

SANKO SEIKO Co., Ltd.

By breathing life into scrap iron, SANKO SEIKO has created numerous products that play an indispensable role in the buildings and structures that form the social infrastructure.

We will continue to move forward while addressing the ever-changing social and environmental requirements.

Vision

In parallel with Japan's high-speed growth, SANKO SEIKO followed a path of expansion into the 21st century by maintaining its outstanding engineering capabilities to offer products that underpin today's social infrastructure. The Company's achievements to date and the ceaseless passion of its entire staff for creating better steel materials constitute the driving force for offering high-quality products on a continual basis.

In addition to the Japanese market, the Company is focused on the world markets and will continue to enhance its technologies from a global perspective.



SANKO SEIKO has consistently engaged in the "rebar manufacturing" business to help build the social infrastructure, and it will continue to evolve in a way that ensures harmony with the environment.

Greetings





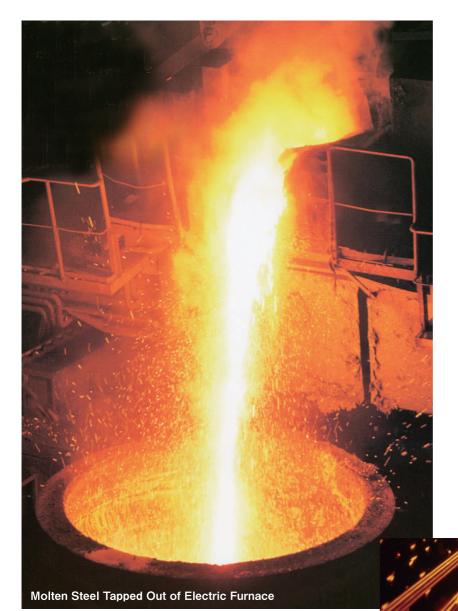
Since its establishment, SANKO SEIKO has enhanced the quality of its products by listening to the feedback from customers, thereby achieving a considerable reputation for the excellent quality of its products. In responding to the drastically changing social environment, the Company has been committed to the development of technologies in line with its corporate philosophy that's always leading the times. To provide customers with an added sense of security and higher trust, the Company has maintained the ISO 9001 and 14001 certifications for its quality and environmental management systems, respectively. Under a consistent policy of ensuring the safety of customers, the Company will make continued efforts to create products that achieve higher customer satisfaction, while making rational investments from the perspectives of nonpolluting, resource saving and energy conservation so as to minimize the environmental burden. Your continued advice and support would be greatly appreciated.

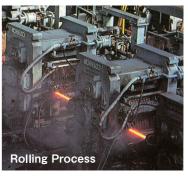
Shiro Suzuki, President and CEO

Our technologies have already seen advances in the 21st century. Yet we will continue to further advance these technologies.

Factories and Plants

Even in our highly digitalized society, called the IT society, what matters most in the manufacturing process is the expertise of the engineering staff, which can only be attained through long-time onsite experience. SANKO SEIKO highly values investments in factory equipment, which helps the engineering staff to acquire higher skills to offer world-class products.





From the roughing mill to the finishing mill, up to 16 units of continuous rolling machine are in operation to achieve efficient molding.



Finished products are carefully inspected in terms of appearance, dimensions, geometry, weight and others. Then they go through mechanical testing to have their yield point, tensile strength, elongation and bendability examined on a lot-by-lot basis.

Steel materials are molten in an electric furnace to eliminate impurities. The molten steel then undergoes adjustments as to chemical components and temperature before being tapped out of the furnace.

After passing the rolling process, steel deformed bars will be cut by a dividing shear into a length that fits in the cooling bed where they are left to be cooled.

