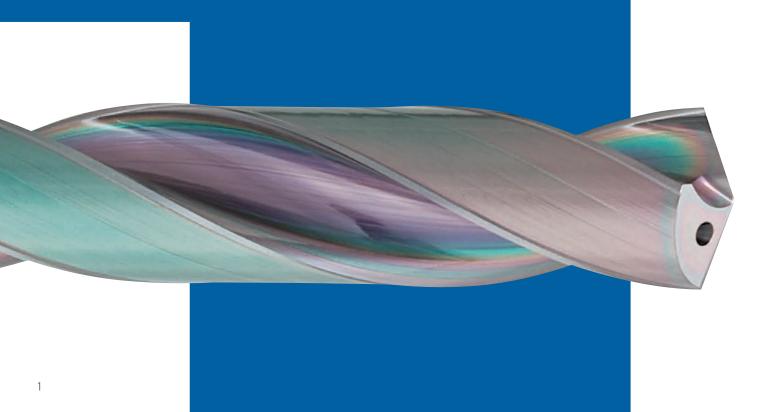


Beyond the Limit

OSG is a comprehensive cutting tool manufacturer known for its world-renowned taps and other product offering such as end mills, drills, and rolling dies. Moving toward an era of carbon neutrality, OSG will strive to achieve further growth as an essential player that contributes to the global manufacturing industry and the realization of a sustainable society based on its "global presence" corporate philosophy.









Corporate Philosophy: Global Presence

As a comprehensive cutting tool manufacturer, we make products that at a fundamental level contribute to enhancing people's quality of life. Through continuous growth, we have established a production, sales, and technical support network spanning 33 countries.

Our corporate aim is to continue to expand our operations globally and strengthen our contribution to manufacturing industries worldwide.

Business Model

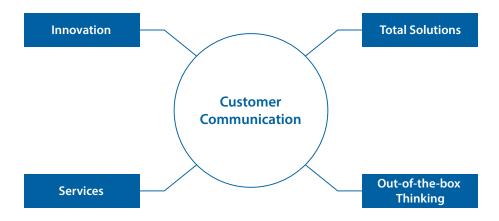
Customer communication is at the heart of the OSG brand. We anticipate, listen and actively react to customer needs through on-site face-to-face support. OSG's vast global network provides our production sites with accurate feedback about user needs so that they can quickly design, develop, manufacture and deliver products that precisely meet those needs.

shaping your dreams

The power of OSG lies in our assured innovative technological know-how for producing high-quality and high-performance products; our exceptional services to respond to situations diligently; and our out-of-the-box thinking to provide total solutions that anticipate our customers' needs.

We are committed to contribute to the advancement of the manufacturing industries by shaping our customers' dreams into reality.

The Power to Exceed Customers' Expectations



A commitment to quality that withstand the test of time

In March 1938, Hideo Osawa established OSG Grinding Co., Ltd. to achieve domestic production of high-quality taps. Thirty years later, OSG's first overseas subsidiary was established in the United States. Based on the corporate philosophy of "global presence," OSG has since then built a production, sales and technical support network spanning 33 countries. With over 50 years of experience in developing new markets and human assets, OSG will continue its global expansion and contribute to the advancement of the manufacturing industry worldwide.



Supporting global manufacturing with top class products and technology

OSG maintains absolute control over every aspect of its manufacturing capabilities. OSG products are produced in-house – from the production of tool material, creation of tool geometry, to the development of its own proprietary coatings – the 3 vital elements in the manufacturing of superior cutting tools.



Taps

Taps are used to cut screw threads on the inside surfaces of holes, creating the "female" half (nut) of the screw. High precision is of vital importance, particularly in areas such as automobile engines, which require precision screws. OSG offers a lineup of taps with diameters in various sizes and with specifications suitable for a wide variety of uses.

Drills

Drills are used to make holes in a wide range of surfaces. OSG has received high acclaim for the development of high-precision, high-value-added products for its use in automotive and aircraft part manufacture, which demands advanced processing techniques and zero margin of error.

