

Kuroda Precision Industries Ltd.

(7726, Tokyo Stock Exchange Second Section)

Hidden Champion That Supports Manufacturing

Analyst: Yuya Okamura

Company Outline

Head Office Location	Kawasaki City, Kanagawa Prefecture
President	Hiroshi Kuroda
Established	April 1949
Capital	1,892 million yen
Listed Date	October 1961
URL	https://www.kuroda-precision.co.jp/
Industry Sector	Machinery

Stock Data (Closing Price as of June 1)

Stock Price	706 yen
Outstanding Shares	5,648,704 shares
Trading Unit	100 shares
Market Capitalization	3.98 billion yen
Forward PER	22.0 times
Forward EPS	30.14 yen
Actual PBR	0.5 times

■ Top Niche Company Highly Trusted by Global Companies

Kuroda Precision Industries (hereinafter, referred to as "KURODA") was founded in 1925 by Saburo Kuroda, grandfather of current President Hiroshi Kuroda. As the first manufacturer in Japan specializing in gauges, the company built the foundation of mass production in the industrial world of Japan. Since its establishment, the company has consistently supported the advancement of industry through the development of precision technologies. In fact, KURODA's technologies are being used in many products. Their business consists of 3 segments, namely, the Motion Controls systems business, the Press Tool & Die systems business, and the Machine Tool & Measurement systems business.

■ Key Businesses Riding the Wave of Growth of Semiconductors and EVs

Ball screws in KURODA's Motion Controls systems business are used in many types of semiconductor manufacturing equipment. It is highly possible that the growth of semiconductors due to the introduction of 5G and IoT will enable ball screws to ride the wave of growth.

For KURODA's Press Tool & Die systems business that is deployed with proprietary FASTEC® system technology as an advantageous feature, the demand for use in EVs is growing. KURODA has received many project orders mainly for Glue FASTEC® motor cores for drivetrains from Japanese and overseas automobile manufacturers.

■ Efforts to Improve Profitability, Aiming for a Stable Operating Profit of One Billion Yen

The company formulated a Medium-term Management Plan in July 2018 and set 20 billion yen in net sales, 1.3 billion yen operating profit, and 7.9% ROE as numerical goals for the fiscal year ending March 2021 which is final fiscal year of the plan. This is the first time KURODA has released specific numerical targets in its Medium-term Management Plan as far as records show. KURODA is focused on the improvement of profitability and has set a stable one billion yen operating profit as a target. The company exceeded the target in the fiscal year ended March 2019 which is the first year of their Medium-term Management Plan. However, the company failed to achieve the target in the fiscal year ended March 2020.

■ IR Activity Has Started to Breakaway from a Stock with Hidden Vale

KURODA's stock is left at an extremely underpriced level in the stock market. The company's PBR of 0.4 to 0.5 times is incredibly low even in comparison with other companies in the same industry. A factor behind the discount stock price is summed up in a single phrase of low liquidity. The good news is KURODA has started to improve its liquidity which is a challenge. A change in attitude for the company's 100-year anniversary since foundation in 2025 is expected to bring successful results. Current market capitalization seems underestimated even if cash and market value of shares owned by the company is considered. Talented human capital and a customer base comprised of global companies are also highly valuable assets for KURODA.

Company Profile

Kuroda Precision Industries was founded in 1925 by Saburo Kuroda who is the grandfather of current President Hiroshi Kuroda. As the first manufacturer specializing in gauges in Japan, the company built the foundation of mass production in the industrial world of Japan. Gauges are key instruments for dimension standards and can be said to be the starting point of precise manufacturing in Japan. The company was listed on the Tokyo Stock Exchange Second Section in October 1961.

● Reliable Supplier of Global Companies

KURODA is a behind-the-scenes supporter of the advancement of industry through precision technologies.

End users may not know about KURODA, but KURODA's technologies are used in many products.



Precision according to KURODA is at the level of a **single micron**.

One micron is the equivalent of one five thousandth of one grain of rice. Stable provision of machining technology at this level is rare even around the world.

What is interesting is finishing at this level cannot be conducted with machines. **Final adjustments are made by humans.**

That is why the company values **human capital** the most.

