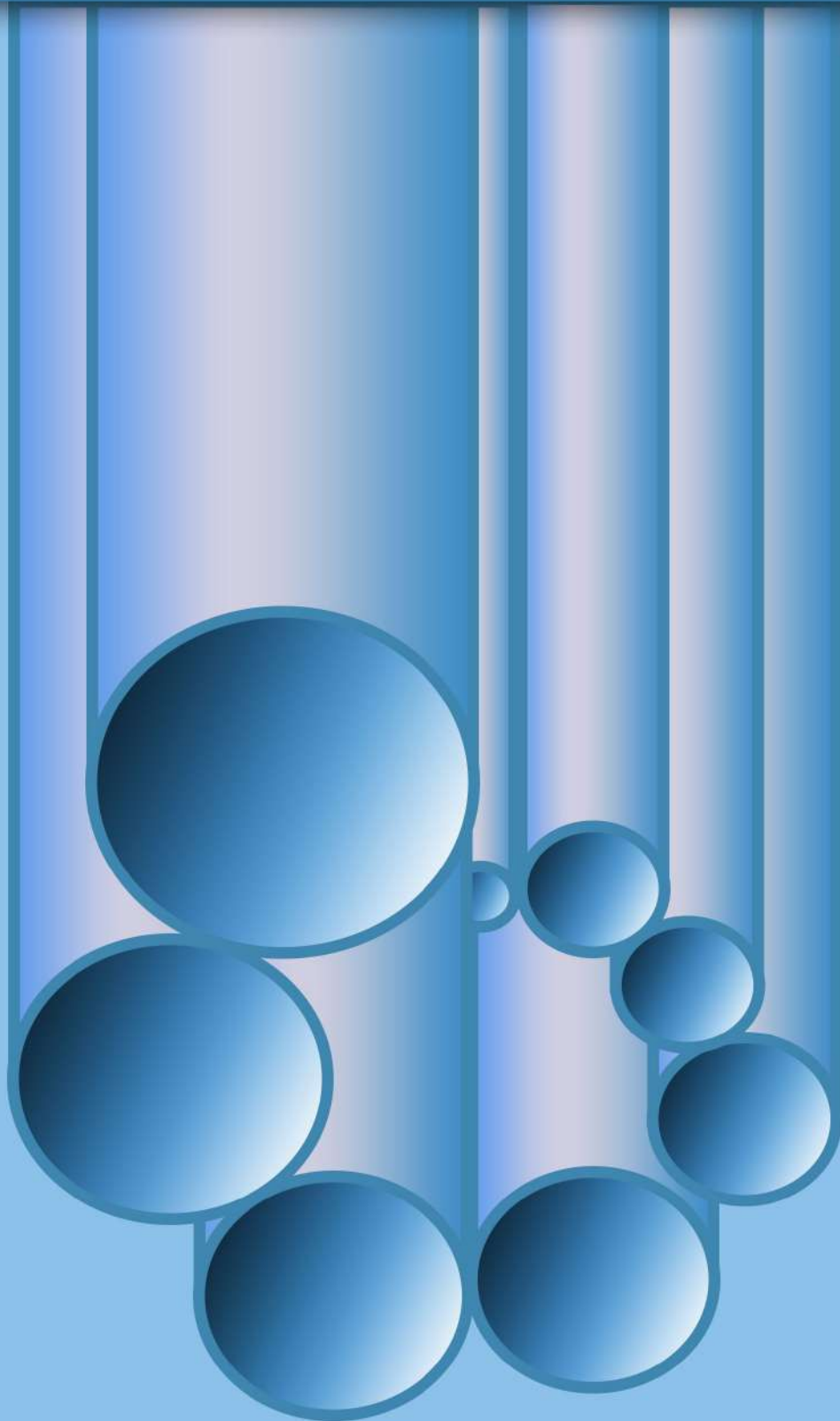


NIPPON STEEL PIPE & TUBE



NIPPON STEEL PIPE & TUBE

Production Control and Quality Assurance

Nippon Steel's sophisticated equipment, expertise and technology make it possible to manufacture and supply pipe to your complete satisfaction.