End Mills

End mills are used to cut and contour molds for plastic parts, which include electric home appliances, die-casting dies for automotive parts and stamping molds. To meet today's demanding requirements (smaller size, lower weight and reduced cost), OSG has developed many carbide end mills that are excellent in both processing accuracy and durability. To further enhance performance, efforts are made in the development of new products utilizing our advanced proprietary coating technique.

Rolling Dies

Thread rolling dies are used to copy threading onto "male" screws (bolts); the process consists of rolling a metal bar between two thread rolling dies tightly pressed to each side. OSG manufactures cylindrical and flat rolling dies for screws, worms and serrations, thread rolling planetary dies and counter-flow rolling dies, in accordance with their intended use.





Indexable Tools

Indexable tools are used to shape metal molds and machine parts. While end mills are used for finishing, indexable tools are intended for rough cutting and contouring, and use disposable inserts attached to the tool body.

Gauges

Gauges are used to inspect the final dimensions of screw threads and holes. OSG was an early adopter of changes in the Japan Industrial Standards (JIS). Today, we offer a range of screw gauges based on ISO standards. Precision checking is an extremely important process because of the trend toward increasing product precision and compliance with international standards.



Innovative cutting tool solutions engineered for an array of industries to drive better results and productivity

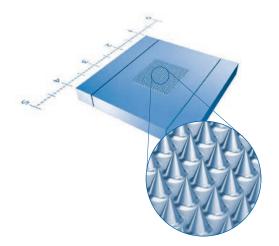


Automotive

Cutting tool solutions that can correspond to the changing needs of the automotive industry

The automotive industry has been evolving rapidly in recent years through the new discovery of materials and technologies, prompting the need of sophisticated cutting tools capable of accommodating these new requirements. OSG is continuing to evolve and responding to changing needs through new innovations. OSG not only supplies powerful cutting tools for the automotive industry, but also provides tailored application solutions to facilitate better processing with higher efficiency and longer durability.





Micro Precision Processing

High machining accuracy measured in micrometers that is required by the micro precision processing industry

Small-diameter, high-performance tools are indispensable in the micro precision processing industry, which is expanding into various fields such as 5G and semiconductors, precision molds, mobility (EV), and robotics. OSG will strive to support this industry by providing cutting tools and optimal solutions that meet the specific needs of its clients.







Semiconductor parts, information and communication equipment, motors, etc.



Die / Mold

Comprehensive lineup of high precision, high quality end mills designed to fulfill every die/mold manufacturing needs

In die/mold manufacturing, a part's quality is highly correlated to the performance of the overall product. OSG's end mills supply speed with size variations and unrivaled quality even for the most complicated mold production.





Work samples

Aerospace

Tooling innovations designed to excel in difficult-to-machine aerospace materials

The aerospace industry's mission is to manufacture more environmentally progressive, longer-range and faster aircrafts that require lower operating costs. OSG's aerospace tooling shares the same mission. With years of experience and know-how, our cutting tools are the industry standard for tough materials like CFRP.









Wing rib, fitting, CFRP, etc.

Heavy Industry

Heavy industry's tough materials and large production require strong tools designed for performance

OSG offers large diameter tooling for the machining of big components, common in the heavy industry such as shipbuilding and construction machinery. OSG has developed a spectrum of products designated for various materials and sizes to help manufacturers achieve the best possible result.







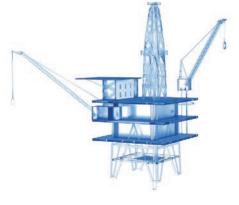


 $\label{thm:control} \mbox{Hydraulic control valve, slewing bearing, engine, etc.}$

Energy

Precision tooling solutions for large component manufacturing common in the energy industry

The energy industry provides fuel necessary for our daily lives and requires precision machining of large parts and difficult-to-machine materials that can withstand various hostile conditions. OSG offers optimized cutting tool solutions for the most demanding requirements of power generation metal cutting.









Turbine rotor, turbine blade, turning circuit, etc.



