

MATERIAL REVOLUTION



JSW

THE JAPAN STEEL WORKS, LTD.

Material Revolution, making the world sustainable and prosperous

JSW has been contributing to resolving social issues through "Material Revolution" from its foundation, developing and supplying new materials to meet the times.

Melting

Mixing

Solidifying



Machine element
technology

Precision control
technology



Manufacturing technology



Material Revolution

Developing new materials that meets the demands of the times, and implementing them in the world

Japan Steel Works began in 1907 with steelmaking. What society was demanding at the time was superior steel. When Japan was striving to improve its industrial technology to catch up with Europe and the United States, steel was a universal value indispensable to the nation. We will soon celebrate 120 years since our founding. Values that everyone thought were unchanging around that time have changed dramatically over the Meiji, Taisho, Showa, Heisei, and Reiwa eras.

With the recent importance placed on the value of natural capital, lighter weight, and low environmental impact materials are required to mitigate climate change risks. After World War II, we focused on the lightweight material plastic earlier than any other company and introduced various manufacturing equipment for plastics to the world. Furthermore, the world now needs new materials that are lighter, highly functional, and more energy-efficient than ever before to achieve carbon neutrality.

Marine pollution caused by waste plastics has now become a major social problem, and a global challenge is the realization of a resource-recycling society where waste plastics can be used to solve this issue.

We will make the world sustainable and prosperous by developing and implementing industrial machinery and new materials that solve social issues with the power of Material Revolution.

We welcome the continued support and encouragement as we go forward.



Representative Director and President

Toshio Matsuo

Contributing to industrial development through our original technologies and unique value-added manufacturing

■ Main products and business domains



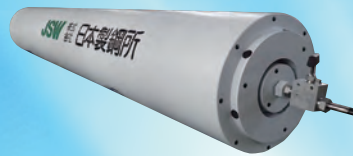
Energy

- Power Plant Equipment
- EV Battery Parts
- Solar Panel Material
- Hydrogen Storage Equipment
- Natural Gas Production and Transport Equipment

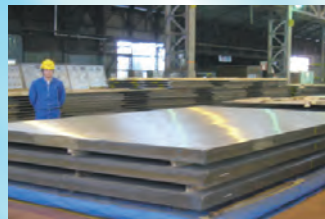
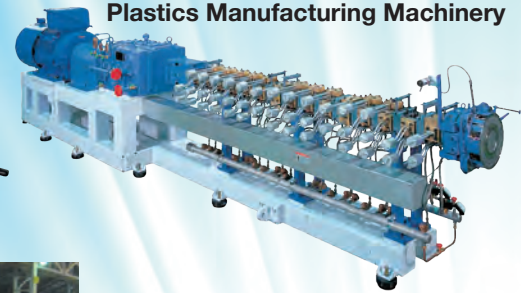


Large-Size Steel Forgings

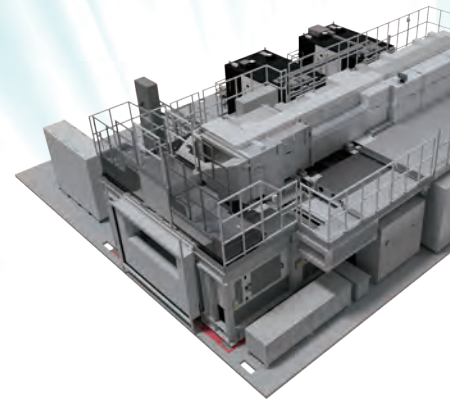
Steel Pressure Vessels for Hydrogen Storage



Plastics Manufacturing Machinery



Clad Plates



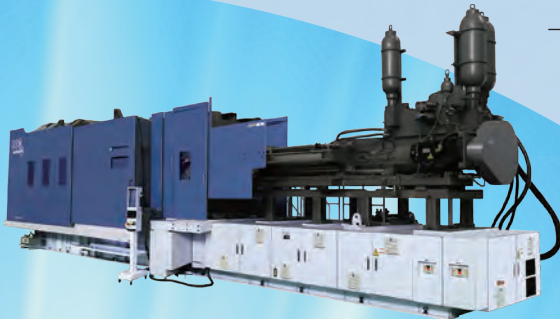
Excimer Laser Annealing Systems

and comfortable life

JSW has always responded to the needs of the times by leveraging our distinct technologies to introduce highly functional materials, production systems, and more. We will continue to lead society and industry forward toward the future as we sustain our creation of eco-friendly products and other new added values.

Transportation

- Automotive Parts and Materials
- Rolling Stock Parts and Materials
- Aircraft Components



Magnesium Molding Machines



Film and Sheet Manufacturing Equipment



Plastic Molding Machines



Hot Presses



IT/Telecommunications

- IT Products and Production Systems
- Semiconductor Materials and Production Systems





BUSINESS DOMAIN

01

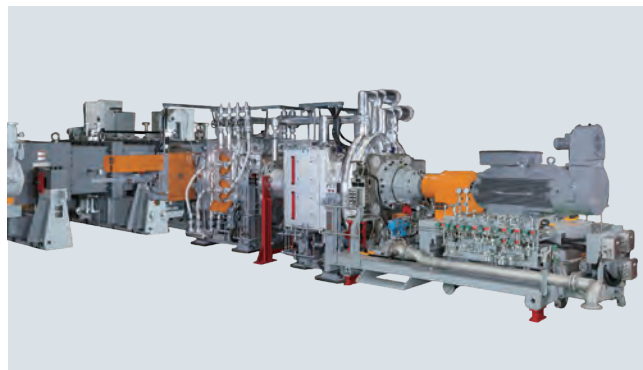
Plastic Machinery Business

As one of the most comprehensive manufacturers of plastics machinery, we help advance the world in a broad range of areas from upstream to downstream in the petrochemical industry based on our extensive experience and achievements.

■ Using plastics to form the unseen foundation of the convenience and comfort of everyday life

Responding to the various needs of industry with our proprietary technology and hard-fought know-how

In our plastics machinery business, we manufacture, supply, and provide maintenance service for plastics production and processing equipment (e.g., pelletizers, twin-screw extruders, film and sheet manufacturing equipment). Products manufactured by our machines and systems appear in a wide variety of products, including IT products (e.g., 5G smartphones, PCs, tablets, keyboards), electronic materials (e.g., capacitors, semiconductor products), home appliances, lithium-ion batteries, automotive parts, food packaging films and containers as well as catheters and other medical devices.



Pelletizers

From food-packaging films to LCD panel films

The history of JSW film and sheet manufacturing equipment began in 1958. Over the half century, we gain a wide variety of experiences from the general applications for many kinds of packaging materials to high performance applications for industrial and optical applications such as lithium-ion batteries and high-technology media screen panels. Many kinds of plastic products produced by JSW manufacturing equipment support a wide range of situations in the world, which make our daily life happy, contribute to environmental issues in the energy field, and help medication development.



Biaxially oriented film and sheet manufacturing equipment

Achieving a carbon-neutral world

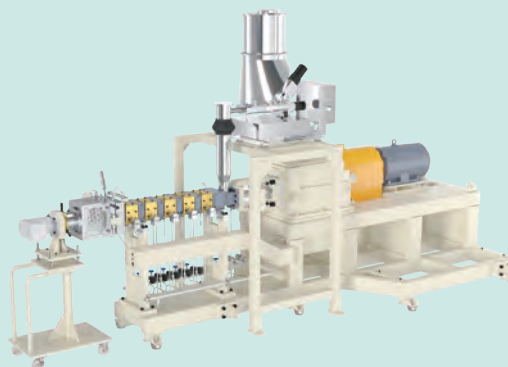
The market for plastics processing equipment is expected to continue to grow as the need for better automobile fuel efficiency through weight reduction, replacement of fossil fuels with batteries (decarbonization) in the transition to EVs, and plastics recycling technology increases amid efforts to achieve carbon neutrality by 2050. As a leader in the industry, we develop plastics processing equipment technology capable of contributing to society, and also make proactive efforts to develop recycling technology for plastics with the aim of achieving a world in which we use and recycle plastics while protecting the global environment.