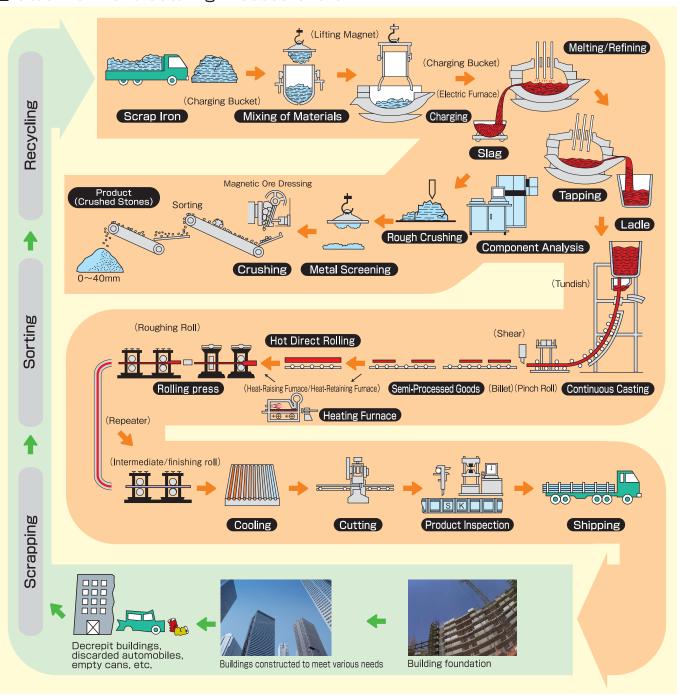
Cooling Bed Line

Persistence and Passion to Seek the Best in the Products It Offers—The Original Spirit of SANKO SEIKO.

Manufacturing Process

Anything that does not meet the set standards is excluded. No compromise is allowed. We believe that such a strict attitude toward product inspections will improve the products we offer and stimulate employees' motivation to acquire higher technological excellence. The persistence and passion to seek the best products is a core value of SANKO SEIKO engineers, who pay careful attention to every process of the manufacturing lines to create the highest-quality products.

Steel Bar Manufacturing Process Chart



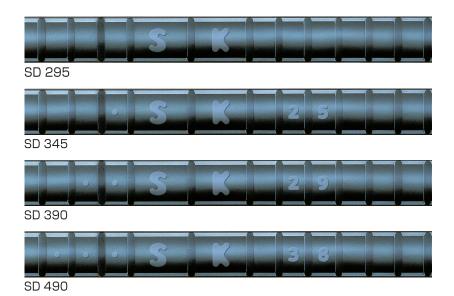
Certification marks guarantee the high reliability of SANKO SEIKO products, which contribute to the building of tomorrow's social infrastructure.





JIS Q 9001 JIS Q 14001 JSAQ575,JSAE1579

Products



@ ;	株式会社 〇	SD	2 9 5	ā
網番				
呼び名		長さ		m
本数	本	製造年		- 年
JISQA		88	G 3 ⁻ 証 番 0307	号
種 類	SD	2	95	
鋼番				
呼び名		長さ		m
本 数				本
製造年				年
0	三興製銀	目株	式会	社



0	E與製鋼 SD 株式会社 ○ SD	390 饗
鋼番		
呼び名	長さ	m
本数	木 製造年	年
JICQA	認	G 3112 証番号 0307009
種類	SD:	390
鋼番		
呼び名	長さ	m
本 数		本
製造年		年
0	三興製鋼株	式会社



JIS Certified Products (Certification No.: QA 0307009)

	To Continued Froduction (Continued and Cooperation)									
	JIS Desi	gnation	JIS G 3112 Steel Bars for Concrete Reinforcement							
	Cate	gory	Steel Deformed Bar							
Sta	andard L	ength (m)	The bar is available in standard lengths from 3.5 m to 12.0 m with 0.5-m incre					rements.		
Produ	ict Type	Designation	SD	295	SD 345		SD 390		SD 490	
		С	Up to	0.27	Up to 0.27		Up to 0.29		Up to 0.32	
	Si		Up to	0.55	Up to 0.55		Up to 0.55		Up to 0.55	
Chemical	" I IVIT		Up to	1.50	Up to 1.60		Up to 1.80		Up to 1.80	
Component (%)	P		Up to	0.050	Up to 0.040		Up to 0.040		Up to 0.040	
(**)	S		Up to	0.050	Up to 0.040		Up to 0.040		Up to 0.040	
	Carbon equivalent (Ceq)		_		Up to 0.60		Up to 0.65		Up to 0.70	
Note 1: A	Alloy eleme	ents not listed in t	his table can l	oe added whe	n so required.	Note 2: Ced	q = C + Mn/6	+ Si/24 + Ni/	40 + Cr/5 + l	Mo/4 + V/14
	Yield point or proof stress (N/mm²)		295 or above		345 to	o 440	390 to 510		490 to 625	
	Tensile strength (N/mm²)		440 to 600		490 or above		560 or above		620 or above	
	Yield ratio (%)		— Up to		o 80	Up to 80		Up to 80		
	Tensile test piece		Equivalent to		Equivalent to		Equivalent to		Equivalent to	
Mechanical			No. 2	No. 14A	No. 2	No. 14A	No. 2	No. 14A	No. 2	No. 14A
Properties	Elon	gation (%)	16 or above	17 or above	18 or above	19 or above	16 or above	17 or above	12 or above	13 or above
		Bending angle	180°		180°		180°		90°	
	Bendability		Up to D16	Above D16	Up to D16	Above D16 and up to D41	Nominal d	lia × 2.5	Nominal	dia × 2
		Inolas radias	Nominal dia. × 1.5	Nominal dia. × 2	Nominal dia. × 1.5	Nominal dia. × 2	Norminal dia. A 2.3		Norminal dia. A Z	

Note: For the steel deformed bar the dimensions of which exceed that of the designation D32, the elongation value in this table will be reduced by 2, as the designation increases by 3. However, the maximum limit for the reduction is 4.