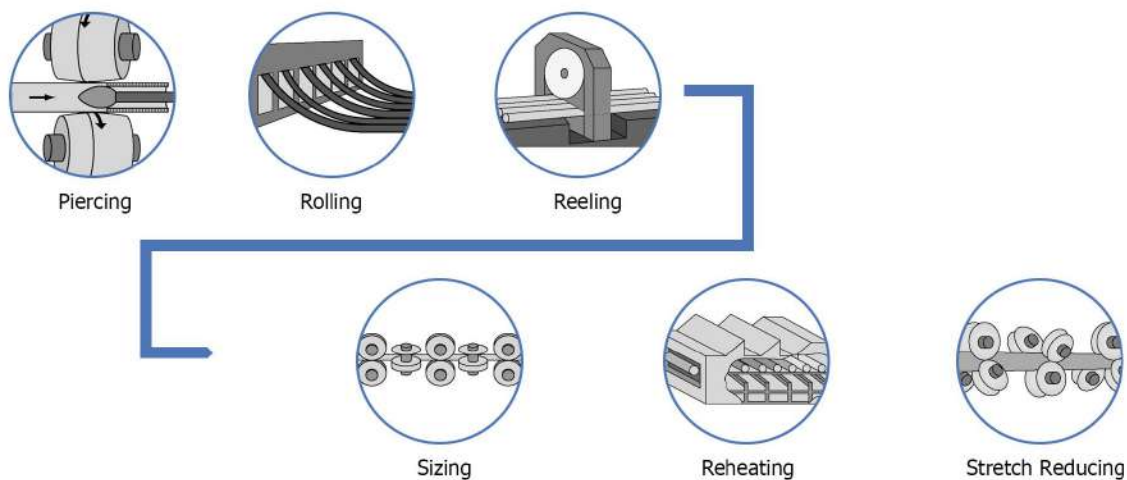
Throughout the processes and operations of Nippon Steel's integrated steel production, exacting production control and quality assurance systems are in effect. Every pipe produced by the company must be certified as having met all the specified quality requirements before it is shipped from the mill. Examples of our pipe manufacturing methods include: (1) computer-aided production control and quality control of all operations, from raw material handling to shipment of finished products; (2) employment of the latest advances in technology for the manufacture of pipe having the exact quality to suit specific needs and applications; and (3) inspection systems so designed as to meet particular purposes, as exemplified by the extensive and effective use of nondestructive testing equipment such as ultrasonic, eddy-current, X-ray and magnetic testers.

All incoming orders are processed at the company's Tokyo head quarters. Orders are input into a computer, which specifies the quality of each product to suit the intended use, then dispatches this data to the computer at the steel mill which is the best positioned to handle the manufacture of the products. Given the quality design, the mill performs the process design based on the materials best suited to meet the quality requirements of the order.



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We use billets that have undergone tapping casting, blooming, and rolling in our Kimistu Works to produce seamless steel pipes and tubes by the Mannesmann plug mill method. Tokyo Works produces high-quality hot seamless steel pipes and tubes, using piercing mills, rolling mills, reeling mills, sizing mills, and stretch reducers on billets heated to high temperatures. We also produce high-grade cold product through cold drawing equipment and a wide range of heat treatment furnaces in order to satisfy the continuously rising expectations of customers.



Billet heating furnace



Piercing mill



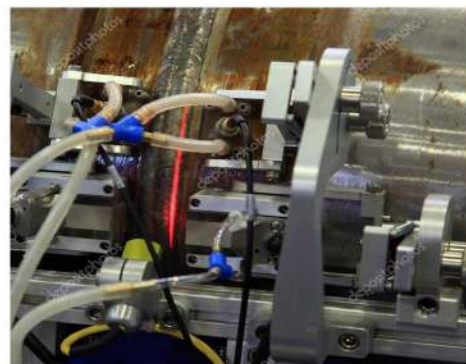
Rolling mill (plug mill)



Stretch reducing mill



Heat transfer furnace



Nondestructive inspection device

Nippon Steel continues its development and improvement efforts so as to be able to manufacture [pipe to any designated standards to fulfill your specific requirements. Some representative standards and specifications are tabulated below along with the corresponding manufacturing process employed at Nippon Steel to ensure compliance; the company manufacture pipe to other international standards, too.

