



The Iron and Steel Institute of Japan

Steel is produced at steelworks/steel mills located on vast sites near the coast, using the “blast furnace and converter method” or the “electric furnace method.” The “blast furnace and converter method” involves feeding iron ore (iron oxide) imported from Australia and other countries into a huge reaction vessel called a blast furnace together with coal as a reducing agent, blowing hot air into it to reduce and melt it, and then refining the pig iron extracted from the blast furnace in a converter. The “electric furnace method” is a method that utilizes the excellent recyclability of steel and uses scrap iron as raw material to melt and refine it in an electric furnace. The refined molten steel is solidified and rolled into the desired shape. A single steel mill produces a wide variety of steel products that differ in appearance and properties, supporting a range of demand sectors, including automobiles, social infrastructure, and energy. Steel is an essential basic material for industrial development and improving the lives of citizens, and is also considered an important export item for Japan.



【Converter】



【Blast furnace】



ISIJ Website
<https://www.isij.or.jp/>

The Iron and Steel Institute of Japan is an academic society consisting of approximately 8,000 individual members and around 170 sustaining members (companies and organizations). Since its establishment in 1915, the institute has promoted academic activities related to steel and related fields based on five key pillars: (1) integration of science and technology, (2) collaboration among steel companies, (3) cooperation among industry, government, and academia, (4) integration of steel with other disciplines, and (5) connection between Japan and the world.

【Membership】 (As of the end of May 2024)

Individual members: 8,281 individuals, including university faculty, students, researchers, engineers, and managers from research institutes and companies.
Sustaining members: 167 companies, including Nippon Steel Corporation, JFE Steel Corporation, Kobe Steel, Ltd., Daido Steel Co., Ltd., and others.

【Business Scale (FY2024)】

Operating income: 628 million yen
- Membership fees and others: 497 million yen, Business revenue: 125 million yen
Operating expenses: 708 million yen
- Activities include lectures/training, research and survey projects, journal publication, etc.

Net assets: 1,435 million yen (End of FY2024)

【Officers】

Board Members: 30 directors, 2 auditors
President: Nobuhiro Fujita (Nippon Steel Corporation)
Executive Director: Kazuhiro Kozawa (The Iron and Steel Institute of Japan)

【Activities】

1. Bulletin and Journal

- Journal (Open access journal) ●Bulletin

ISIJ
International



ISIJ Int.

Tetsu-to-Hagané

Ferrum

Tetsu-to
-Hagané



<https://isijint.net/jp/>

<https://tetsutohagane.net/>

Ferrum



<https://portal.isij.or.jp/ferrum/>

2. ISIJ Annual Meetings

Held twice a year in spring and autumn, this is the association's largest event, attracting approximately 1,500 participants per session. The program includes student poster sessions and joint sessions with The Japan Institute of Metals and Materials.

3. Academic Society

There are six academic divisions:

- 1)High Temperature Processes,
- 2)Sustainable Systems,
- 3)Instrumentation, Control and System Engineering,
- 4)Processing for Quality Products,
- 5)Microstructure and Properties of Materials,
- 6)Process Evaluation and Material Characterization.

4. Technical Society and Interdisciplinary Technical Committees

There are 19 technical divisions organized by steel production processes, product categories, and technical fields. These divisions serve as platforms for engineers from sustaining member companies to collaborate, aiming to enhance technologies and foster human resource development. In addition, three interdisciplinary technical committees address cross-industry issues through investigation and discussion.

5. International Exchange

We host international conferences and bilateral symposia to promote global collaboration.

6. Research Grants

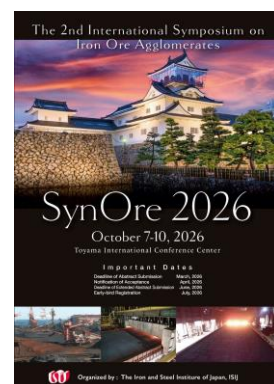
We provide research funding with a total annual limit of 200 million yen.

7. Human Resource Development

We foster the development of future leaders in the steel industry, from students to corporate professionals. Various technical courses and online lectures are also offered.

8. Awards and Recognition Programs

Outstanding achievements by members and others are recognized at an awards ceremony held during the Spring ISIJ Meeting.



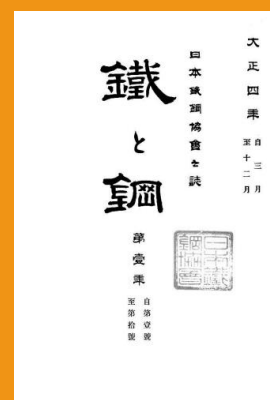
 The Japan Iron and Steel Association celebrates its 110th anniversary.

History and tradition

The Iron and Steel Institute of Japan was established in 1915 and celebrates its 110th anniversary in 2025. In addition to publishing "110 Years of the Iron and Steel Institute of Japan," the association is holding anniversary lectures and publishing a special issue of its journal.



The Iron and Steel Institute of Japan First president,
Kageyoshi NORO



"Tetsu-to-Hagané" Volume 1
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(1915)

New Challenges: Carbon Neutrality Initiatives

The process of producing iron using the "blast furnace + converter method" has been established as an energy-efficient steelmaking process, but with the emergence of global warming issues, there is a growing momentum for change in processes that generate large amounts of CO2 emissions. The Iron and Steel Institute of Japan will bring together the wisdom of industry and academia to tackle this issue.

The Iron and Steel Institute of Japan
Membership Information

<https://www.isij.or.jp/about/individual.html>



The Iron and Steel Institute of Japan Secretariat

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