Film and sheet manufacturing equipment

TOPICS | Robust demand for twin-screw food extruder

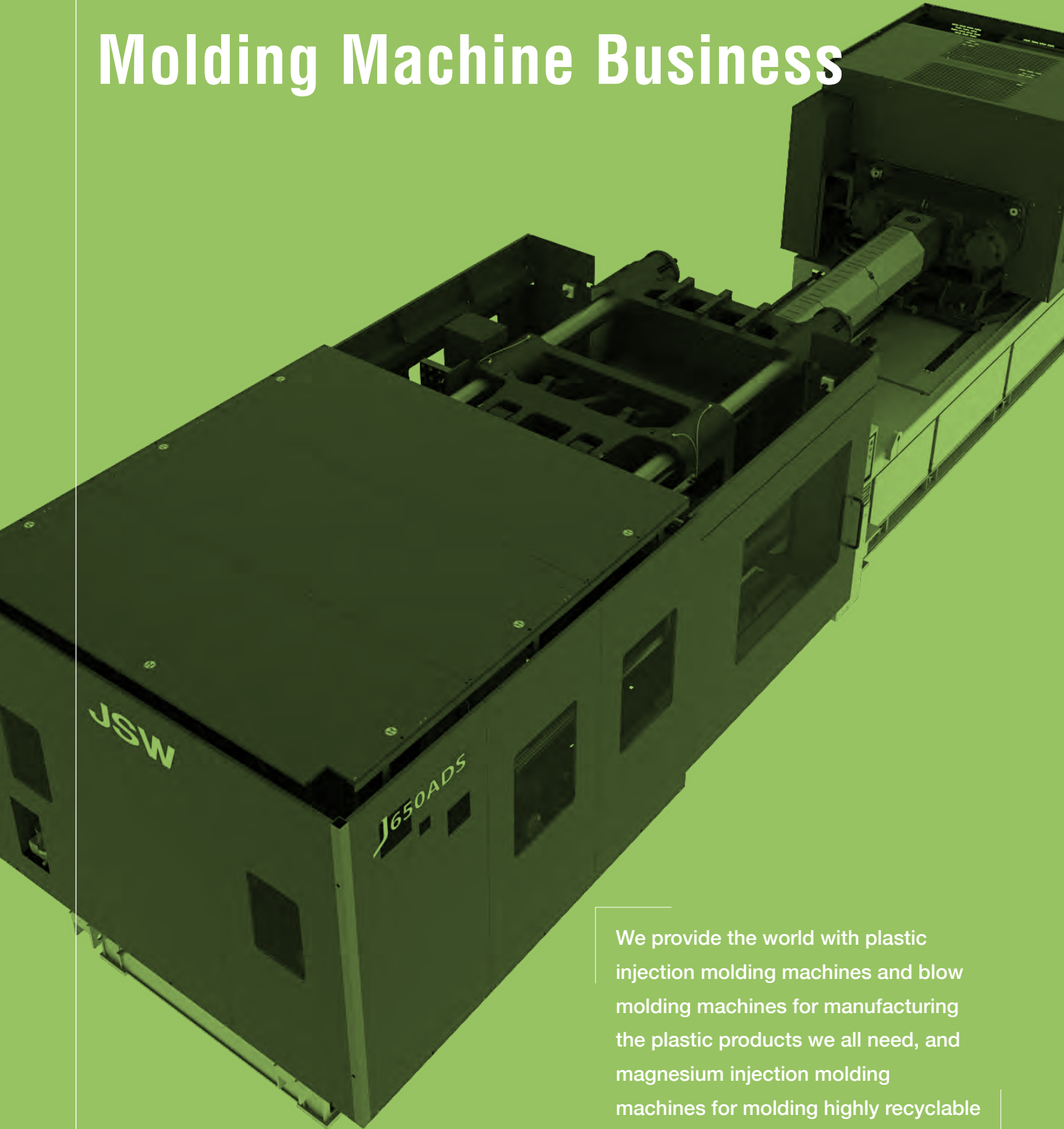
Starting with successfully producing single screw extruders for plastics for the first time in Japan in 1950, we have consistently led the industry in twin screw extruders for plastics. In the food industry, our expertise in plastic compounding has been applied to the development of the "TEX-F," a twin-screw extruder designed specifically for food processing first launched in 1988. Offered in a broad lineup ranging from compact to large-scale models, the TEX-F delivers high quality and stable production performance across a wide variety of applications — including meat processing, milling, starch and soybean processing, pet food, and confectionery products such as bread, cookies, and chocolate. In addition, it also contributes to the upcycling of food residues, supporting more sustainable food manufacturing.



BUSINESS DOMAIN

02

Molding Machine Business



We provide the world with plastic injection molding machines and blow molding machines for manufacturing the plastic products we all need, and magnesium injection molding machines for molding highly recyclable magnesium alloys.

■ Using the power of our products, solutions, and services to respond to the growing demand for a carbon-neutral world

Extensive lineup of plastic injection molding machines for home appliances, automobiles, daily necessities, containers, and more

Our extensive lineup of machines—from small to ultra-large and with special specifications for multi-color, multi-material molding, ultra-precision molding, and more—provides options for businesses around the world.

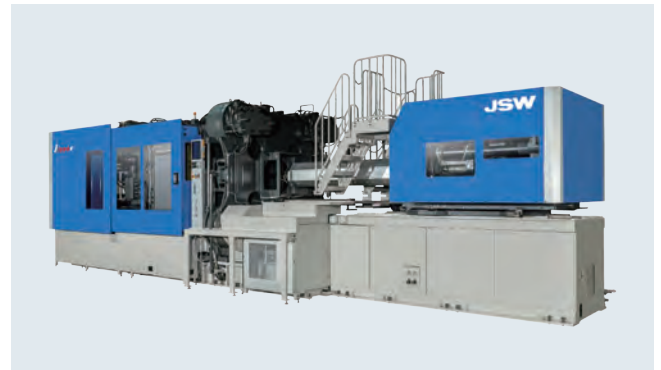
We also facilitate the quest for carbon neutrality through energy-saving technologies such as electric servo drives and electricity regeneration for molding machines, foam molding and other material reduction technologies, IoT-based production efficiency, and more.

Focusing on magnesium injection molding machines, a promising component of a more sustainable world

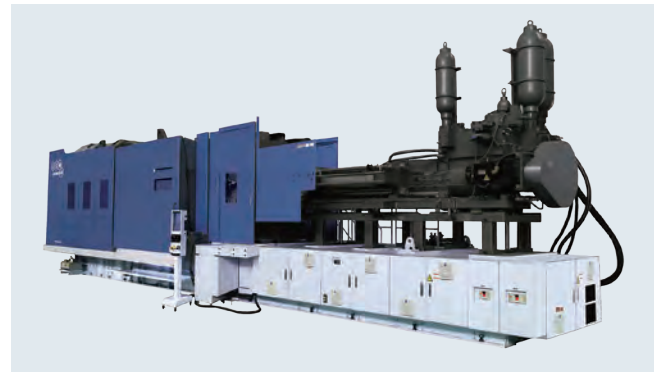
Our magnesium injection molding machines use Thixomolding technology, which enables cleaner, more energy-efficient, and more precise molding than conventional methods. We will respond to the world's need for carbon neutrality by leveraging the lightness, strength, and other outstanding properties of magnesium, expanding its application to automotive parts, and more.

JSW Group meets all blow molding needs, from the small bottle to large and multi-layered containers

We meet all needs concerning blow molding, from medium and large machines used for automobile fuel tanks and industrial containers to small machines for cosmetics and daily necessities.



Plastic injection molding machine



Magnesium injection molding machine



Blow molding machine

TOPICS

Successful conversions to smart factories contribute significantly to productivity improvement

Our IoT solution "J-WiSe" helps our customers improve productivity at their plants by providing systems and services in four areas: production control, operational assistance, service and maintenance, and production automation systems.

We are currently expanding the application to molding machines as well as to twin-screw extruders and all of our other industrial machinery products.



J-WiSe : JSW Worldwide IoT Solutions of Enhancement

BUSINESS DOMAIN

03

Industrial Machinery Business

We manufacture, sell, and provide after-sales service for industrial machinery products, such as equipment to manufacture electronic device-related products used in producing semiconductors, displays, and electronic parts, as well as railroad-related products that underpin economic infrastructure.

