

Steel Plantech

Heat the World, Shape the Future

Corporate Information



ABOUT US

JP Steel Plantech Co. (Steel Plantech) is a leading Japanese steel plant engineering manufacturer. We fulfill the expectations of our customers by providing optimal hardware and software technologies in addition to meticulous services. Our portfolio covers all stages of the steelmaking process, from strategic facilities planning to after-sales services.

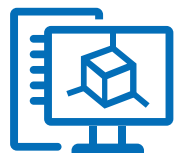
OUR SERVICES



Planning and Estimation



We prepare the optimum plan for our customers by placing ourselves in their position and making considerations from various angles, such as layout, processes and costs. We also offer a wide range of other services, including consulting for feasibility studies and investments in new facilities and remodeling.



Design



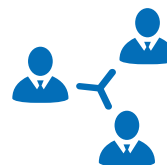
We realize advanced customizations tailored to each customer and respond to various needs through personnel who leverage our strengths, which includes ample experience in design, 3D computer-aided design and other state-of-the-art designing tools. We also offer economical plans utilizing standard models.



Procurement



We have a framework for not only procuring materials and machinery but also for ordering the production and construction required at plants from around the world. This enables us to realize optimum procurement that meets our customers' needs. Of particular strength in China and India is our collaboration with local affiliates and partners that allows us to provide customers with high-quality products at economical prices.



Project Management



We take full advantage of the talents of our personnel and know-how based on abundant experience in turnkey construction to fulfill our agreements soundly in all aspects, from quality and costs to delivery date.



After-sales Services



We also provide after-sales services, such as parts provision, inspection, repair and facilities renovation and remodeling. Our swift and highly reliable services allow customers to use their facilities with a peace of mind even after delivery.

Corporate Mission & Managing Principles

The source of our expertise and know-how has been nurtured with our customers over the past half century to reach the highest standard of steel plant engineering technology. We will continue to refine this technology, develop state of the art capabilities, and provide “Made of Japan” products and services that will delight our customers and contribute to the development of the world’s steel and nonferrous industries as well as to local communities and to conserve the global environment.

PLANTECH MIND

We are committed to exceeding customer expectations by providing the most advanced products and services for steel plant worldwide with the highest level of technology and professional engineering.

PLANTECH WAY

We pledge to act with sincerity in accordance with society’s highest ethical standards. We value people, we value ourselves, we value our society and we value the environment.

Message from the president

Plantech Mind for Customers

SPCO Continues to Provide Technology that Contributes to People and Society

The SDGs and carbon neutrality are major goals for mankind to be achieved by 2030 and 2050 respectively.

Under the banner of "Green & Smart," Steel Plantech is committed to contributing to a sustainable society as one team. We will achieve this by solving our customers' various issues through the steel-based manufacturing plants and various engineering services we provide.

In addition to the steelmaking engineering technologies we have developed over the years, we will utilize digital technologies such as data science, AI, and IoT, which have made great progress in recent years, and integrate advanced technologies such as robotics, CCUS, hydrogen utilization, and power electronics. We will also actively incorporate knowledge from other industries. We will also reconsider and reform our working practices throughout the entire company, including the back office. Such work style reform can be realized by using DX-related technologies. We will remove boundaries between organizations, break down barriers with outside parties, and work with collaborative partners to rebuild an open engineering chain. With this attitude, we will take on new challenges. We will continue to change day by day, responding swiftly to advanced technologies and changes in the social environment.

We believe that "we are not qualified to stay in business unless we are a company that contributes to society, pleases people, and is appreciated by future mankind."

With this high philosophy, we will work together with our customers toward the realization of a sustainable society. Each and every one of us at Steel Plantech will do our utmost and move forward as one.

We look forward to your continued support.



Keiji Wakahara
President and
Representative Director



PROJECT 01



In-house Production of High Added-value Steel Strips Achieved Through the Adoption of the SuPerLeveler™

The SuPerLeveler™ meets today's needs for ever thinner and stronger steel plates in order to increase the performance of existing facilities while reducing the amounts of energy consumed and CO₂ emissions. Through adoption of the SuPerLeveler™, Finnish steelmaker Rautaruukki Corporation succeeded in cultivating new customers.