Offering high-precision, high-performance products with state-of-the-art facilities and meticulous quality control



Main Products: Taps

Yana Factory

50-5 Akaiwa, Tomioka, Shinshiro, Aichi 441-1335, Japan

Access: 20 minutes by car from the Shin-Tomei Expressway Shinshiro Interchange Tel: +81-536-26-1411



Main Products: Carbide End Mills

Oike Factory 450 Kamishinkiri, Ichinomiya, Toyokawa, Aichi 441-1294, Japan

Access: 15 minutes by car from the Tomei Expressway Toyokawa Interchange Tel: +81-533-93-2187



Main Products: Carbide Drills, Carbide Taps, HSS Drills, HSS End Mills

Shinshiro Factory 1-2 Maruyama, Arumi, Shinshiro, Aichi 441-1317, Japan

Access: 3 minutes by car from the Shin-Tomei Expressway Shinshiro Interchange Tel: +81-536-25-1311



Main Products: Rolling Dies, Gauges, Cutter Bodys

Toyohashi Factory 3-12 Kamiyama, Kamo, Toyohashi, Aichi 441-1101, Japan

Access: 15 minutes by car from the Tomei Expressway Toyokawa Interchange Tel: +81-532-88-1141



Main Products: In-house Machine Tools

Toyokawa Factory

2-17 Shirakumo, Toyokawa, Aichi 442-0018, Japan

Access: 10 minutes by car from the Tomei Expressway Toyokawa Interchange Tel: +81-533-86-2188



Main Products: Coating Rods

Hongu Center 8-24 Tedori, Kaminagayama, Toyokawa, Aichi 441-1202, Japan

Access: 15 minutes by car from the Tomei Expressway Toyokawa Interchange Tel: +81-533-92-1505

The so-called "OSG's brains," where designing, testing and development take place



Design Center

The Design Center (DC) was established through the integration of engineering units to provide faster responses to customers' manufacturing operation needs. It effectively uses 3D CAD and technology databases to provide timely solutions from multiple approaches.



Product Development Global Technology Center

OSG's Global Technology Center (GT Center) plays a key role in product development. This division and the testing laboratory work in unison to test product prototypes with fresh ideas, which are ultimately crafted into new innovative high-value-added products.



The purpose of the D-Lab (Development Laboratory) aims to accelerate cutting tool development for enhancing manufacturing efficiency in sync with the latest technology.



As an accommodation facility for participants in training programs, the Guest House welcomes visitors from Japan and overseas. It is also used as a venue for new product seminars and events, and as a center for communication among the tooling community.



Creation of new business models

through digital transformation

The fusion of traditional craftsmanship and smart factory





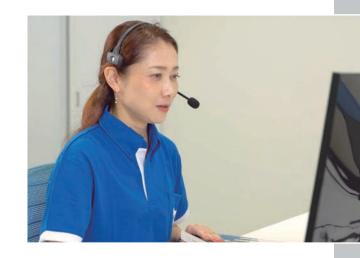




While making the best use of the manufacturing know-how cultivated over the years, OSG has refined its on-site capabilities by implementing improvements that have been identified through digitalization. What the company focuses on is the thorough visualization of manufacturing. Information such as the operating rate of each machine, schedule, production status and volume are shared, and the collected data is analyzed. By eliminating waste in production and optimally making arrangements according to the situation, automation is made possible to accelerate smart lines capable of long-hour unmanned operation up to 72 hours. By promoting the "one factory" concept, where production status, forecast and schedule of major factories in Japan and overseas are centrally managed, OSG will further strengthen its ability to fulfill evolving manufacturing needs.

Furthermore, the company-wide "OSG 4.0" project is underway to strategically connect data and systems revolving sales, manufacturing, product development and customer service to maximize performance and profits. With a revamped business model that is highly efficient and versatile, OSG is able to drive new efficiencies into the core of its operation to take manufacturing to a new level.





Sales and distribution network structured to fulfill every customer needs

OSG's domestic sales network is divided into three regions – east, central and west, to provide optimal customer support. With sales engineers stationed nationwide, OSG is able to quickly respond to customer needs, provide tailored technical support, and offer industry specific workshops.



