



Our Philosophy

Corporate Philosophy of The Japan Steel Works,
starting with Purpose

The Japan Steel Works, Ltd.

Establishment of Corporate Group Philosophy, Starting with Purpose

The Japan Steel Works began in 1907 with steelmaking. What society was demanding at the time was superior steel. At the time 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.

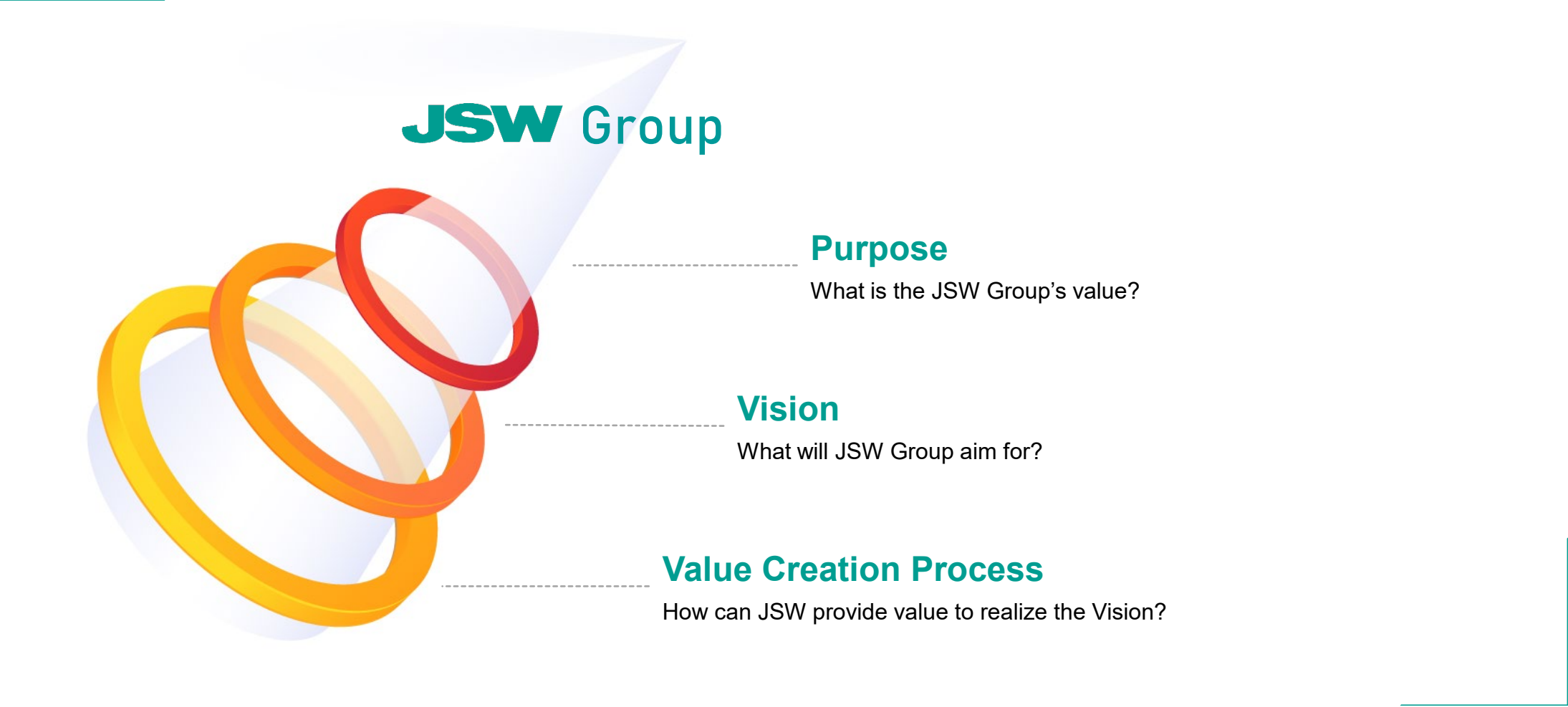
With the recent importance placed on the value of natural capital, lighter weight and low environmental impact materials are required to mitigate climate change risks. After World War II, we focused on the lightweight material plastic earlier than any other company, and introduced various manufacturing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

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



Toshio Matsuo
Representative Director & President

Philosophy Structure



Material Revolution,

making the world sustainable and prosperous.

JSW Group Purpose →

Back to Where JSW Group Started

▷ Innovation in Steel

Steel plays a role in supporting social infrastructures around the world by responding to the various needs required through continuous technological development. For example, superior steel components, equipped with high reliability and excellent material properties, are used in power plants.