SuPerLeveler™, for Flattening Hard Steel Plates

Leveling hard steel plates had been said to be technically difficult. However, the SuPerLeveler™ reduces residual stress while enhancing flatness through Automatic Roll Gap Control (ARGC) and Dynamic Crowning Control (DCC), which are technologies for enabling infinite rigidity. For the SuPerLeveler™ customized for Rautaruukki Corporation, in addition to the technologies for enabling infinite rigidity, we also changed the roll driving method to

further enhance the correction of flatness errors. This made it possible to correct the flatness of 30mm thick steel plates with yield strength of 1300MPa. Meanwhile, in terms of the reduction of residual stress, it has been numerically confirmed that with the SuPerLeveler™, the amount of bending that arises in materials thinly split into 200mm widths are reduced to one-fifth, from an average of 12.5mm per 10 meters to an average of 2.5mm.

The In-house Production of High Added-value Steel Panels Achieved

Before adoption of the SuPerLeveler™, leveling was the only process that the Rautaruukki Corporation outsourced, but Rautaruukki was faced with the problem of returned product in cases in which it was not possible to produce steel sheets at the required level of quality. However,

the adoption of the SuPerLeveler™ enabled high-quality leveling to be carried out in house at Ruukki, thereby ensuring the quality of its products while also eliminating outsourcing fees to other companies, thereby reducing production costs.



Successful Differentiation and New Customer Development

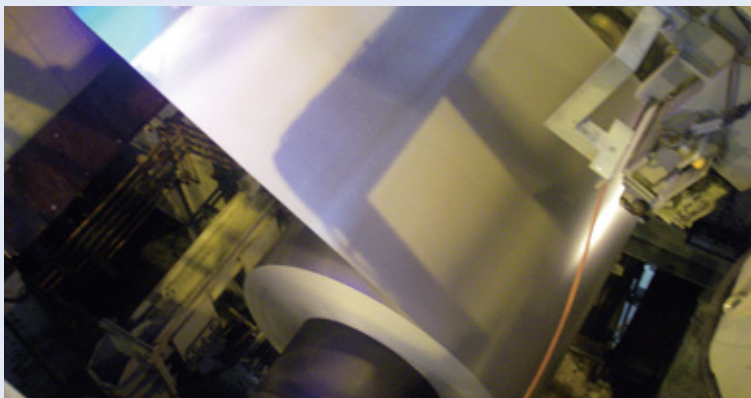
By adopting the SuPerLeveler™, the Rautaruukki Corporation was able to increase the productivity of flat panels with no residual stress and succeed in boosting the added value of its heavy plates. Further,

in addition to increasing sales volume by developing new customers, the company was able to differentiate itself from competitors through its ability to produce high tensile-strength steel plates.

PROJECT 02

Best Grade Steel Strips Through the Combination of Rapid Cooling Technology for CALs and CGLs with CSC's Original Operating Technology

Steel Plantech's CALs and CGLs fulfill a variety of the technological needs of Japan's steel industry, and have been implemented for the production of high-quality steel sheets that are used primarily as external panels for automobiles. With the market increasingly oriented towards high-grade steel for higher added-value products, the China Steel Corporation (CSC) of Taiwan adopted Steel Plantech's CAL and CGL, and has further strengthened its status as one of the world's leading steelmakers.



Technology that Enables Rapid Cooling of Steel Strips

Rapid cooling technology is particularly important when manufacturing special quality materials, such as high tensile and dual-phase steel strips. With greater focus on the reduction of vehicle weight, these specialty steels, which are strong and light, are being used for automotive outer panels. To enable this, a portion of

the cooling facilities utilizes a method in which the hydrogen concentration within the furnace is raised in order to speed up cooling. Steel Plantech is currently handling five of CSC's lines. This technology was incorporated when revamping lines that had been previously supplied by Steel Plantech.