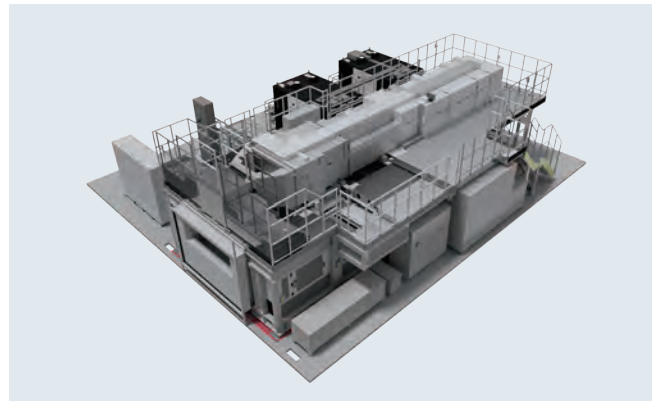
■ Our state-of-the-art production systems undergird the evolution of electronic devices for 5G, automated driving technology, and other essential developments for the advancement of society.

Supporting higher quality and improved production efficiency for cutting edge displays

Displays for smartphones, tablets, and PCs continue to evolve, reproducing images with more vivid colors and videos with smoother motion.

Behind this advancement are laser annealing systems, which are vital for developing higher-definition flat-panel displays.

In addition, our laser lift-off and film laser-cutting systems are increasingly used to produce flexible displays for smartphones and wearable devices.



Excimer laser annealing system

Providing support for the production component of automobile evolution and advances in information and communication technology

Given the growing need for active safety systems and connected cars, automobiles feature more and more onboard electronic devices.

Advanced electronics are also required for IT equipment and industrial robots, and our hot presses and vacuum laminators are widely used to manufacture the printed circuit boards needed to produce them.

Applications for lasers are expanding to include light sources for optical communication—the bedrock of information and communication infrastructure—as well as 3D printers and obstacle sensing for automatic driving. Our ECR plasma deposition systems are used to provide the high-quality deposition technology needed to produce high-power, high-efficiency semiconductor lasers. Our deposition technology is also useful in the production of high-pass filters used for communication in smartphones and IoT devices.



Hot press



ECR plasma deposition system

TOPICS

Developing and launching next-generation vacuum laminators

Our vacuum laminators are used to laminate electronic circuit boards and dry films, a process in the manufacture of printed circuit boards and semiconductor package substrates. The development and manufacture of hardware such as advanced electric circuit boards with high-density wiring is vital for the latest technologies, IoT, AI, and automated driving technology. To meet these demands, we launched "MVLP-3ST-αX", the vacuum pressure electric laminator (3-stage) in 2023 as a new model. Additionally, we have newly established a technical center in Meiki Plant (Obu city, Aichi Pref.) to explore new technologies, supporting our customer's technical development.



MVLP-3ST-αX,
new vacuum laminator

The background of the slide is a photograph of an industrial factory interior, likely a steel mill, with a warm orange-red color cast. The JSW logo is visible in the upper left. The text 'BUSINESS DOMAIN' is in a teal color, while '04' is in a light grey color.

BUSINESS DOMAIN

04

Materials & Engineering Products Business

Utilizing the manufacturing technology for basic materials that we have cultivated for over 100 years, we provide components that combine steel with non-ferrous metals and composite materials to meet increasingly sophisticated and diverse needs. We also offer a complete menu of engineering service from design, fabrication, construction, and installation to maintenance inspections, analysis, evaluation, and repairs—to provide a wide range of technological solutions.

■ We provide a wide range of products as a materials manufacturer, along with engineering solutions to meet diverse needs.

Materials Business Division (forgings and plates)

High-quality large-sized steel forgings, the main and core products of the Muroran plant where JSW was founded, are supplied all over the world as critical components for power generation equipment. Absolute reliability and safety are required for these products. We respond to the needs of the energy industry, which is becoming sophisticated day by day, by taking advantage of our capability to produce the world's largest 670-ton steel ingot and the material development technology we have inherited and evolved since our founding. Other small-and medium-sized forgings and hot-roll bonded clad plates, which are high-performance composite plates with various combinations, are utilized in many fields, including energy, automotive, industrial machinery, IT, electrical, electronics, and food, and are also supporting sustainable social development.

Engineering Services Division (from design, fabrication, construction, and installation to maintenance inspections, analysis, evaluation, and repairs)

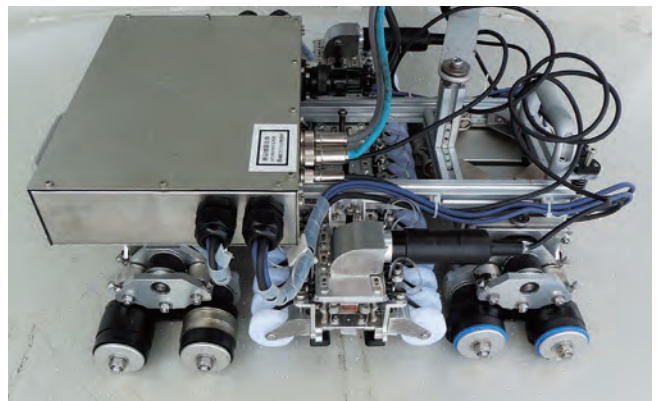
Our Engineering Services Division supports the renewal and maintenance of aging social infrastructure by leveraging the expertise we have developed through the design, manufacturing, construction, and inspection of oil-refinery reactors and industrial welded structures. Building on this technical foundation, we manufacture steel welded structures, provide construction management services for customers' facility upgrades, and conduct plant inspections and material degradation assessments. In addition, we contribute to the safety and development of society by offering comprehensive engineering services, including inspection proposals utilizing our proprietary technologies as well as associated ancillary and repair work. Furthermore, we are committed to fostering the development of new technologies through the research and development of hydrogen utilization technologies, contributing to the realization of a more sustainable society.

Contributing to a sustainable society

We leverage the unique materials and engineering technologies we have cultivated over many years through the manufacturing of equipment for demanding operating environments such as social infrastructure and various industrial plants. These technologies are now being applied to emerging social needs, including carbon neutrality. We provide proprietary products and services across multiple sectors. For example, pile-driving equipment used for offshore wind turbine installation in the renewable energy sector; low thermal expansion alloys in the electrical and electronics sector; and hydrogen accumulators and metal hydride (MH) tanks in the hydrogen infrastructure sector. Going forward, we will continue to create new value by maximizing our resources and consistently contribute to society through innovative products and services.



Components for nuclear reactor pressure vessels



Self-Propelled Ultrasonic Inspection Device

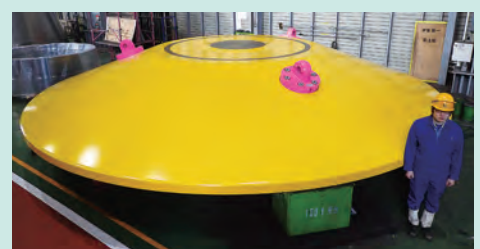


Large Stationary MH Tanks and Compact Portable MH Tanks

TOPICS

Scaling up large hammer components for offshore wind turbine foundation installations

In line with the global shift toward decarbonization and the elimination of fossil fuels, offshore wind power is rapidly emerging as a major source of renewable energy. As bottom-fixed offshore wind power gains wider adoption and installed capacity continues to grow, the demand for larger hammers capable of driving monopiles (foundation piles) is increasing. In response to this demand, we have jointly developed, together with an equipment manufacturer, unprecedented large forged steel components for global markets.



BUSINESS DOMAIN

Ordnance Business

Our roots trace back to 1907, when our company was founded to produce weaponry in Japan to reduce dependence on imports, and we still manufacture ordnance as Japan's leading manufacturer of gun systems.



Manufacturing to ensure peace and security ever since our founding

We develop and apply advanced technologies based on the materials and machinery production technologies we have developed since our founding to manufacture and maintain a variety of defense equipment for the Ministry of Defense and Japan Coast Guard. We also actively engage in the research and development of advanced defense systems, and intend to continue contributing to the peace and security of Japan.