● Solid and Steady Advancement Toward a Top Global Niche Company



President Hiroshi Kuroda

President Hiroshi Kuroda was appointed Director of GE Capital Leasing after working at Nippon Steel Corporation and General Electric Japan. In June 2005, he joined KURODA as a Director and was appointed President in June 2009.

After joining the company, President Kuroda promoted a structural reform of business.

In 2006, the company sold its pneumatic equipment business which was the core of the sales at that time to an American company.

In 2010, 5 business segments were reduced to 3 business segments. In 2013, the company withdrew from its universal tool holding system business which was a key business in machine tool systems. KURODA then sold the land of its head office and moved the head office to the Kawasaki Tech Center.

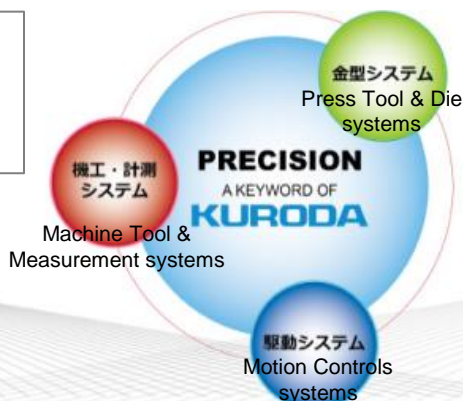
Now that the major structural streamlining including disposal of unprofitable businesses has been achieved, the company is steadily heading toward an **improvement in profitability**. President Kuroda aims to **establish a position as a global brand in a small but niche market**. Caring for high quality in close proximity to customers and taking focused and prompt actions...

With an awareness as a player supporting global industry that is able to showcase such strength, President Kuroda looks ahead to the future looks ahead to the future solidly.

3 Business Segments and Future Prospects (1)

Business is composed of 3 segments.

- (1) Motion Controls systems
- (2) Press Tool & Die systems
- (3) Machine Tool & Measurement systems



Ball Screws



Kazusa Akademia
Plant

(1) <Motion Controls Systems> 46% of Net Sales of Fiscal Year Ended March 2019

Profile

In the Motion Controls system business, KURODA mainly manufactures **ball screws** with technology cultivated through screw gauge manufacturing.

Ball screws are essential components for realizing machines that operate accurately and are used for precision positioning.

KURODA's ball screws are used in many types of semiconductor manufacturing equipment, machine tools, robots, and medical analysis equipment, and so on.

Medical-use robots are a recent adoption example of ball screws.

These are surgical operation support robots which are increasingly being introduced in Japan also. KURODA's **ball screws are used in remote surgical operation robots in the U.S.** which leads this field.

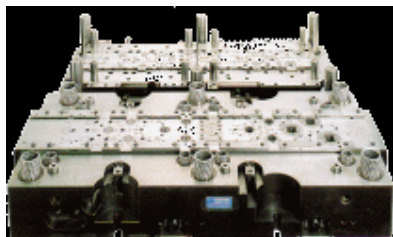
Future Prospects

Semiconductor manufacturing equipment where ball screws are often used has a high potential for growth in the mid-to-long term which is under the spotlight. This is a result of the fact that the appearance of 5G (fifth-generation mobile communication system) and IoT, connected technology use in automobiles, and autonomous driving has made the semiconductor market a growing market. **The growth of semiconductor manufacturing equipment is highly likely to result in the growth of ball screws.**

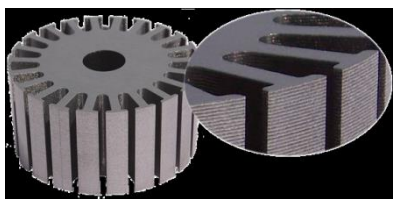
KURODA has already taken action to increase production capacity and expanded its Kazusa Akademia Plant.

While significantly increasing productivity with the introduction of automated lines and new engineering methods, the company improved its production system by 75% compared to fiscal year 2016.

3 Business Segments and Future Prospects (2)



FASTEC System



Glue FASTEC
Precision Metal Press Product



Nagano Plant



Surface Grinding
Machines



Hydraulic Tool

(2) <Press Tool & Die Systems> 26% of Net Sales of Fiscal Year Ended March 2019

Profile

All manufacturers endlessly continue to pursue motors with higher efficiency and lower noise. In the motor market where products continue to evolve in terms of function, KURODA's precision technology has made a great contribution.