Customized for CSC's Original Operational Technology

CSC developed in-house cooling speeds suitable for the respective alloy elements of steel. Steel Plantech customized its CAL and CGL to match the original operational

technology or production process to realize the cooling speeds required by CSC, thereby successfully meeting CSC's quality needs.



Enhancing CSC's Position as a First-rate Steelmaker

With the adoption of Steel Plantech's CAL and CGL, CSC was able to make full-scale entry into automotive outer panel manufacturing. It is steadily boosting sales while also cultivating new customers. In particular, CSC can now meet the demanding quality levels of Japanese automobile manufacturers to which they had not delivered products in the past, but

from which they are now receiving orders. The beneficial effects are clearly being seen in increased sales as well as improved status as a steelmaker with the orders from Japanese automobile manufacturers. These objectives were achieved through the combination of CSC's and Steel Plantech's technological strengths.

PROJECT 03

Installation of the Environmentally Friendly Electric Furnace ECOARC™ for a 30% Reduction of Electric Power Consumption

ECOARC™, with its scrap preheating shaft, is an environmentally-friendly, highly energy-efficient electric arc furnace. ECOARC™ was chosen by the steelmaker in Thailand, whose core products are steel bars, as their main weapon to reinforce their cost competitiveness.





Preheating Technology that Reduces Power Consumption and Saves Costs

ECOARC™, which utilizes technology original to, recovers high-temperature off-gas that is generated during the steel melting process. The recovered heat is used to preheat scraps

and to melt scrap using relatively little energy. ECOARC™ lowers electric power consumption and saves costs. Moreover, it reduces CO₂ emission.

Issues Unique to Thailand Also Overcome

Scrap found in Thailand is lower bulk density than which found in Japan because it is thinner, longer and wider. So, scrap handling could be difficult in Thailand but we achieved smooth commissioning and operation by taking

advantage of the experience in 4th ECOARC™. Furthermore, as a result of repeated meetings with idea between customer staff and Steel Plantech supervisor, the length of the shutdown for installation was minimized.



To be More Competitive Manufacturer

With the installation of the ECOARC™ system, The customer was able to reduce production costs and achieve growth into an even more competitive manufacturer

in Thailand. Furthermore, The customer was able to be one of the first to respond to environmental issues in Thailand, where fossil fuels are burnt to generate electricity.

CORPORATE OUTLINE

Company Name JP Steel Plantech Co.

Locations

Head Office	Yokohama Connect Square 13F 3-3-3 Minatomirai, Nishi-ku, Yokohama, Kanagawa 220-0012, Japan *4 minutes walk from "Minatomirai" station, Yokohama Rapid Transit Minatomirai Line 7 minutes walk from "Sakuragicho" station on JR and Yokohama Municipal Subway Blue Line Phone:+81-45-612-8470 Fax: +81-50-3156-7054
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Kansai Satellite Office	Sumitomo Seimei Shin-Osaka Kita Building 4F, 4-1-14 Miyahara, Yodogawa-ku, Osaka 532-0003, JAPAN *3 min. walk from Shin-Osaka Station Phone: +81-6-7178-3851 Fax: +81-50-3156-3336
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Capital 1,995 million yen

Shareholders JFE Engineering Corporation Hitachi Zosen Corporation Kawasaki Heavy Industries, Ltd.

Founded April 1, 2001

No. of employees 325(as of April 2024)

Major business Design, manufacturing, installation, sales and after-sales servicing of steelmaking machinery, non-ferrous metal producing machinery, and coke-making machinery as well as related equipment for use in Japan and overseas.