Steel Bar Mass and Dimensions and Ridge Tolerances

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	Unit length	Nominal	Nominal	Nominal	Average ridge-to-ridge distance Maximum value (mm)	Ridge height		Sum of ridge clearances
Designation	mass (kg/m)	diameter (mm)	cross-sectional area (cm²)	circumferential length (cm)		Lowest (mm)	Highest (mm)	Maximum value (mm)
D10	0.560	9.53	0.7133	3.0	6.7	0.4	0.8	7.5
D13	0.995	12.7	1.267	4.0	8.9	0.5	1.0	10.0
D16	1.56	15.9	1.986	5.0	11.1	0.7	1.4	12.5
D19	2.25	19.1	2.865	6.0	13.4	1.0	2.0	15.0
D22	3.04	22.2	3.871	7.0	15.5	1.1	2.2	17.5
D25	3.98	25.4	5.067	8.0	17.8	1.3	2.6	20.0
D29	5.04	28.6	6.424	9.0	20.0	1.4	2.8	22.5
D32	6.23	31.8	7.942	10.0	22.3	1.6	3.2	25.0
D35	7.51	34.9	9.566	11.0	24.4	1.7	3.4	27.5
D38	8.95	38.1	11.400	12.0	26.7	1.9	3.8	30.0
Steel def	Steel deformed bars have bamboo-shaped ridges that are projected at certain intervals.							intervals.

Tolerances						
Length	7 m or less	+40 mm O				
Lengui	Above 7 m The tolerance is increased by 5 mm per a of one meter and any fractions thereof, up					
	Designation	Mass tolerance per bar	Mass tolerance per pair			
Mass	D10~D13		±5%			
	D16~D25	±5%	±4%			
	D29~D38	±4%	±3.5%			

Annex JA (Supplementary Quality Requirements) Yield Ratio

According to an agreement between the parties concerned, the following yield ratio can be applied to round and deformed steel bars except SD 490. Yield Ratio: $\leqq 0.80$

Expanding and Enhancing Its Business Foundation. SANKO SEIKO Provides Society with Trust and Security.

Company Profile and History

■Company Profile

Name: SANKO SEIKO Co., Ltd.

Kuryozutsumi 2-19, Hiratsuka, Kanagawa Location:

254-0801, Japan 0463-22-1750 Phone: Capital: ¥100 million Established: August 12, 1948

Representative: President and CEO Shiro Suzuki

Number of Employees:162

Products: Product name and JIS No.

JIS G 3112 steel bars for concrete reinforcement

Product type

Steel deformed bars SD295, SD345, SD390 and SD490

I and: Factory site area: 47,460m Dormitory site: 4,613 m Buildings: Factory building total floor area: 32,209 m

Dormitory building total floor area: 4,397 m2

Banking Relationships

Sumitomo Mitsui Banking Corporation (Hiratsuka Branch) The Bank of Yokohama, Ltd. (Hiratsuka Branch) Mizuho Bank, Ltd. (Marunouchi Chuo Branch) Shoko Chukin Bank (Yokohama Branch) Japan Finance Corporation (Atsugi Branch) The Kanagawa Bank, Ltd. (Hiratsuka Branch)

■ Major Affiliates

WINFIRST Co., Ltd. (Marketing Department No.1) Tekko Bldg. 6F, 8-2, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-0005 Tel: 03-6212-8901 SANKO Trading Co., Ltd. Kuryozutsumi 2-19, Hiratsuka, Kanagawa 254-0801 Tel: 0463-22-1750 Toshin Kogyo Co., Ltd. Kuryozutsumi 2-20, Hiratsuka, Kanagawa 254-0801 Tel: 0463-24-1280

JIS Product Certificate



IIS Product Certificate

Date of certification Date of reissue

July 3, 2007 February 24, 2021

SANKO SEIKO CO., LTD.

2-19, Kuryozutsumi, Hiratsuka-shi, Kanagawa, Japan

JIC Quality Assurance Ltd., operating as a registered certification body by the M Economy, Trade and Industry under the Industrial Standardization Law where the cont SOJIEC 17065 is stipulated as the criteria of registration thereot, hereby certificial industrial and mineral products or processing technologies mentioned below comply certification criteria and specifications in Japanese Industrial Standards as well as in [1].