AMV (Wheeled Armored Personnel Carrier)



5-inch, 62-caliber naval gun



Type 19 Self-Propelled Howitzer (Wheeled)

Source: JMSDF Self Defense Fleet website
<https://www.mod.go.jp/msdf/sf/news/08/0830-01.html>

New Business

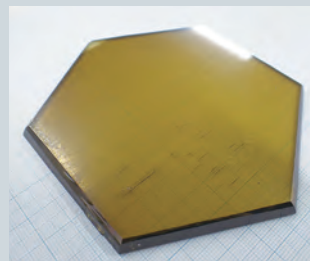
We will focus on new businesses to contribute to the advancement of society and realize a more sustainable world.



Photonics

Initiatives to manufacture and commercialize single-crystal materials for next-generation high-speed, high-capacity communications and energy efficiency

As society moves toward next-generation infrastructure, new optical and power networks are rapidly being developed to achieve higher communication speeds, greater data capacity, and lower power consumption. Against this backdrop, we are focusing on advanced crystal materials—gallium nitride (GaN), synthetic quartz crystal and lithium niobate—as well as the production of high-quality substrates utilizing these materials. Through these efforts, we contribute to a wide range of application, including next-generation high-speed communications, optoelectronics, next-generation power devices, and sensing technologies. Our competitive strengths lies in our ability to grow high-quality crystals using high-temperature, high-pressure autoclaves, leveraging manufacturing technologies cultivated through our large steel castings and forgings. We also provide integrated high-value-added processes including bonding, film formation, and material modification. Moving forward, we will continue to enhance this technological foundation and contribute to solving social issues as a materials developer supporting the communication and energy infrastructure of next-generation society.



Gallium nitride (GaN) crystal



Lithium Niobate (LiNbO₃:LN) crystal

Metal Materials

Producing high-performance, high-quality metal products to keep pace with the accelerating growth of telecommunications traffic

Amid the advancement of IoT and 5G technologies and growing demand related to AI applications, we provide high-performance metal materials—including copper alloys—that enable higher functionality in information and communication devices. We established Muroran Copper Alloy Co., Ltd. as a joint venture with JX Nippon Mining & Metals Corporation, and are steadily expanding our production capacity through newly installed facilities designed with cutting-edge technologies that surpass conventional systems. We will continue to contribute to the realization of a smart society through our materials technology.

LINE OF BUSINESS

Industrial Machinery Products Business

Plastic production and processing machinery

- Pelletizers
- Twin-screw extruders
- Film and sheet manufacturing equipment
- Spinning extruders

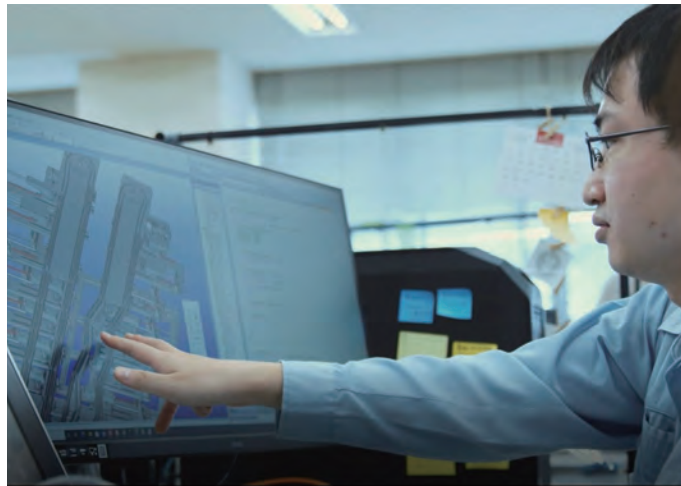
Molding machines

- Plastic injection molding machines
- Magnesium injection molding machines
- Blow molding machines

Defense equipment

Others

- Excimer laser annealing systems
- Laminators
- Deposition systems
- Rolling stock products
- Twin-screw food extruders
- Starting gates (horse racing)



Material & Engineering Business

Materials

- Components for nuclear reactor pressure vessels and steam generators
- Rotor shafts for power generators
- Rolls for plate mills
- Plate mill and forging press components
- Clad plates

Engineering

- Design, manufacturing, and construction of steel structures for plants and infrastructure
- Non-destructive examination and analytical testing services
- Steel pressure vessels for hydrogen storage, metal hydride tanks
- Composite materials



New Business

- Photonics
- Metal materials

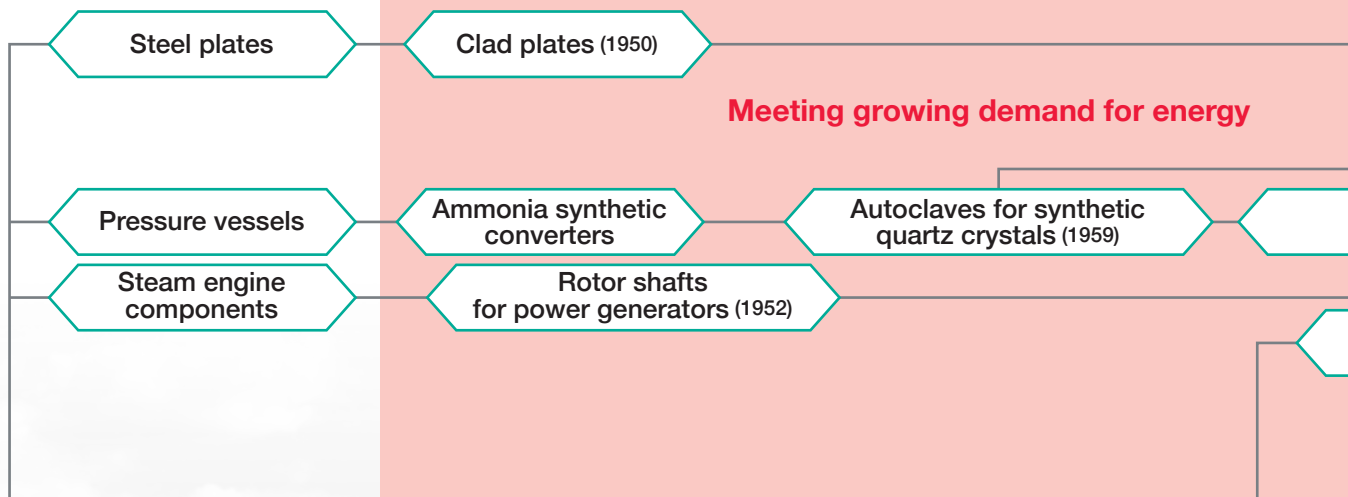
Creating and circulating materials that meet the needs of the times on the strength of our integrated production system and foresight

JSW was originally founded to produce advanced weaponry in Japan, which had relied on imports to that point. To fulfill that purpose, we have introduced and developed technologies for the design and control of machinery, the design and development of such constituent materials, and the technologies for producing such resultant machinery & materials. In the century-plus since our founding, the world has changed dramatically. Consequently, the world's needs have also shifted. We continue to implement the latest technologies in the real world by advancing our distinct, proprietary technologies while working with our customers to realize technological innovations. The technology we deploy to create new materials by melting, mixing, and solidifying forms the core of our industrial machinery, material & engineering businesses, as well as our new business. Plastics, for example, are now indispensable materials for daily life. Plastics require the processes of melting, mixing, and solidifying to give them function and form for their various uses. In plastics, as in other areas, the distinct, proprietary technologies of JSW are utilized to facilitate the achievement of a more convenient, prosperous world.