The technology is called **FASTEC® system**. This proprietary system of KURODA enables **cores made of stacked thin sheets** (0.5 millimeter or thinner electrical steel sheets) to be created within the stamping process in a die. This technology enables highly precise and efficient manufacturing of motor cores that meet a wide variety of needs such as motor cores for on-board use and home appliances.

In 2014, KURODA **established a partnership with Euro Group S.p.A. (Italy) which is a world-class motor core manufacturer**. This partnership allowed KURODA to acquire a global supply system utilizing the worldwide manufacturing and sales network of Euro Group.

Future Prospects

Large demand growth is definitely expected for **use in EVs (electric vehicles) (= precision motor core which is a key component of EVs)**.

Motor cores for drivetrains manufactured by **Glue FASTEC®** (in-die gluing) dies are receiving attention in particular for motor cores for EVs. **Recently, KURODA has received numerous project orders** from automobile manufacturers both in Japan and overseas. Due to the increase in demand, the company increased the production capacity of its Nagano Plant by investing in die manufacturing equipment.

(3) <Machine Tool & Measurement Systems> 28% of Net Sales of Fiscal Year Ended March 2019

Profile

KURODA also manufactures machine tools. According to the company, machine tools originally developed for KURODA's own use yield highly functional products with excellent cost-effectiveness.

This episode embodies KURODA's tradition of **creating things you need on your own**.

KURODA manufactures precision **grinding machines** not general-purpose cutting machines. KURODA's grinding machines grind items with grindstones to upgrade the precision level in the post-cutting process. The machines are used for machining of fine and small items such as core pins which are parts in connectors and punches which are parts in precision dies.

NANOMETRO® ultra high precision flatness measuring system is a machine to measure the surface shape of photomask substrates for FPDs and silicon wafers used by special glass manufacturers and major wafer manufacturers.

Many Kuroda's hydraulic tools which are precision hydraulic jigs are used for machining and inspection of transmission parts in automobiles and reduction gears for multi-jointed robots.

Financial Results

Financial Result Transitions

(Million yen)

Accounting Period	Net Sales	YoY	Operating Profit	YoY	Profit	YoY	Earnings Per Share (Yen)
Fiscal year ended March 2016	13,424	0%	90	Returning to profit	-91	Deficit decrease	-
Fiscal year ended March 2017	13,260	-1%	113	25%	99	Returning to profit	17.65
Fiscal year ended March 2018	16,117	21%	522	361%	252	154%	45.01
Fiscal year ended March 2019	17,754	10%	1,277	144%	871	245%	155.19
Fiscal year ended March 2020	15,083	-15%	338	-73%	132	-84%	23.45

● In the course of focusing on profitability and working on profit improvement across the entire company, the cost rate was reduced. In the fiscal year ended March 2019, positive performance of 17.75 billion yen in net sales and 1.28 billion yen in operating profit was achieved. In the Motion Controls systems, a large amount of remaining orders were completed, and as a result, both income and profit increased while in the Press Tool & Die systems, due to contribution from the launch of a large scale project, the segment was able to realize an income increase and return to profit in operating profit. In all three business domains including the Machine Tool & Measurement systems, an increase in income and profit was achieved.

● However, in the fiscal year ended March 2020, due to the impact of the prolonged trade friction between the United States and China and world-wide economic slowdown, a delay in recovery of the semiconductor industry which is the main customer for KURODA and suppression of capital investment in each industry field affected business performance, and as a result, both income and profit decreased. The impact from the expansion of the novel coronavirus infection was also partially included in the fourth quarter.

Medium-term Management

Plan: Numerical Targets

(Fiscal year ended March 2019 to fiscal year ending March 2021)

(Million Yen)

Accounting Period	Fiscal year ended March 2019	Goal for fiscal year ending March 2021
Net Sales	17,600	20,000
Operating Profit	840	1,300
ROE	5.3%	7.9%

● KURODA formulated its Medium-term Management Plan in July 2018. In the plan, the company set numerical targets as shown in the table on the left.