Domestic Sales Network

- 1 Eastern Regional Office
- 1 Tokyo Sales Office
- 2 Sendai Sales Office
- **3** Koriyama Sales Office
- **4** Niigata Sales Office
- **5** Suwa Sales Office
- **6** Ueda Sales Office
- Ryomo Sales Office
- **3** Utsunomiya Sales Office
- **9** Ibaraki Sales Office
- Hachioji Sales OfficeAtsugi Sales Office
- 12 Shizuoka Sales Office

- **13** Central Regional Office
- **13** Nagoya Sales Office
- Toyokawa Sales Office/ Toyota Sales Office
- **15** Hamamatsu Sales Office
- **16** Anjo Sales Office
- **17** Gifu Sales Office
- **18** Mie Sales Office

- Western Regional Office
- **19** Osaka Sales Office
- 20 Kanazawa Sales Office
- Keiji Sales Office
- 2 Akashi Sales Office
- 3 Hiroshima Sales Office
- **49** Okayama Sales Office
- 3 Shikoku Sales Office
- Kyusyu Sales Office
- **☼** Kumamoto Sales Office
- Kitakyusyu Sales Office

Stock Center

- 29 Logis Tokyo
- **30** Logis Nagoya
- **3** Logis Osaka





CS Center

The Customer Satisfaction Center (CS Center) embodies OSG's core principle of service, and provides a space where the latest metal cutting technologies can be shared, enabling customers to experience live tooling demonstration on-site.

Visit OSG's homepage to learn more about our domestic sales network



Fulfilling customer needs with domestic group companies specialized in their respective fields

Each domestic group company manufactures and sells the products that they specialize in. Together, they offer a broad lineup of products and services, including the manufacturing of carbide materials and cutting tools, coating and regrinding services, as well as sales of machinery. They also offer various custom services, ensuring that each and every client will always receive products that suit their desired processing environment.

Manufacturing of Cutting Tools

SD MFG. Company Round rolling dies

Ohtaka Precision Co., Ltd. Round thread cutting dies and rolling dies

Aoyama Seisakusho Co., Ltd.

Band saw blades, circular saw blades, bit drivers and regrinding of cutting tools **NODA Precision Inc.**

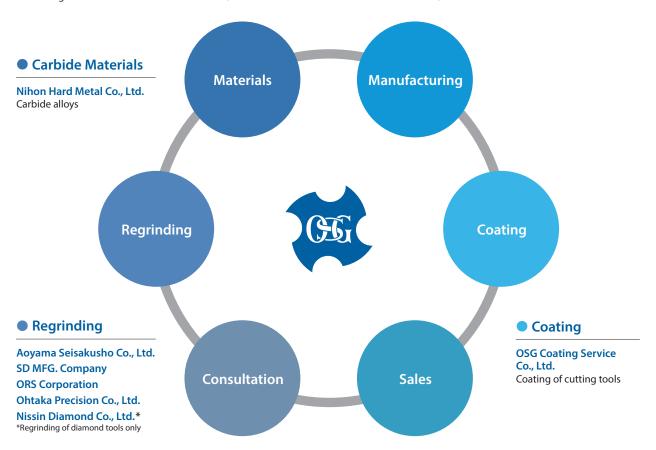
Diamond tools, carbide tools and CBN tools

Nissin Diamond Co., Ltd.

Single crystal diamond cutting tools, PCD tools and CBN tools

F.P.TOOLS Co., Ltd.

Carbide reamers, HSS reamers



Consultation

Kanagata Consulting Co., Ltd.

Consultation regarding mold manufacturing techniques

Special Subsidiary

OSG Active Co., Ltd.

Promotion of employment opportunity for people with disabilities; community contribution, social contribution activities

Sales

OSG System Products Co., Ltd.

Sales of LH-Stix, Micro-Stix, D-Bars and bit drivers

Taiho Sangyo Corporation

Sales of precision cutting tools, rolling dies, measuring instruments, machine tools, etc.; automobile maintenance leasing services

Sanwa Seiki Co., Ltd.

Sales of precision cutting tools, general machinery, engine valves, jigs and tools for special-purpose machinery; retro-fitting of machine tools and industrial equipment

Visit OSG's homepage to learn more about our domestic group companies



A global network that accelerates international business development

In 1968, OSG Corporation established its very first overseas subsidiary in the United States. Since then, OSG has dynamically expanded its global presence, establishing a production, sales and technical support network spanning 33 countries.