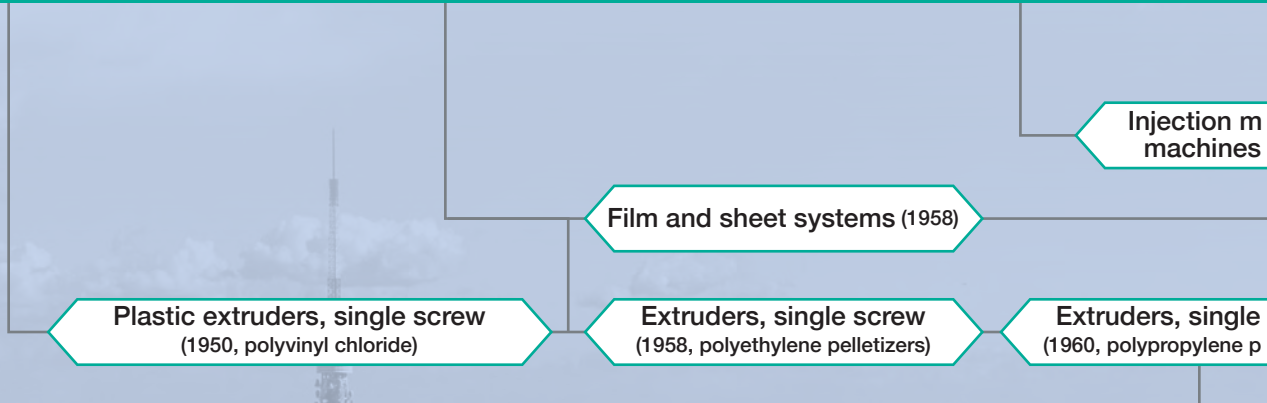


JSW manufactured Japan's first domestically produced official aircraft engine (Army, 1918)

Lineage of JSW technologies and products

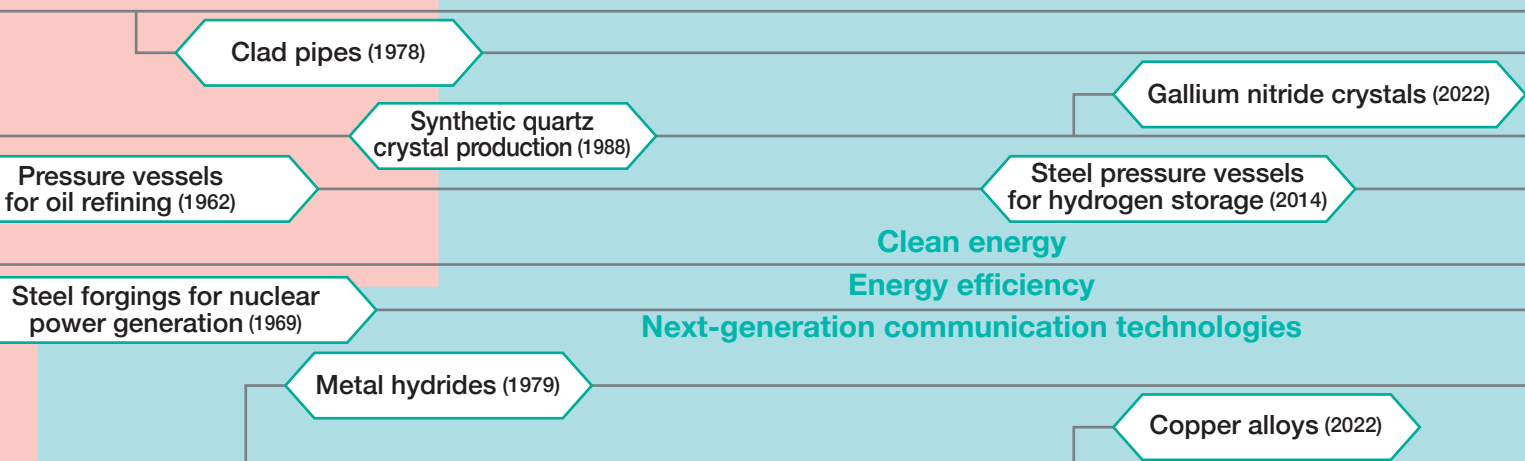
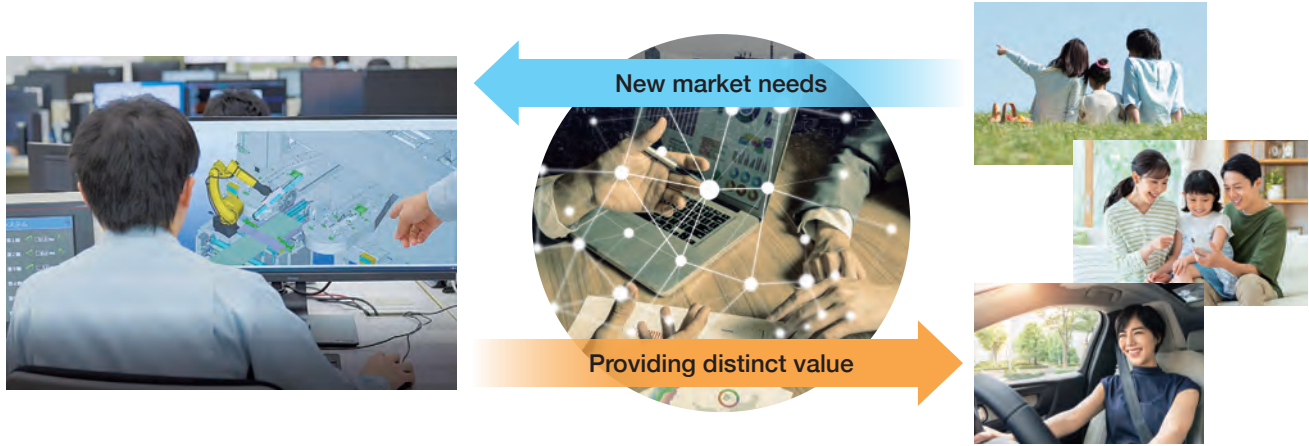


JSW established (1907) Machine element technology, precision control material development and production (melting, ...)

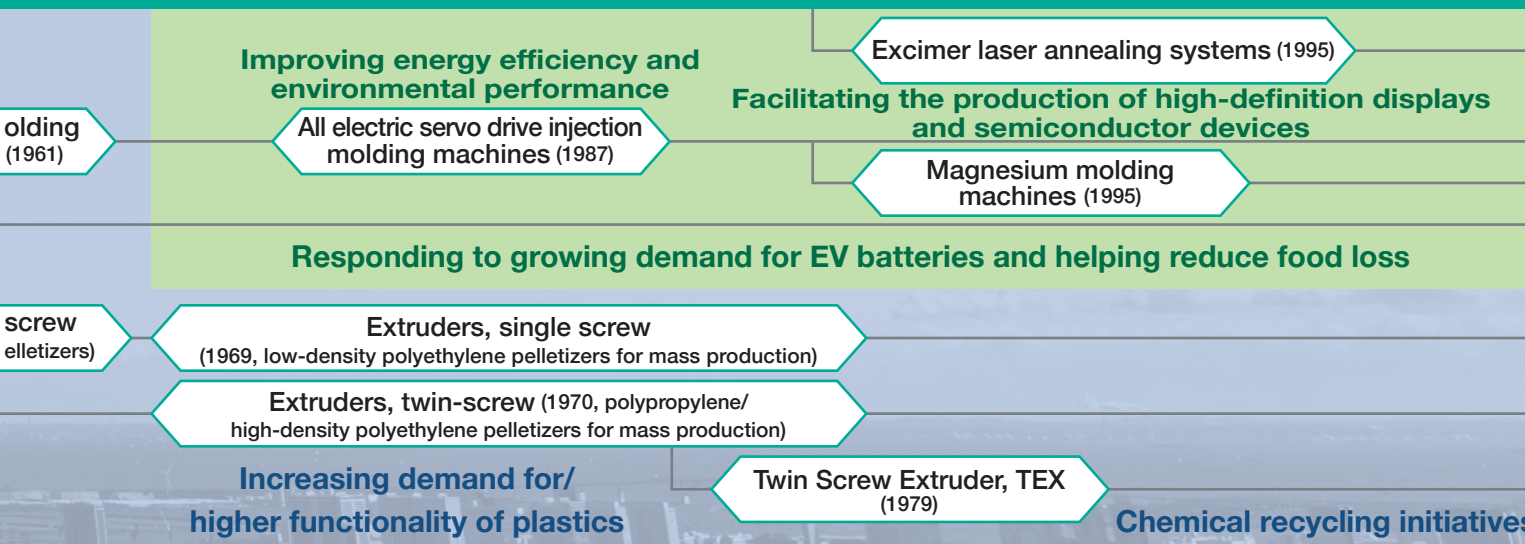


Widespread use of plastics in society

Our elaboration to grasp and develop continuously evolving technologies, made possible only by our in-house proven development and manufacturing, contributes significantly to implementing new technologies.



technology, mixing, and solidifying) technology



Increasing demand for/ higher functionality of plastics

Chemical recycling initiatives

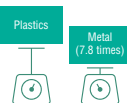
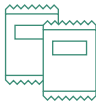




SUSTAINABILITY

Leaving the next generation with a green earth where people, society, and nature coexist in harmony

ENVIRONMENT Realization of a plastic-resource-recycling society

Plastics supporting an energy-efficient society and contribute to CO₂ emissions reduction

Plastic is known as an indispensable material for modern society because of its usefulness in solving social and environmental problems when its qualities are properly utilized. The amount of plastic used in the world continues to increase and is forecast to reach 800 million tons by 2040, about double the current level, and then 1.2 billion tons by 2060.