Corporate Officers (2024.4~)	<p>Keiji Wakahara President and CEO, Representative Director</p> <p>Akihiko Yoshizato Vice President and Representative Director Assist the President in all aspects of management operations In charge of Plant Engineering Div., Project Management Div., Quality Assurance Dept. Business Operation Manager under the Construction Business Law</p> <p>Katsuyoshi Fukuma Vice President and Representative Director Assist the President in all aspects of management operations In charge of Corporate Planning&Administration Dept., Sales Div., SafetyHealth Control Dept., Chinese Subsidiary.</p> <p>Yasuki Mikami Director In charge of System Solution Div., Procurement Dept., India Subsidiary.</p> <p>Atsuo Shikata Outside Director</p> <p>Tadashi Shibayama Outside Director</p> <p>Takashi Kotaki Outside Director</p> <p>Tsuyoshi Uchida Corporate Auditor</p> <p>Takeshi Oyamada Outside Auditor</p> <p>Takeshi Hotta Outside Auditor</p> <p>Akihiko Tonoki Outside Auditor</p>
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Executive Officers and Respective Assignments (2024.4~)	<p>Shigeru Oyama General Manager of Project Management Div.</p> <p>Hiromitsu Kurokawa General Manager of System Solution Div.</p> <p>Kenichi Ueda General Manager of Plant Engineering Div.</p> <p>Hiroshi Goto Deputy General Manager of Plant Engineering Div.</p> <p>Kenji Aoki General Manager of Sales Div.</p> <p>Shigeru Shiraki General Manager of Corporate Planning Administration Dept.</p>
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Keiji Wakahara
President and CEO,
Representative Director



Akihiko Yoshizato
Vice President and
Representative Director



Katsuyoshi Fukuma
Vice President and
Representative Director



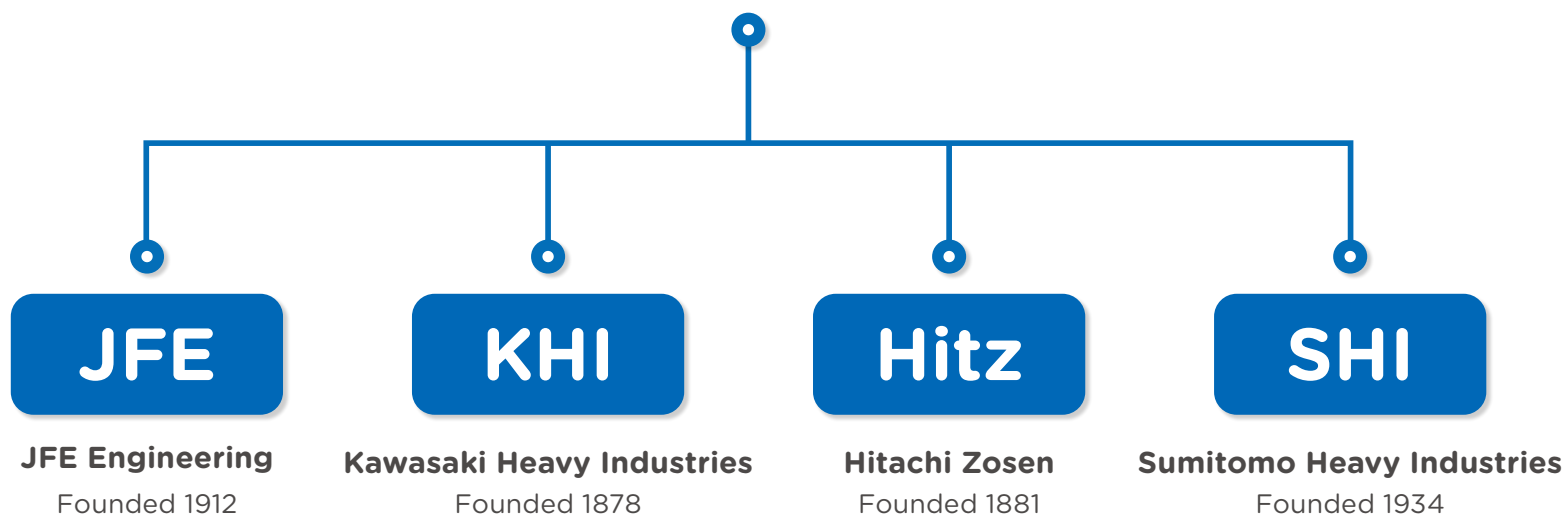
OUR ORIGINS

Steel Plantech is a joint venture of four companies. With the history of the respective companies as its foundation, Steel Plantech makes full use of the experience and knowledge accumulated by each company to promote its future development.



