

Kobelco Steel Tube Co. Ltd: the seamless stainless steel tubes & pipes specialist

A photograph showing a large industrial furnace with a glowing orange interior. A long, cylindrical stainless steel tube is being processed, with a bright white and yellow glow emanating from its end. The tube is positioned horizontally, extending from the left towards the center of the furnace. The background shows various industrial components, including a control panel with several red and green lights and buttons. The overall scene is dimly lit, with the primary light source being the heat of the furnace.

As one of the Kobe Steel Group companies, Kobelco Steel Tube Co., Ltd. has a manufacturing base in Shimonoseki City, Yamaguchi Prefecture, manufacturing and selling seamless stainless steel tubes & pipes. The company has an annual seamless stainless steel tubes & pipes production volume of about 16,000 tonnes/year (over 1,300 tonnes/month). Stainless Steel World spoke to company President, Mr. Takashi Onishi, and learned that its high quality products and punctual delivery is highly appreciated by customers both in Japan and overseas.

By Kiyoko Ichikawa & Joanne McIntyre



Clean pipe for semiconductors (bright annealed tube).

well as high-grade steels such as duplex and high nickel, etc.”

The company was founded in 1959 under the name ‘Chofu-Kita Plant of Kobe Steel, Ltd’, but in April 1996 it became independent from Kobe Steel, Ltd. and changed its name to Kobe Special Tube Co., Ltd. In April 2016, the name was changed again, this time to Kobelco Steel Tube Co., Ltd. (hereinafter referred to as KST). By promoting the Tokyo branch office to the Tokyo headquarters, we set up a two-headquarters system with Shimonoseki headquarters.”

The Tokyo head office handles 80% of total sales, including all exports and 60% of domestic sales, while the Osaka branch office handles 40% of domestic sales.

“The incorporation of the globally recognised “Kobelco” brand into our company name, was done with the intention of expanding sales, particularly to new customers overseas,” explained Mr. Onishi. The Tokyo Head Office is in charge of market research and other overseas-related functions, while the planning and administration departments have been relocated to Shimonoseki. “This shortens the distance between us and our customers, increases sensitivity to changes in the external environment, improves information-gathering skills, and promotes the development of the market and new

“Our company is an integrated manufacturer producing seamless stainless steel tubes and pipes products from raw materials (round bar billet),” begins Mr. Onishi. “These materials are secured through a stable supply from our parent company Kobe Steel, Ltd. and other leading manufacturers. We maintain a large stock of these materials, which allows us to handle the demand for making general-use tubes & pipes as



In 2018 Kobelco Steel Tube Co., Ltd started commercializing coil tubes to supply to domestic users. Pictured is OD ¼” coil tube.

product offerings, to increase market share.”