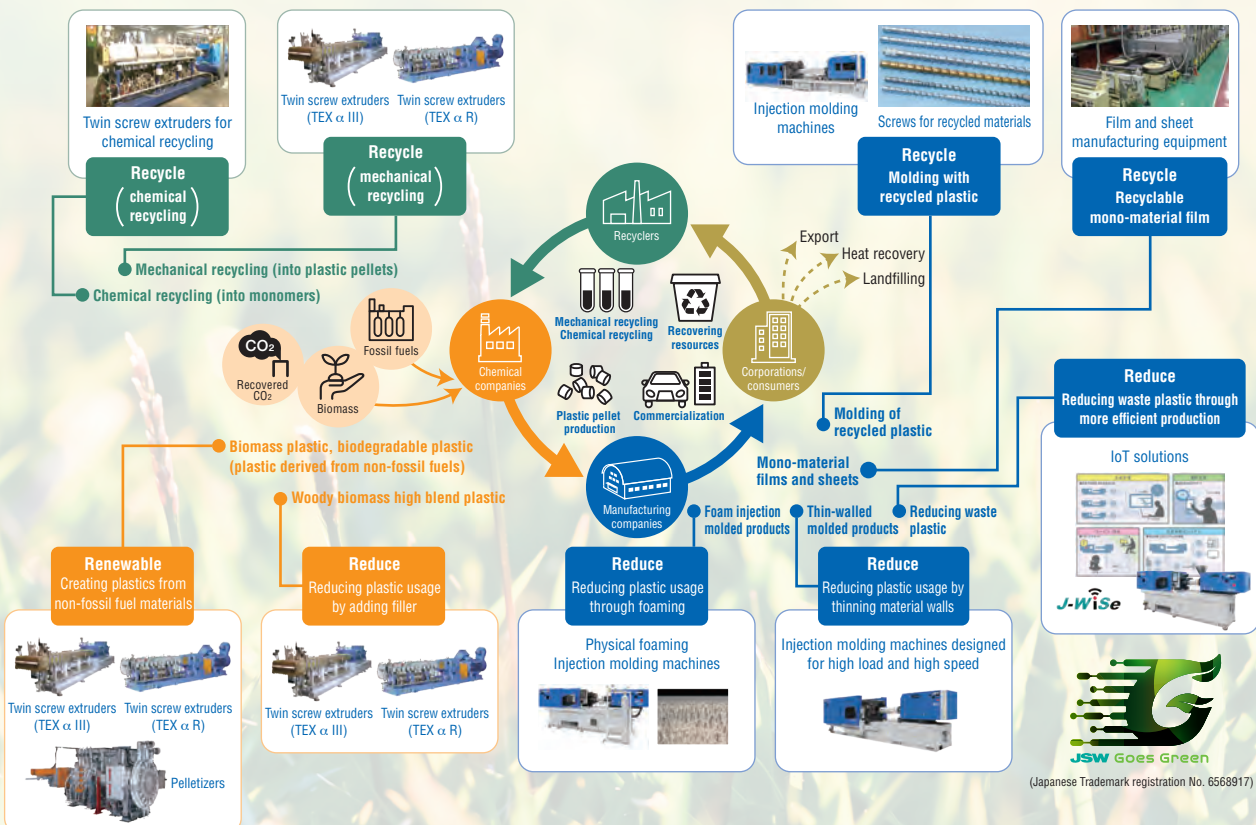
<p>Lightness</p> <p>Plastics is a lighter material compared to other materials. It contributes to reducing the weight of packaging materials, lower fuel consumption of automobiles, and reducing CO₂ emissions during logistics.</p>  <p>Plastics Metal (7.8 times)</p>	<p>Gas barrier properties</p> <p>Plastic food packaging shields food from air and water vapor. This extends shelf life and helps reduce food loss.</p> 
<p>Moldable with low energy use</p> <p>Plastic softens when heated. Pouring it into a metal mold in this state, it can be molded into its final shape with little energy required.</p> 	<p>Thermal insulating properties</p> <p>Plastic sashes have 2.6 times the thermal insulation performance better than their aluminum counterparts. The use of plastic sashes increases the thermal insulation properties of homes and buildings, making it comfortable to live in all of the season.</p> 
<p>Contribution to the spread of renewable energy</p> <p>Photovoltaic panels and wind turbine blades cannot be made without plastic.</p> 	<p>Insulation</p> <p>Plastic films that act as electrical insulators are used to insulate the positive and negative electrodes of lithium-ion batteries, the heart of EVs.</p> 

Social and environmental issues posed by plastic

A linear economy based on mass production, mass consumption, and mass disposal of plastics presents a great deal of problems for our world. This process depletes natural resources (fossil fuels), consumes large amounts of energy in producing and disposing, injures marine animals when plastics are dumped into the ocean, and causes many other problems. The solution to this issue is the realization of a circular economy that balances the enrichment of people's lives (well-being), reduction of environmental impact and economic growth. It is also expected that the circulation takes root, there will be a significant reduction in the amount of plastic dumped.

Efforts to realize a plastic-resource-recycling society

JSW Group has placed achieving of a society that recycles plastic resources at the top of our materiality. In the cycle of plastic-resource-recycle, we provide various types of plastic processing machines at all stages except resource recovery. For example, pelletizers and twin-screw extruders that produce plastic raw materials, film sheet manufacturing equipment that produces products such as films, automotive parts, and bottles from raw materials, injection molding machines, blow molding machines, and twin-screw extruders for plastic recycling, etc. We recognize it is both a responsibility and strength for the Group.



Social **Respecting people—the core of our business activities—and maximizing their potential**

Developing a comfortable working environment for diverse human resources to demonstrate their abilities

We devote energy to anti-harassment activities and health and safety programs, and have established internal and external consultation services. We have also established a resolution process driven by our Anti-Harassment Committee. Additionally, we are developing systems conducive to work-life balance and surveying employees to learn what we need to do to create more comfortable working environments for diverse human resources and provide them with equal opportunities to flourish and advance at JSW.



Better relationships with local communities are the basis of our business activities

JSW Group believes that companies are members of society, and that they progress in collaboration with various communities, including local communities. In addition to contributing to society through its business, the Group also engages in socially responsible activities with the aim of realizing a better society and becoming a company that is rooted in the local community.



Work experience activities



Sponsor and exhibitor for Hiroshima Skill Fair

Providing truly excellent products and services through a tireless pursuit of quality

To maintain and improve the practical techniques and skills we need to retain the strength of our manufacturing structure, we provide in-house training opportunities such as the "Ginou-Dojo" (Technical Skills Dojo) at our Hiroshima Plant and the "Hagane-Juku" (Steel Academy) at the Muroran Plant. In these programs, experienced employees pass down the knowledge they have accumulated over the years to younger employees.