- · JIS number, and designation of Products/Processing technologies
 - JIS G 3112 Steel bars for concrete reinforcer
- · Division of certification: G-4 · Type or grade:
 - SD295, SD345, SD390, SD490
- Head FACTORY: SANKO SEIKO CO., LTD.
- 2-19, Kuryozutsumi, Hiratsuka-shi, Kanagawa, Japan
- Basis provision of the Industrial Standardization Law: Article 30, Paragraph 1



JIC Quality Assurance Ltd.



■Company History

- 1948 Established to produce small steel bars at 7-7, Higashi Kojiya 4-chome, Ota-ku, Tokyo, and became a subcontracting factory for NKK Corporation.
- 1956 Raised the production capacity to 3,700 tons of steel bars per month, including the 9-mm steel bars processed under contract with NKK Corporation.
- 1960 15-ton electric furnace constructed to ensure the self-supply of steel ingots.
- 1962 Increased the production amount of steel ingots and declined the processing on consignment of NKK Corporation to expand the steel ingot production system.
- 1965 Modified the equipment at the rolling press plant and innovated advanced equipment. The production was expanded to 6,500 tons per month.
- 1966 Acquired the product certification of JIS G 3112 steel bars for concrete reinforcement.
- 1970 Acquired an 8,500-square-meter site adjacent to the factory to install a 60-ton electric furnace and four strands of a continuous casting machine made by Italia Continia and a refurbished refining plant.
- 1978 Acquired Hiratsuka Industry Co., Ltd., to make it a subsidiary, which was then renamed Hiratsuka Seiko Co., Ltd.
- 1981 Absorbed Hiratsuka Seiko to reorganize the production forces into the Tokyo Head Office Factory and the Hiratsuka Factory.
- 1984 Closed the Tokyo Head Office Factory and concentrated the head office and production forces at the Hiratsuka Factory, where innovative facilities were introduced to achieve monthly production of 40,000 tons.
- 1988 Plotted the production rationalization by DC-electrification of the rough rolling press mills and enforced the system to produce 50,000 tons per month.
- 1993 Additionally installed building dust collectors (NKK).
- 1995 Highly advanced equipment 4-slit rolling equipment (Kobe Steel) and two-tower oxygen generating equipment (Sumitomo Seika) - was introduced to ensure higher product quality.
- 1998 L-line steel bar rolling equipment for D19 to D32 was completed, which combined with the conventional D10-to-D16 production capability, enabled the production of deformed steel bars in sizes from D10 through D32.
- 1999 Acquired the ISO 9001 quality management system certification.
- 2006 Established WINFIRST Co., Ltd., as a distributor of deformed steel bars,
- jointly with Mukoyama Factory Co., Ltd., on a 50-50 joint ownership basis. 2007 Acquired the JIS product certification through JIC Quality Assurance (JICQA).
- 2009 Adopted AC electrification for two finish rolling mills to enhance the quality of products and productivity.
- 2011 Review by the JICQA to determine the continuation of certification concluded. JIS G 3112:2010 applied. Updated the electric furnace transformer HMI (SPCO) and the rolling
 - PLC HMI (Kobe Steel).
- 2012 Enlargement of the production dimension (Designation: D35) of steel deformed bars based on the Special Certification Continuation Examination of JICQA was approved.
- 2014 Refurbished continuous casting equipment and adopted AC electrifi-cation for six intermediate/finish rolling mills to enhance the quality of products and productivity. Acquired the ISO 14000 environment management systems certification.
- 2016 Upgraded the flicker compensation and control equipment for electric furnaces and introduced the Hot Direct Rolling equipment to achieve energy conservation.
- 2017 Introduced product flaw detectors to enhance the quality of products.
- 2018 Ensured compliance with the 2015 versions of the ISO quality and environmental management systems.
- 2019 Promoted energy-saving efforts by introducing a multifunctional burner system for electric furnaces and a high-performance oxygen burner system for drying ladles.
- 2021 Ensured compliance with JIS G3112: 2020.
 - Enlargement of the production dimension (Designation: D38) of steel deformed bars was approved based on the Special Certification Continuation Examination of the JICQA.
 - Upgraded conveyor equipment for continuous casting and heating furnaces to ensure the stability of operations.
- 2024 Upgraded the power receiving equipment and stabilized power supply to the factories.



- 15-minute walk from the South Gate of JR Hiratsuka Station
- 7-minute walk from "Myoujinmae" bus stop



Kuryozutsumi 2-19, Hiratsuka, Kanagawa 254-0801, Japan Tel.: 0463-22-1750 Fax: 0463-22-1755 https://www.sankoseiko.co.jp/