Long term investments

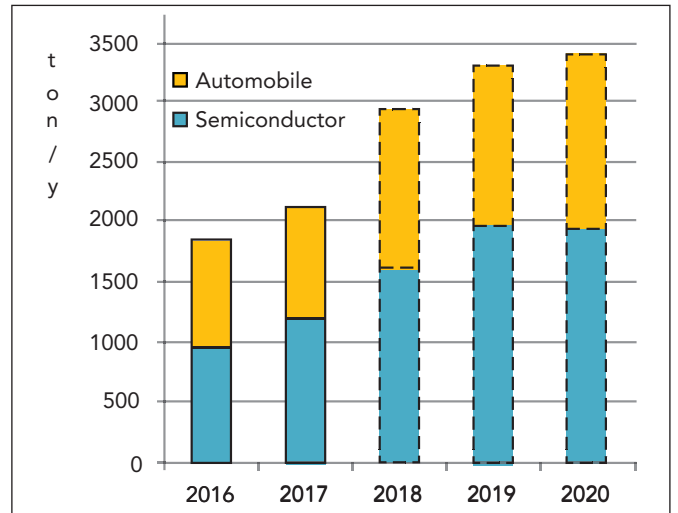
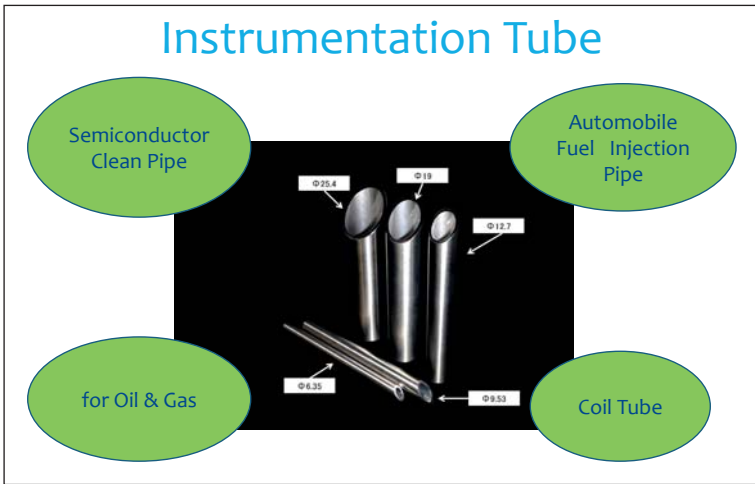
One of the company’s core products is instrumentation tubes, including bright annealed (BA) tubes & pipes for semiconductors and BA tubes & pipes for automobiles. This market is supported by robust demand in the semiconductor and automotive fields. Today, KST is the fourth largest global supplier of these products with 5.3% of the global market in 2017 (Steel &

“KST is the fourth largest global supplier of bright annealed tubes & pipes for semiconductors and automobiles”

Metals Market Research Company Data).

“In the semiconductor market, high performance and advanced applications such as smartphones, IoT, and the AI sector continue to grow and expand. In response to the vigorous demand for semiconductors, capital investments are being implemented or planned at semiconductor factories in South Korea, US, Taiwan, and China,” continues Mr. Onishi.

In the automotive field, a rapid increase in the number of vehicles equipped with GDI engines is anticipated in order to meet fuel efficiency and environmental regulations. The company supplies BA tubes & pipes to GDI engine parts,



The Kobelco Steel Tube Co., Ltd team are confident that it will soon become one of the top three manufacturers for instrumentation tubes in the region.

Production volume of BA tubes and pipes for semiconductors and automobiles (by weight).

while demand for BA tubes & pipes for semiconductors is further expanding sales volume.

“Our company is now implementing capital investment to improve production capacity of BA tubes & pipes, with an eye to increasing sales of instrumentation tubes for the oil & gas market, where demand is finally returning,” explains Mr. Onishi.

“Initially we had made medium-term plans to prepare for an increase in our production of BA tubes & pipes in the three years from 2018 to 2020. However, as I mentioned, there has been such strong demand from the semiconductor and automobile sectors, and in order to capitalise on this great opportunity, our production plans were reduced by one year. We now have plans to expand BA tubes & pipes production capacity as of January 2019 from 140,000 tubes & pipes/month to 170,000 tubes & pipes/month, translating to a 25% increase in production capacity.”

Pioneering manufacturer

“Our company is a pioneer in entering the BA tubes & pipes market for semiconductors and is also a world leader in semiconductors,” explains Mr. Onishi. “Today we are one of the largest suppliers of BA tubes & pipes. This year we have also started commercializing coil tubes to supply to domestic users. In addition, we recently received inquiries from overseas and are currently in the negotiating process.”

The straight tubes & pipes and coil tube product groups are the company’s third

largest market after semiconductors and automobiles, and as such it is also considering further expansion into the oil & gas market.

“In addition, we have been able to extrude 5-inch and 6-inch pipes with our 2000-ton press to cater to the market for general purpose stainless steel tubes and pipes (GTP). For the purpose of further enlarging the outer diameter, we have produced our own cold working technology which expands the diameter after hot working, and started production of 8-inch pipes. We also aim to manufacture 10-inch pipes this year, and these are currently under development.”

KST has a well-equipped R&D division, which in addition to the innovations described previously, has also been tasked with developing lean duplex for the next generation of automotive instrumentation tubes, and further developing the next generation steel type.