Steel Plantech

Founded 2001



Affiliated Companies

India



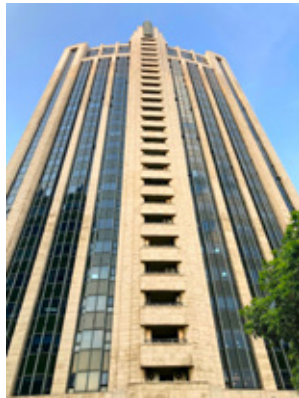
Steel Plantech India Pvt. Ltd. (SPI)

SPI was established in order to enable the smooth provision of our products in India, which is showing remarkable growth. Furthermore, for our customers outside of India, the company provides designs at competitive prices by utilizing talented Indian engineers.

Infinity Benchmark Building 14F Unit1403, Block-EP & GP, Sector-V, Salt Lake City, Kolkata - 700091, India

Tel: +91-33-4043-7800

India



Steel Plantech Shanghai Co.

China is not only a market where we receive orders and deliver products, but also an important region for manufacturing and procurement. By communicating our requests and design concepts more speedily and accurately, we can improve the quality of manufactured products and realize smooth procurement operations.

Room 2703, Building No1, No.369, Xianxia Road, Changning District, Shanghai

Tel: +86-21-5298-5026



Ironmaking

Coke Dry Quenching (CDQ)

Sinter Plant - Energy-saving Ignition Furnace

Sinter Plant - Expansion Pallet Car

Waste Plastic Injection System (WPIS)

Sinter Plant - Water-Sealed Circular Cooler



Sinter Plant - Cooler Waste Heat Recovery System (WHRS)



Pulverized Coal Injection (PCI) System for Blast Furnaces



Blast Furnace Gas Cleaning System (RSW - Ring Slit Washer)



Lime Kiln



Converter



KR Hot Metal Desulfurization System



RH Degasser



OG System



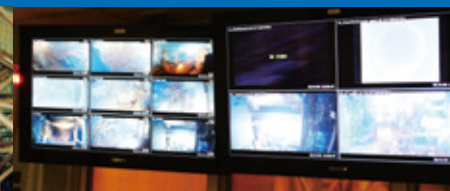
Ecological and Economical Arc Furnace (ECOARC™)



Next Generation Ecological and Economical Arc Furnace (ECOARC light™)



Electric Arc Furnace



Computer System for Steelmaking Facilities



OUR PRODUCTS



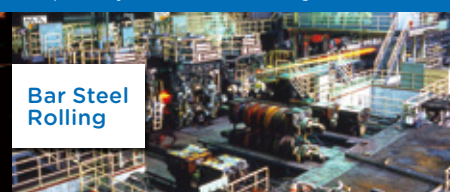
Continuous Slab Caster



Continuous Bloom, Beam Blank and Billet Casters



Quality Strip Production Process (QSP)



Section Rolling Mill



Bar and Wire Rod Mill



Shifting Reverse Mill



Roller Straightener



Cold Mill



Zoom-Mill™

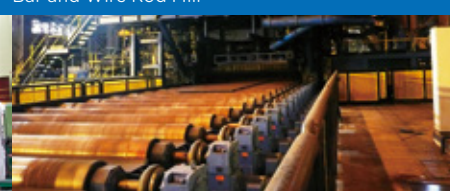
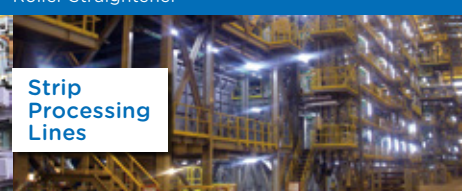


Plate Leveler



Plate Shear



Continuous Annealing Line (CAL)



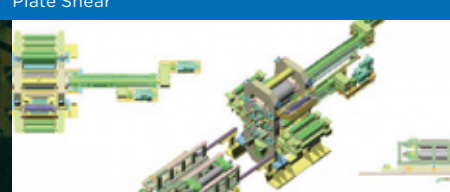
Continuous Galvanizing Line (CGL)



Annealing and Coating Line (ACL)



Color Coating Line (CCL)



Temper / Skin Pass Mills



Tension Leveler