Plant tour



Naming rights contract

GLOBAL NETWORK

Japan

Head Office

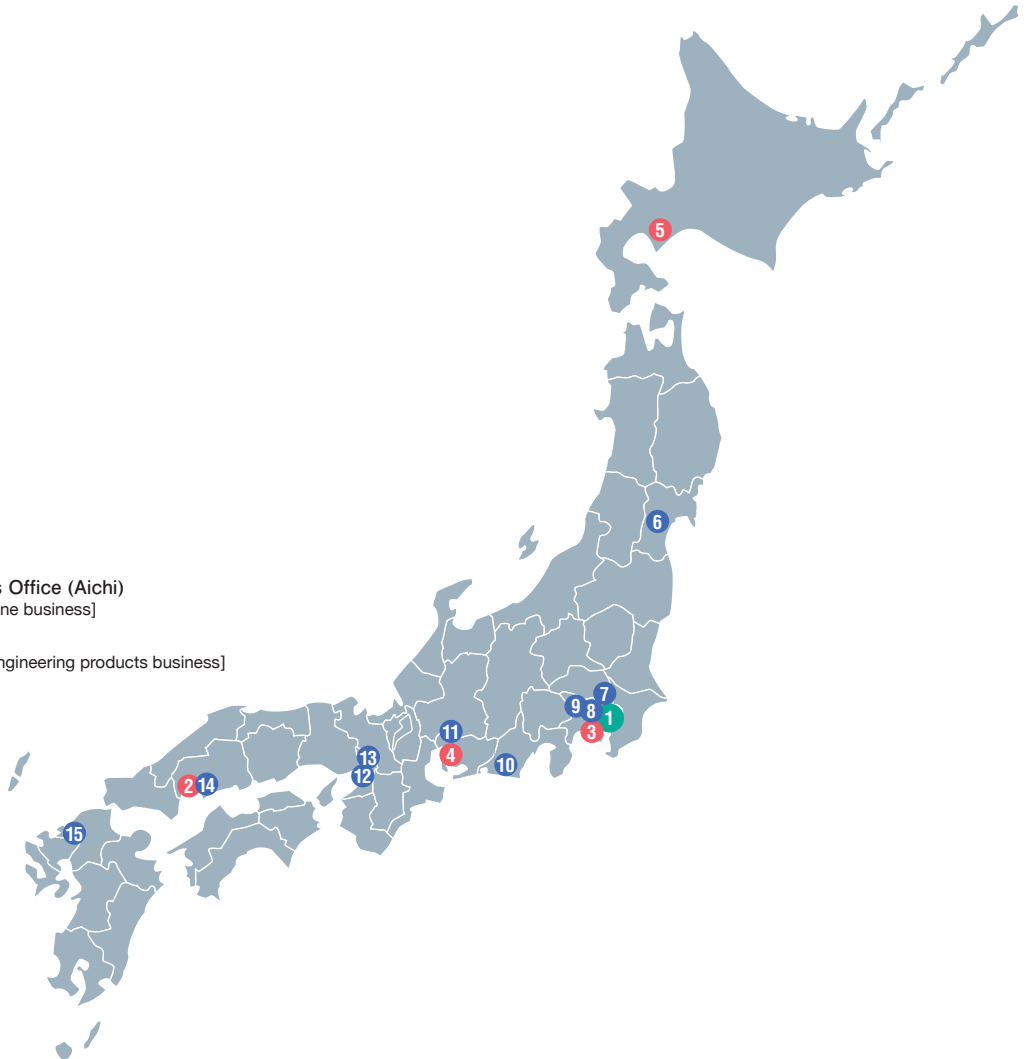
- 1 Head Office (Tokyo)

Manufacturing Plants

- 2 Hiroshima Plant (Hiroshima)
- 3 Yokohama Plant (Kanagawa)
- 4 Meiki Plant (Aichi)
- 5 Muroan Plant (Hokkaido)

Sales Offices

- 6 Sendai Sales Office (Miyagi)
[Molding machine business]
- 7 Kanto Sales Office (Saitama)
[Molding machine business]
- 8 Tokyo Business Office (Tokyo)
[Plastic Machinery Business]
- 9 Fuchu Branch Office (Tokyo)
[Molding machine business]
- 10 Hamamatsu Branch Office (Shizuoka)
[Molding machine business]
- 11 Nagoya Business Office/Nagoya Sales Office (Aichi)
[Plastics machinery business/Molding machine business]
- 12 Osaka Business Office (Osaka)
[Plastics machinery business/Material and engineering products business]
- 13 Osaka Sales Office (Osaka)
[Molding machine business]
- 14 Hiroshima Sales Office (Hiroshima)
[Molding machine business]
- 15 Fukuoka Sales Office (Fukuoka)
[Molding machine business]



MAIN AFFILIATES

Tokyo

NIKKO-YPK SHOJI CO., LTD.

- Selling steel products, molding and plastic machinery, semiconductor production systems, and more

NIKKO KOSAN CO., LTD.

- Outsourcing, temporary staffing, travel services

NIKKO TOKKI CO., LTD.

- Maintaining, and selling parts for defense equipment

Hiroshima

NIKKO SEKKEI CO., LTD.

- Designing, drafting, and other services for machinery products

NIKKO TECHNO CO., LTD.

- Machining, heat-treating, welding, canning, finishing, and assembling ferrous and nonferrous metal materials and special alloy materials, and manufacturing and selling the resulting products

NIPPLA INC.

- Installing, repairing, and maintaining injection molding machines

MG PRECISION CO., LTD.

- Designing, manufacturing, and selling molded metal products produced with injection molding machines

SUN·TECTRO, LTD.

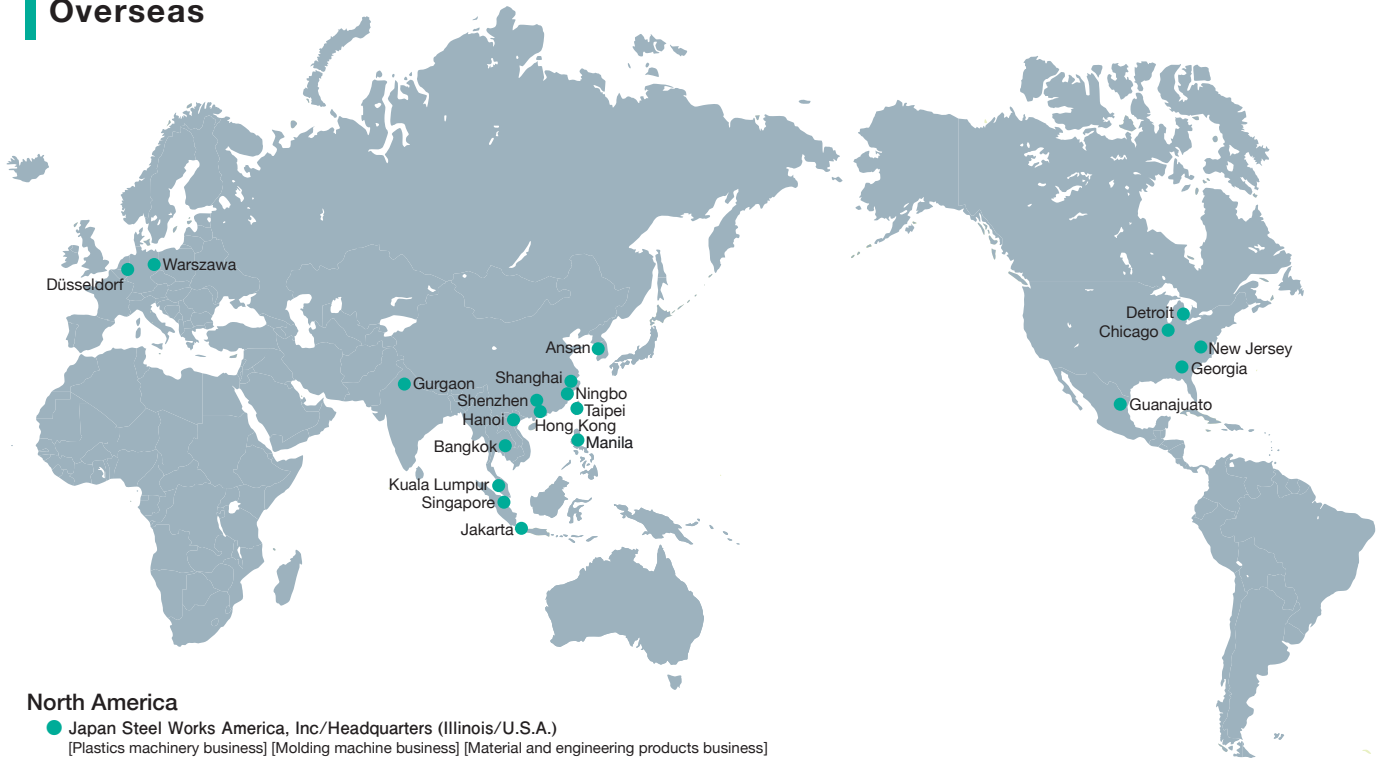
- Designing, manufacturing, and selling electrical components for injection molding machines, plastic machinery, and other industrial machinery

JUST CO., LTD.