▷ Innovation in Plastics

After World War II, we focused on the lightweight material plastic earlier than any other company, and have been developing and implementing various-purposes plastic processing machinery, which is expanding dramatically, contributing to weight reduction of components and energy conservation.

Material Revolution,

making the world sustainable and prosperous.

JSW Group has been continuously striving for material innovation and solving social issues. We will hone our material innovation technology even further and continue to be a provider of solutions to social issues.

Recent Initiatives

In recent years, we have been working on the improvement of mass production technology for gallium nitride (GaN) crystals, viewed as the next-generation semiconductor material, as well as the development of various bonded substrates. By supporting the social implementation of these crystal materials and various elements, we will contribute to the realization of a super-smart society.

JSW Group Vision

What will JSW Group aim for?

Benefiting all stakeholders by developing and implementing industrial machinery and new materials that solve social issues.

JSW Group Vision →

Needs of Society

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

The mobility field, which is undergoing a major shift in its business model toward a carbon-neutral society, including reduction of CO₂ emissions, requires the use of lightweight materials leading to improved fuel efficiency.

We have great expectations for the next generation of crystals as materials because everything around us will be connected to the network in a super-smart society where the real world and virtual space are merging together. As such, creating new power semiconductor materials that simultaneously satisfy high-speed, large-capacity communications and energy conservation must be essential.

JSW Group Vision

Benefiting all stakeholders by developing and implementing industrial machinery and new materials that solve social issues.

JSW Group will continue to meet the needs of society by using Material Innovation technology.

Industrial Machinery Products

We will supply the world with equipment for manufacturing products made from waste plastics based on our established recycling technology, leveraging our knowledge of plastics cultivated up until now.

In addition to the magnesium injection molding machine, which has already been successfully put into practical use, globally we will develop and provide industrial machinery for social implementation of environmental-friendly, lightweight materials, such as cellulose nanofiber and plastics reinforced with carbon fiber.

Materials

We make use of the technology to manufacture various crystals, including quartz crystals. We develop mass production technology for gallium nitride crystals, which are expected to be used as materials for laser diodes, high-frequency devices, and high-voltage power semiconductors, as well as materials for various bonded substrates. By doing so, we will support the social implementation of various energy-efficient elements.

JSW Group Value Creation Process

JSW Group Core Competence

Melting, Mixing, and Solidifying

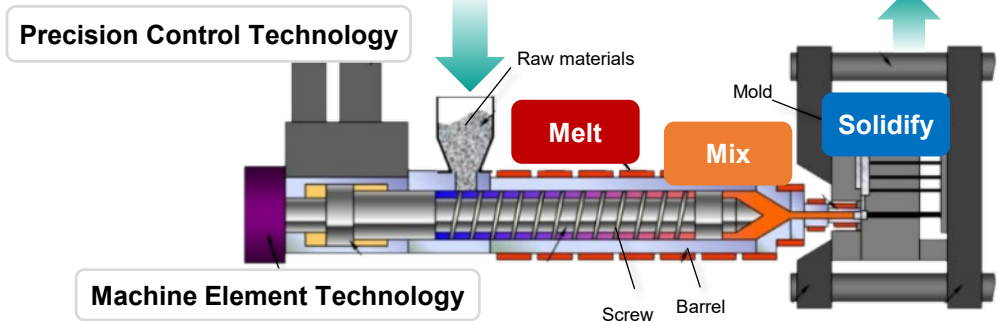


Machine Element and Precision Control

Melting raw materials in an equipment
Mixing them evenly
Solidifying them into the shape needed
EXAMPLE: Injection molding machines



Machine Element and Precision Control Technology

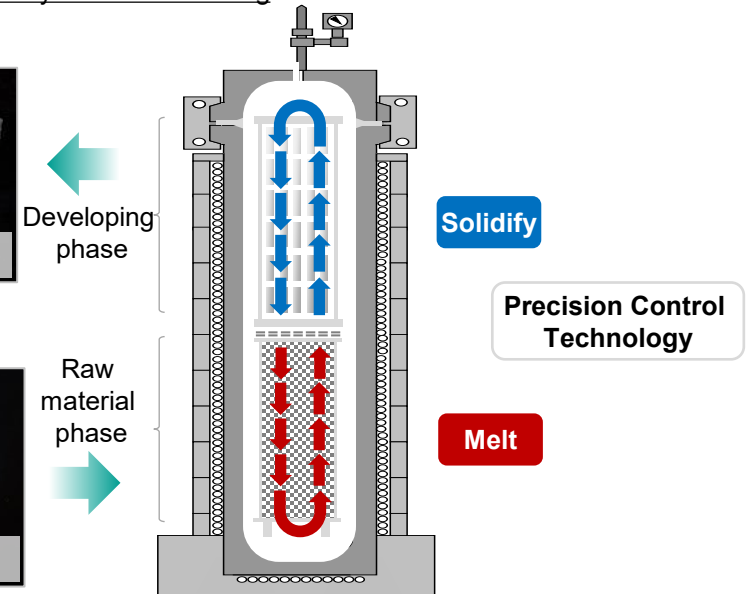


Melting raw materials in a container
Solidifying them into desired quality crystals