It is also undertaking research and development of its own highly corrosion resistant stainless steel.

Overseas expansion

The company has been successful in expanding its market share across Asia and North America and has also serviced a range of European customers for many years. Within the near future, expansion plans will see it developing certification acquisition activities in the Middle East, with a view to expanding sales to that region.

“The expansion in BA tubes & pipes production capacity by January 2019 will allow us to capture and expand within the market for BA tubes & pipes in the semiconductor and automotive sectors, while simultaneously developing and expanding into the oil and gas market, thereby establishing our presence to users around the world,” explains Mr. Onishi.

“Furthermore, as part of our PR activities in overseas markets, in November 2017,



Kobelco Steel Tube Co., Ltd. is expanding its product offerings to include pipes in key sizes such as 4”, 6”, 8” and 10” diameters.

we exhibited for the first time at the Stainless Steel World Exhibition (SSW) in Maastricht, in the Netherlands. This was the first time that we had promoted our products to European and other international users, and it made us realise that the brand recognition of KST's stainless steel tubes & pipes is still fairly low. In order to remedy this and increase our brand recognition, we will attend the next SSW exhibition in 2019 and continue our international PR activities as well."

Technical superiority

"Our strength lies in our proprietary cold processing technology, which allows us to manufacture high quality BA tubes & pipes and coil tubes," continues Mr. Onishi. "Regarding our market share for instrumentation tubes in particular, I am convinced that we will soon become one of the top three manufacturers in the region."

"In addition, as described previously, the technology to expand the diameter has further evolved, and the commercialisation of 10-inch pipes is also underway.

Based on advanced technological capabilities that produce these high-quality products, we will further develop materials for BA tubing & piping capacity, expanding to 12-inch diameter pipes, highly corrosion resistant stainless steel and other materials, while identifying market needs. We plan to promote the sales of our products to



Coil tubes are one of the company's most important product groups.



The incorporation of the Kobelco brand into the company name was a move to expand sales, particularly to new customers overseas.

customers in Japan and overseas with a high-quality management of delivery dates and short lead times thanks to our group and our proprietary production management system."

Misconduct in Kobe Steel Group

In response to the misconduct in Kobe Steel, Ltd. and its group companies (the Kobe Steel Group) which came to light last year, Mr. Onishi made the following statement. "We deeply and sincerely apologize once again for causing substantial trouble to our customers due to the misconduct of the Kobe Steel Group. We hereby report to you on our products as follows."

"In response to the revelation of the misconduct, the Kobe Steel Group has conducted the quality self-inspections, covering the products manufactured or supplied from September 2016 to August 2017, consisting of (i) confirming whether manufacturing specifications as provided in the mill test certificates and other testing documents matched the specifications called for by the applicable public standards or customer specifications (specification check); and (ii) confirming whether actual testing/inspection results matched those recorded in the mill test certificates (document comparison)."

"In addition, the Independent Investigation Committee started on October 26, 2017 and completed its investigation into the quality self-inspections around the end of February 2018. As a result, the Independent

Investigation Committee has not found any particular issues which affect appropriateness of the quality self-inspections, or which affect the quality of our products."

"In connection with the misconduct in Kobe Steel Group, we have received quality audits and quality record confirmation by many customers since last October, and also from these results, there have not been found any quality problem within our company. In addition, we received a special audit from the JIS certification body, and after such special audit certification of our quality control system maintained with no issues or qualifications. Furthermore, in June this year, we received the ISO 9001/2015 version audit and renewed the certification. We would like for customers to continue to use our products with confidence, just as you have been doing in the past."

Facts & Figures

Name:	Kobelco Steel Tube Co., Ltd
Founded:	1959 (as a factory of Kobe Steel, Ltd.)
Independence:	April 1996 (as Kobe Special Tube Co., Ltd.)
Equity capital:	JPY 4,250,000,000
Employees:	360 (as of March 2018)
Shareholder:	Kobe Steel, Ltd. (100%)
E-mail:	inquire-kobest@kobelco.com
URL:	www.kobest.co.jp