- Selling, repairing, and servicing industrial machinery and electrical equipment and constituent parts



Overseas



North America

- Japan Steel Works America, Inc./Headquarters (Illinois/U.S.A.)
[Plastics machinery business] [Molding machine business] [Material and engineering products business]
- East Coast Technical Center (New Jersey Technical Center) (New Jersey/U.S.A.)

Europe

- Japan Steel Works Europe GmbH (Germany)
[Plastics machinery business] [Material and engineering products business]
- JSW Plastics Machinery Europe Sp. zo. o. (Poland)
[Molding machine business]

South Korea

- SM Platek Co., LTD. (Korea)
[Plastics machinery business]

China

- JSW Machinery Trading (Shanghai) Co., Ltd. (Shanghai/China)
[Plastics machinery business] [Molding machine business]
- JSW Electromechanical Trading (Shanghai) Co., Ltd. (Shanghai/China)
[Industrial machinery business]
- JSW Plastics Machinery (H.K.) Co., Ltd. (Hong Kong)
[Molding machine business]
- JSW Plastics Machinery (Shenzhen) Co., Ltd. (Shenzhen/China)
[Molding machine business]
- JSW Machinery (Ningbo) Co., Ltd. (Ningbo/China)
[Molding machine business]

Taiwan

- JSW Plastics Machinery (Taiwan) Corp. (Taiwan, R.O.C.)
[Molding machine business] [Industrial machinery business]

Southeast Asia

- The Japan Steel Works (Singapore) Pte. Ltd. (Singapore)
[Plastics machinery business] [Molding machine business]
[Industrial machinery business] [Material and engineering products business]
- The Japan Steel Works (Thailand) Co., Ltd. (Thailand)
[Plastics machinery business] [Molding machine business]
[Industrial machinery business]
- PT. JSW Plastics Machinery Indonesia (Indonesia)
[Molding machine business]
- JSW Plastics Machinery (Philippines) Inc. (Philippines)
[Molding machine business]
- JSW Plastics Machinery (M) SDN. BHD. (Malaysia)
[Molding machine business]
- JSW Plastics Machinery Vietnam Ltd. (Vietnam)
[Molding machine business]

South Asia

- Japan Steel Works India Private Limited (India)
[Plastics machinery business] [Molding machine business]
- Experience Centre (India)

Central and South America

- JSW Plastics Machinery Mexico S. de R.L. de C.V. (Mexico)
[Molding machine business]

Yokohama

NIKKO KOUKI CO., LTD. ■

- Manufacturing, designing, assembling, and other services for industrial machinery

JSW Aktina System Co., Ltd. ■

- Manufacturing, selling, and maintaining electronic device-related equipment

JSW AFTY Corporation ■

- Developing, manufacturing, and selling semiconductor production systems and more

GM ENGINEERING CO., LTD. ■

- Manufacturing and selling plastic extrusion molding machine

Chiba

TAHARA MACHINERY LTD. ■

- Manufacturing and selling blow molding machines

Muroran

NIKKO UNYU CO., LTD. ■

- General transport (rail track, port)

NIKKOU MURORAN SERVICE CO., LTD. ■

- Outsourcing and other services

MURORAN ENVIRONMENTAL PLANT SERVICE, LTD.

- Operating, maintaining, and inspecting polychlorinated biphenyl waste treatment facilities

FINE CRYSTAL CO., LTD. ■

- Manufacturing and selling synthetic quartz crystals and other processed goods

MURORAN COPPER ALLOY CO.,LTD. ■

- Melting and casting of copper alloys

■ Plastics machinery business	■ Material and engineering products business
■ Molding machine business	■ Ordnance business
■ Industrial machinery business	■ New business

HISTORY

1907 The Japan Steel Works, Ltd. was founded as a joint venture of Hokkaido Colliery Steamship Company of Japan, Sir W. G. Armstrong, Whitworth & Co., Ltd., UK, and Vickers Sons and Maxim, Ltd., UK with a capital of 10 million yen
Establishment of head office and plant in Muroran, Hokkaido

1915 Relocation of head office to Tokyo



1920 Acquisition of Hiroshima Seisakusho K.K. (located outside Hiroshima-shi) and establishment of Hiroshima Plant



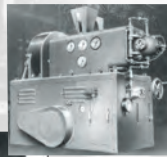
1935 Construction of the Yokohama Plant in Kanazawa-cho, Kanagawa Prefecture
Construction is completed, and operations are launched in June 1936



1938 Construction of the Tokyo Plant in Fuchu-cho, Kitatama-gun, Tokyo Prefecture
Construction is completed, and operations are launched in May 1941

1950 Change of trade name to Kyu Nihon Seikoshu and prompt dissolution of the company. New establishment of The Japan Steel Works, Ltd., with a capital of 200 million yen, which assumes ownership of the former company's four plants (Muroran, Hiroshima, Yokohama, Tokyo), head office, and other sales offices

Enters the plastic processing machinery field, manufactures its first extruder



1961 Manufactures the 1st injection molding machine



1963 Introduces blow molding machine technology from West Germany

1969 Establishment of offices in New York, Dusseldorf, and Tehran

1975 Establishment of offices in Los Angeles, Houston, and Singapore

1978 Establishment of Japan Steel Works America, Inc. in the USA

1979 Launches twin-screw extruder (TEX) for compounding



1983 The Yokohama Plant is relocated and goes into operations
Establishment of Beijing Office
Receives Deming Prize

1987 Entry into the information systems business
Launch of All Electric Servo Drive Injection Molding Machine



1988 Established Fine Crystal Co., Ltd. to manufacture and sell synthetic quartz crystals and applied products

1990 Establishment of JSW Plastics Machinery, Inc. in the USA

1991 The Technical Development Center is completed at the Hiroshima Plant

1994 Acquisition of ISO 9001/9002 certification

1995 Launch of the first magnesium injection molding machine



1995 Launch of first excimer laser annealing system



● **1997** Establishment of JSW Plastics Machinery (H.K.) Co., Ltd. in Hong Kong

● **1998** Acquisition of ISO 14001 certification

● **2000** Establishment of JSW Plastics Machinery (Taiwan) Corp. in Taiwan

● **2002** Completes construction of a hydrogen station using our MH storage systems and high-pressure hydrogen compressors

● **2003** Establishment of the JSW Plastics Machinery (C) Corp. in China

● **2005** Establishment of Shanghai Office

● **2007** Marks the 100th anniversary of the company's founding



The Head Office is relocated to Osaka, Tokyo

● **2009** Establishment of the Japan Steel Works (INDIA) Private Limited in India

● **2010** Establishment of the JSW Machinery (Ningbo) Co., Ltd. in China

Establishment of "Hagane-Juku" (Steel Academy) at the Muroran Plant and "Ginou-Dojo" (Technical Skills Dojo) at the Hiroshima Plant in an effort to pass down technical skills



● **2011** Marks the 50 years of the injection molding machine business



● **2012** Localization of the Dusseldorf Office Establishes Japan Steel Works Europe GmbH

● **2013** Selected as one of the "Global Niche Top Companies 100" for nuclear reactor pressure vessels and ultra-large integrated steel castings for generators



● **2014** Establishment of the Japan Steel Works, Ltd. (Singapore) Pte. in Singapore

Establishes JSW Afty Corporation

Develops Steel Pressure Vessels for Hydrogen Stations



● **2015** Acquisition of SM Platek Co., Ltd. of South Korea

● **2016** Acquisition of a 100% stake in Meiki Co., Ltd. Marks 80 years of the Yokohama Plant

● **2020** An absorption-type merger of Meiki Co., Ltd.



A spin-off of the Materials & Engineering Division for the establishment of the Japan Steel Works M&E, Inc.

Marks the centenary year of the Hiroshima Plant

● **2021** A spin-off of the Flat Panel Display Division for the establishment of the JSW Actina System

● **2025** Acquisition of ISO 19443 certification

● **2026** An absorption-type merger of Japan Steel Works M&E, Inc.

To be continued

JSW



www.jsw.co.jp/en/