Medium-Term Management Plan

The OSG Group has renewed its management structure from fiscal year 2021 and began a new medium-term management plan "Beyond the Limit 2024." The 3-year plan runs from the period ending November 2022 until the term ending November 2024. Under this new plan, OSG is committed to further enhance the efficiency of business operations, improve profitability, create a robust corporate culture, and contribute to the global manufacturing industry as we advance toward the era of carbon neutrality.

Changes in Management Plan

The Next Stage 2014 (2014-2016)

The Next Stage 2017 (2017-2020)

Topline Expansion Phase

Becoming the world's leading holemaking cutting tool manufacturer



Basic Policy

Aim to become the world's leading holemaking manufacturer, rebuild corporate and product branding, and accelerate global expansion.

Priority Measures

- ① Development of bases mainly in growth markets to become a global player.
- ② Launch of A Brand, OSG's premium general-purpose product brand.

Reflection

Promotion of the two-product basic strategy propelled growth of both sales and income.

- ① Increased market share by launching the A Brand as a distribution expansion strategy.
- 2 Major end-user strategy strengthened OSG's capability to secure orders.

Basic Policy

Aim to become the world's leading holemaking manufacturer and spur 'evolution' in the frontline to strengthen OSG's capability to secure orders.

Priority Measures

OSG will seek to increase global market share through a two-pronged strategy focusing on "catalog product sales," which target distribution to promote sales expansion of the A Brand, and a "major end user strategy" that focuses on the ability to secure orders. In addition, OSG will expand frontline sites to facilitate global expansion, promote business development of the aerospace industry as an industry that follows the automotive industry in sales, and promote M&A.

Reflection

An increase in sales was achieved through the two-product basic strategy, global frontline expansion, and M&A. On the other hand, in the fiscal year ending November 2020, we were unable to achieve the targets for The Next Stage 2017 (net sales of ¥150 billion and operating income of ¥30 billion), partly due to the impact of the COVID-19 pandemic. Profitability and asset efficiency also declined.

Medium-Term Management Plan Beyond the Limit



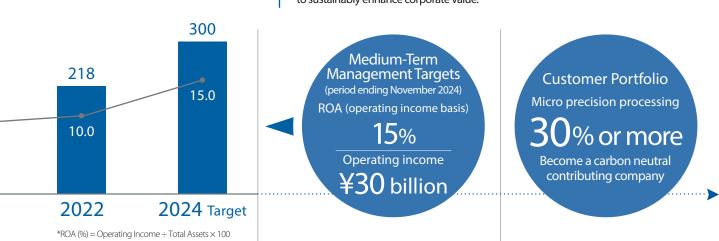
Basic Policy

- To transform OSG into an essential player that contributes to the global manufacturing industry, our long-term vision is divided into three stages. The first 3-year period is "Beyond the Limit 2024," where we will strengthen our corporate structure.
- Over the course of these three stages up to the year 2030, OSG will change the composition of customer portfolio to better address social and environmental changes.
- As we advance toward the carbon neutral era, the entire OSG Group will strive to enhance corporate value with the aim of
 achieving total optimization.

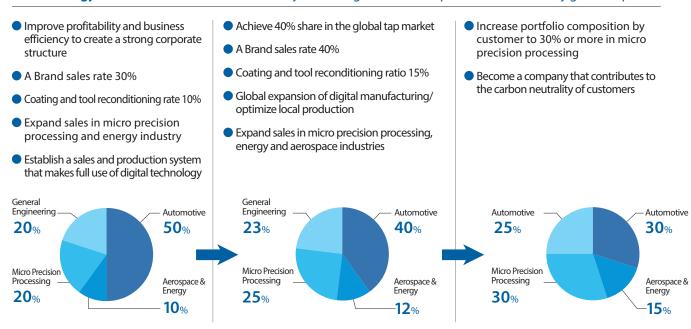
Beyond the Limit 2022-2024 (Stage 1) Beyond the Limit 2025-2027 (Stage 2) Beyond the Limit 2028-2030 (Stage 3)

Toward the Carbon Neutral Era

To become an essential player that contributes to the global manufacturing industry Based on our corporate philosophy "global presence," OSG will promote ESG management to sustainably enhance corporate value.



