/20	FY03/21	FY03/22	FY03/23	FY03/24	FY03/25
	Act.	Act.	Act.	Act.	Act.	Act.	Act.	Act.	Act.	Act.
No. of employees (ex. temp. employees)	857	898	955	1,021	1,060	1,121	1,176	1,300	1,389	1,516
Thermal Spraying (Parent)	430	449	504	538	553	569	611	683	751	790
Domestic Subsidiary (PVD process)	100	112	113	120	125	142	156	163	176	204
Other	263	265	275	292	309	328	327	376	324	421
Adjustments	64	72	63	71	73	82	82	78	99	101
Avg. number of temporary employees	239	245	236	251	263	253	265	164	148	132
Thermal Spraying (Parent)	117	111	108	114	128	139	147	127	114	99
Domestic Subsidiary (PVD process)	65	71	70	67	62	43	34	26	26	25
Other	50	56	52	60	61	60	71	4	0	2
Adjustments	7	7	6	10	12	11	13	7	2	6
Segment sales per employee	26.2	25.3	28.6	31.1	28.6	28.4	30.4	32.9	30.4	32.6
Thermal Spraying (Parent)	40.6	40.3	43.3	47.3	42.3	43.4	44.4	45.8	40.1	45.5
Domestic Subsidiary (PVD process)	13.2	13.0	14.5	15.2	14.7	13.2	14.8	15.2	15.1	13.6
Other	15.6	14.3	17.4	19.2	20.0	17.9	21.0	25.0	31.9	29.1
Segment profit per employee	4.6	5.1	6.2	6.3	5.1	6.5	7.3	7.5	6.3	7.5
Thermal Spraying (Parent)	8.3	8.7	9.8	10.0	7.7	9.5	10.7	10.3	7.3	10.0
Domestic Subsidiary (PVD process)	1.6	2.2	2.7	2.9	2.6	2.2	2.5	1.9	2.4	1.5
Other	1.9	1.9	3.4	3.5	3.6	3.7	5.0	5.6	7.5	8.9
No. of employees (parent)	534	560	605	648	667	695	752	811	889	943
Avg. number of temporary employees	137	131	123	132	148	158	165	138	122	107
Average age	38.7	38.7	38.3	38.1	38.3	38.4	38.2	39.2	39.0	39.3
Average years of service	13.4	13.4	12.7	12.5	12.3	13.1	13.2	12.7	12.5	12.8
Average annual salary (JPY'000)	7,068	6,992	7,104	7,264	7,389	7,164	7,499	7,493	7,550	7,318

Source: Shared Research based on company data

Note: Sales and operating profit per employee figures are reference values calculated based on the combined total of full-time employees and the average number of temporary workers (not including temporary workers received on dispatch)

News and topics

TOCALO plans to establish new subsidiary in Arizona, US

2025-08-25

On August 22, 2025, TOCALO Co., Ltd. announced plans to establish a new subsidiary in Arizona, the US, through its wholly owned US subsidiary, TOCALO USA, Inc. (TCA), based in California. The new company will strengthen the service framework for key clients involved in developing a domestic supply chain for surface treatment of semiconductor manufacturing equipment parts, as part of TOCALO's strategy to expand its business in the US market.

The new subsidiary is scheduled to be established in September 2025, with operations expected to begin around 2027 (exact timing yet to be determined). Capital will be a little over JPY100mn. As it will be a wholly owned second-tier subsidiary of TOCALO, it is expected to become a consolidated subsidiary upon establishment. According to the company, the impact on FY03/26 earnings will be minor, while the potential impact from FY03/27 onward is currently under review.

TOCALO selected as a constituent of FTSE Blossom Japan Index

2025-07-08

- ▶ On July 8, 2025, TOCALO Co., Ltd. announced that it had been selected for the first time as a constituent of both the FTSE Blossom Japan Index and the FTSE Blossom Japan Sector Relative Index—two key indices for ESG (Environmental, Social, and Governance) investment. The company stated it intends to use this opportunity to further strengthen its ESG initiatives.
- ▶ The FTSE Blossom Japan Index and the FTSE Blossom Japan Sector Relative Index, both developed by FTSE Russell, are designed to evaluate Japanese companies with strong ESG practices. Companies selected for inclusion may become candidates for ESG-focused investment funds and financial products. The FTSE Blossom Japan Sector Relative Index, in particular, includes companies that have received favorable TPI Management Quality Scores—an assessment of how seriously a company addresses climate change and integrates it into its management—thereby supporting the transition to a low-carbon economy.

TOCALO announces construction of new plant building

2025-05-19

On May 19, 2025, TOCALO Co., Ltd. announced it will construct a new plant building. The planned construction site is in Funabashi, Chiba Prefecture, where the company's main Tokyo Plant is currently located. (Note: the new site is also in Funabashi but not adjacent to the existing plant.)

The company will build a new plant to expand its production capacity in response to growing demand from major customers amid the recent semiconductor market expansion. The facility will manufacture components for semiconductor production equipment and feature multiple innovative systems along with environmental protection measures. Separately, the company plans to further improve the production efficiency of its existing Tokyo Plant. The details of the new plant are as follows.

- Location: Funabashi, Chiba Prefecture
- Building footprint: 3,734sqm
- Total floor area: 14,201sqm
- Construction cost: Approx. JPY6.7bn (excluding production equipment)
- Construction start: Scheduled for August 2025
- Start of operations: Scheduled for late 2027
- Purpose: To strengthen surface treatment processing capacity for semiconductor production equipment components

TOCALO announces completion of new plant

2025-05-13

On May 13, 2025, TOCALO Co., Ltd. announced the completion of its new Kobe No. 2 Plant, whose construction began in May 2024, and held a completion ceremony. The new facility is dedicated to thin-film coating and was established to enhance the company's ability to meet growing demand in the semiconductor and medical sectors. TOCALO aims to further reinforce its production framework by improving productivity and expanding manufacturing capacity. An overview of the plant is provided below.

- Location: Kobe Techno Logistic Park, Kobe, Hyogo Prefecture
- Building footprint: Approx. 1,270sqm
- Total floor area: Approx. 3,120sqm
- Construction cost: Approx. JPY1.3bn (excluding production equipment)
- Construction start: May 2024
- Purpose: To handle new orders, increase production, and improve manufacturing efficiency in the semiconductor and medical sectors

TOCALO announces dividend payment from retained earnings

2025-05-09

On May 9, 2025, TOCALO Co., Ltd. announced a dividend payment from retained earnings.

(Click [here](#) for the full press release.)

The company has decided to pay a year-end dividend of JPY38.0 per share for FY03/25 (previous forecast: JPY35.0; FY03/24: JPY28.0). As a result, the annual dividend will total JPY68.0 per share (previous forecast: JPY65.0; FY03/24: JPY53.0).

The company explained the increase in its annual dividend (effectively the year-end dividend) from the previous forecast reflects stronger-than-expected earnings for FY03/25 and aligns with its dividend policy, which targets a consolidated payout ratio of around 50%, a dividend on equity (DOE) of at least 5%, and stable shareholder returns.

About Shared Research Inc.

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Contact Details

 2-6-10 Kanda-Sarugakucho Chiyoda-ku Tokyo, Japan

 +81 (0)3 5834-8787

 info@sharedresearch.jp

 <https://sharedresearch.jp>

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