This is the first time KURODA has released specific numerical targets as far as records show.

● The company set a **stable operating profit of one billion yen** as a target. However, the company already achieved this target in the fiscal year ended March 2019 immediately after formulation of the Medium-term Management Plan (In this fiscal year, the company achieved 1.28 billion yen in operating profit and 10% ROE.)

● In the fiscal year ended March 2020, KURODA was not able to achieve its targets, but **the company is expected to recover in the fiscal year ending March 2021 or later and be back on track for a profit increase in the fiscal year ending March 2022 or later.** Although achievement of the targets can be later than the initial plan for the fiscal year ending March 2021, KURODA also expressed confidence in the future achievement of numerical targets with excess. In particular, **the company's strength is all three key business domains are growing markets.** An increase of profit level boosted by the market environment is expected.

Investment Appraisal

Stock Price (Historical)

Yearly high	1,158 yen
Yearly low	582 yen
All-time high	9,400 yen
All-time low	315 yen



● The author had not heard about KURODA before interviewing the company for reporting. During my first visit, I remembered that the management team including President Kuroda wore long-sleeve work jackets instead of suits. They were completely prepared for our interview, which was very impressive, and KURODA reminds me of Tsukuda Industries in the “Shitamachi Rocket (Downtown Rocket)” TV series.

● Although KURODA has superb unique technology, the company is not pursuing an expansion of business scale but rather has its primary goal as becoming a world leader in the precision field. The company’s asset is its master craftsmanship technology, and that is why their employees are everything. That is why they use human capital instead of human resources, and the company provides a highly satisfactory working environment. In order to pass on their technology to the next generation, the company sets up opportunities for all employees to experience machining in KURODA craftsmanship training hall. **KURODA is a company with human capital assets that cannot be expressed in numbers.**

● KURODA is a company with such assets, but its value in the stock market is left at an **extremely low level** in terms of valuation. While KURODA’s **PBR is 0.4 to 0.5 times**, comparable companies are THK (PBR is approximately 1.2 times) and NSK Ltd. (PBR is approximately 0.7 times) in the Motion Controls systems business, Mitsui High-tec, Inc. (PBR is approximately 1.1 times) in the Press Tool & Die systems business, and Okamoto Machine Tool Works, Ltd. (PBR is approximately 0.6 times) in the Machine Tool & Measurement systems business. The single reason why KURODA’s PBR is significantly lower than these companies must be their low level of recognition. **Their recognition is so low that liquidity is low.**

When looking at the per day trading value (25-day moving average), it is 2.09 billion yen for THK, 1.55 billion yen for NSK, and 0.15 billion yen for Mitsui High-tec on the Tokyo Stock Exchange First Section. However, in the case of Okamoto Machine Tool Works on the Tokyo Stock Exchange Second Section where KURODA is also listed, the per day trading value is low at 41 million yen, while for KURODA, it stands at **3 million yen**. What does seem certain is the problem of fluidity is a discount factor in terms of valuation.

● KURODA’s technologies are used in current hot topic products but remain unseen. On the other hand, it is also true that many electronic devices cannot maintain their current quality without KURODA technologies. It would be great if this report could offer an opportunity to enable such a **Hidden Champion** to be known. It is difficult to expect the company to be fairly evaluated in the market immediately, but what can be done to have the company’s stock prices reviewed is clear. That one thing is increasing fluidity. The good news is KURODA is highly motivated to tackle this challenge.

● Lastly, this report visualizes points about KURODA which are underestimated in the stock market. The company’s **market capitalization is 3.98 billion yen**, but as of the end of March 2020, the company has **2.2 billion yen in cash**. In addition, KURODA owns many publicly traded shares including shares due to cross-shareholding relationships. KURODA owns **29 issues in total** such as Mizuho Financial Group, TOKYO SEIMITSU CO., LTD., and Makita Corporation, and they are worth approximately **1.36 billion yen** when calculating market value (number of shares as of the end of March 2019 and stock prices as of June 1, 2020). Only with these facts, KURODA shares are acknowledged as sufficiently valuable. In addition, KURODA possesses human capital and a strong customer base which are assets valued the most under the impact of the novel coronavirus. KURODA is **a stock with deep hidden value**.

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