Basic Strategy Further enhance business efficiency and strengthen OSG's corporate culture to stably generate profits



Achieving sustainability with the environment and society

OSG has for many years taken proactive measures to fulfill its diverse social responsibilities in its corporate activities. As businesses cannot be successful unless they are in harmony with the global environment, OSG places great consideration in its product development process concerning the entire product life cycle while minimizing its ecological footprint. OSG also aims to conduct fair and transparent business activities to enhance its corporate governance. As a good corporate citizen, OSG will continue various efforts to contribute to the sustainability of society and the environment.

Environmental Initiatives

Contributing to Environmental Preservation

OSG places great emphasis on the preservation of environment, taking actions such as the reduction of energy consumption, CO₂ emissions and waste products. All OSG units are involved in efforts to conserve energy by adopting energy efficient construction and developing environmental friendly products that are in sync with customer expectation.

Social Responsibility

Corporate Citizenship

As a good corporate citizen, OSG plays an active role in sustaining society's development by engaging in meaningful communication with local communities and supporting a wide range of programs. OSG promotes all business activities with the highest priority placed on life, safety and law compliance, and fulfills social responsibilities to satisfy all stakeholders while safeguarding its future as a company.

Corporate Governance

Creating a Fair and **Transparent System**

OSG is continuously strengthening its corporate governance system, recognizing that sound corporate governance is vital in operating the company effectively, efficiently, and in a way that increases corporate value. In addition to complying with the requirements of applicable corporate governance laws and regulations, OSG has introduced its own requirements to help improve and maintain the soundness and transparency of its governance which is a vital part of business.

Quality and Environmental Management System ISO 9001 | JIS Q 9100 | ISO 14001 Certifications

OSG is committed to continuously improve quality and contribute to environmental sustainability.

●ISO 9001 Quality Management System

OSG first acquired the ISO 9001 certification for its tap production in 1998. In 2007, all OSG products have been certified.

●JIS Q 9100 Quality Management System

In May 2017, OSG acquired the JIS Q 9100 certification, which is the international standard for quality management system specific to the aerospace and defense industries.

●ISO 14001 Environmental Management System

Nine of OSG's domestic business operations were certified in November 2000.



Establishment of Special Subsidiary OSG Active

On December 13, 2022, OSG Active Co., Ltd. was established as a special subsidiary that promotes employment opportunity for people with disabilities. As a subsidiary that is independent from the parent company, a work environment with consideration of special needs can be fostered. OSG is the only company to establish a special subsidiary in Toyokawa City, Aichi Prefecture, and the first in the cutting tool industry in Japan. OSG will continue to promote the creation of a society that respects diversity regardless of one's ability or disability to enable every individual to play an active role and shine in their respective work sites.

*A special subsidiary is a company established to promote the employment of people with disabilities and to ensure stability.

Company Overview

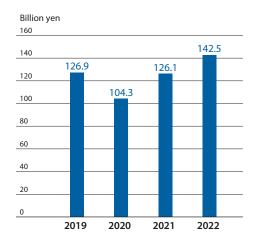
(as of Nov. 30, 2022)

Company Name	OSG Corporation
Headquarters	3-22 Honnogahara, Toyokawa, Aichi, Japan
Established	March 26, 1938
Description of Business	Manufacture and sales of cutting tools, rolling dies, gauges, machine tools, and machine parts; import and sales of tools
Capital	13,044 million yen
Representatives	Norio Ishikawa, Chairman & CEO Nobuaki Osawa, President & COO
Number of Employees	7,543 (Consolidated) 1,899 (Non-consolidated)
Net Sales (FY2022)	142,525 million yen (Consolidated) 56,956 million yen (Non-consolidated)
Stock Market	Tokyo Stock Exchange Prime Market, Nagoya Stock Exchange Premier Market
Stock Code	6136 (Nikkei 500, JPX-Nikkei 400)

Sales by Product

Rolling Dies 9.9% 7.4% 35.3% Net Sales (Consolidated) 142.5 billion yen (as of Nov. 30, 2022) Drills

Sales Trend



Net Sales by Region