Precision Control Technology

EXAMPLE: Crystal manufacturing



JSW Group will further refine its **core competence**, develop industrial machinery and new materials that solve social issues, and supply them to the world, thereby simultaneously creating social value and enhancing sustainable corporate value.

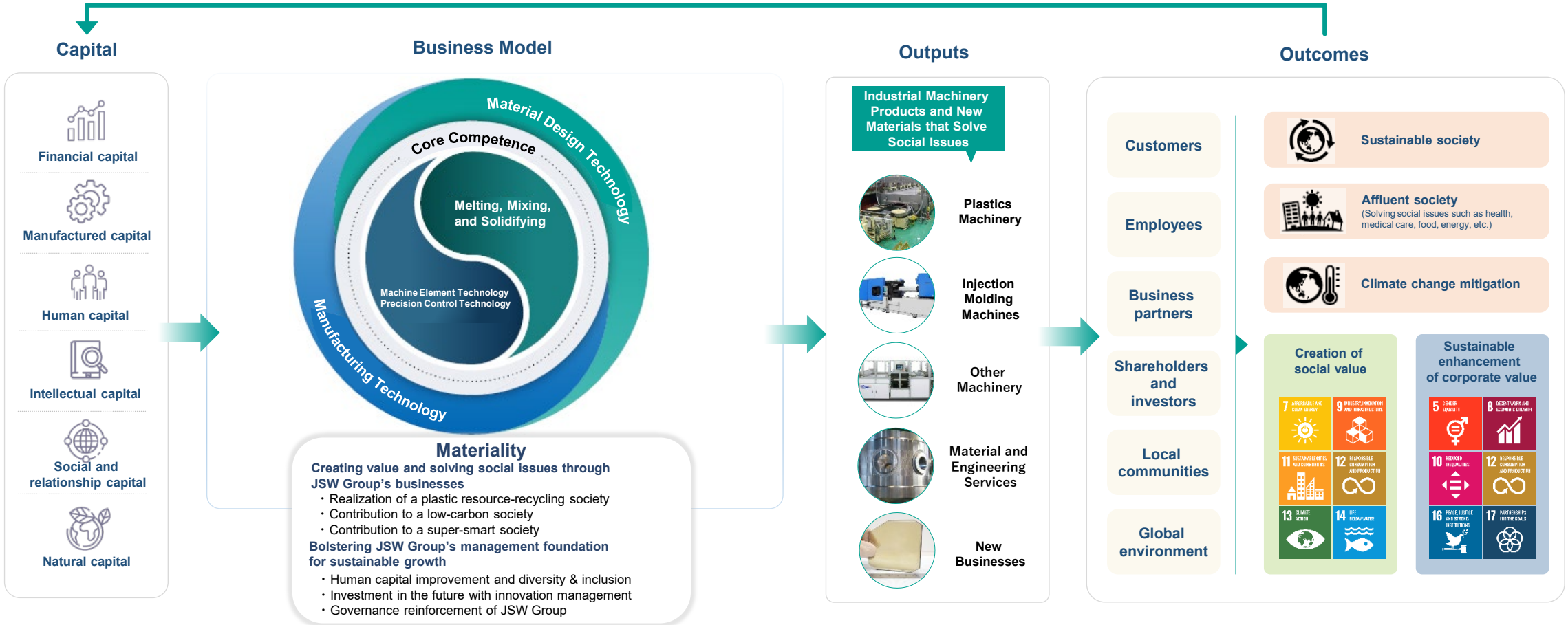
JSW Group Value Creation Process →



Material Revolution,
making the world sustainable and prosperous.



Benefiting all stakeholders by developing and implementing industrial machinery and new materials that solve social issues.



Social Environment Solving the problem of waste plastics (realizing a circular economy) Carbon neutrality in Japan by 2050 Advances in digital transformation, AI and IoT Declining birthrate and aging populations in developed economies Worldwide population growth



JSW
THE JAPAN STEEL WORKS, LTD.