Also available are Nippon Steel standards for special use such as Weldable High Tensile Strength Pipe. All - Weather High Tensile Strength Pipe, Anti-abrasion High Tensile Strength Pipe and Sea Water Resistance Pipe.

When you require quality and reliability. Nippon Steel has the pipe products you need.

STANDARDS		Seamless Pipe		Welded Pipe				
		MM	HE	ERW	CW	UO	SP	BR
API (American Petroleum Institute)								
5L	Line Pipe	●		●	●	●	●	●
5CT	Casting and Tubing		●	●				
5D	Drill Pipe							
2B	Fabricated Structural Steel Pipe					●		●
AS (Australian Standards)								
1836	Welded Steel Tubes for Pressure Purpose							
ASTM (American Society for Testing and Materials)								
A53	Black and Hot - Dipped Zinc - coated (galvanized) Welded Seamless Steel Pipe	●		●	●			
A106	Seamless Carbon Steel Pipe for High Temperature Services	●						
A135	Electric Resistance Welded Steel Pipe			●				
A178	Electric Resistance Welded Carbon Steel and Carbon Manganese Steel Boiler Tubes			●				
A213	Seamless Ferritic and Austenitic Alloy - Steels Boiler Superheater and Heat-Exchanger Tubes	●	●					
A214	Electric Resistance Welded Carbon Steel Heat - Exchanger and Condenser Tubes			●				
A250	Electric Resistance Welded Carbon Molybdenum Alloy Steel Boiler and Superheater Tubes			●				
A252	Welded and Seamless Steel Pipe Piles			●		●	●	●
A268	Seamless and Welded Ferritic and Martensitic Stainless Steel Tubing for General Services		●					
A269	Seamless and Welded Austenitic Stainless Steel Tubing for General Services		●					
A312	Seamless and Welded Austenitic Stainless Steel Pipes		●					
A333	Seamless and Welded Steel Pipe for Low - Temperature Services	●						
A334	Seamless and Welded Carbon and Alloy - Steel Tubes for Low - Temperature Services	●						
A335	Seamless Ferritic Alloy - Steel Pipe for High Temperature Services	●						
A376	Seamless and Austenitic Steel Pipe for High - Temperature Central - Station Services		●					
A423	Seamless and Electric Welded Low - Alloy Steel Tubes			●				
A513	Electric Resistance Welded Carbon and Alloy Steel Mechanical Tubing			●				
AWWA (American Water Works Association)								
C200	Steel Water Pipe					●	●	●
C203	Standard for Coal - Tar Enamel Protective Coating for Steel Water Pipe					●	●	
GOST (USSR Specification)								
10704	Electric - Welded Steel Tubes			●				
10705	Specification for Delivery of Electric - Welded Steel Tubes of 8-530 mm in diameter			●				

Nippon Steel Corporation

ASTM A53 Plain Ends, Threads and Coupling
ASTM A106 Plain Ends

Nominal Size		Outside Diameter		Wall Thickness			Weight		Test Pressure Grade A	
Inch		Inch	mm	Inch	mm	Sch. NO.	Lbs/ft	Kg/m	Psi	Kgf/cm
1/2"	0.840	21.30		0.109	2.77	40 (STD)	0.85	1.26	700	49
				0.147	3.73	80 (XS)	1.09	1.62	850	60
3/4"	1.050	26.70		0.113	2.87	40 (STD)	1.13	1.68	700	49
				0.154	3.91	80 (XS)	1.47	2.19	850	60
1"	1.315	33.40		0.133	3.38	40 (STD)	1.68	2.5	700	49
				0.179	4.55	80 (XS)	2.17	3.23	850	60
1-1/4"	1.660	42.20		0.140	3.56	40 (STD)	2.27	3.38	1000	70
				0.191	4.85	80 (XS)	3.00	4.46	1500	105
1-1/2"	1.900	48.30		0.145	3.68	40 (STD)	2.72	4.05	1000	70
				0.200	5.08	80 (XS)	3.63	5.4	1500	105
2"	2.375	60.30		0.154	3.91	40 (STD)	3.65	5.43	2300	162
				0.218	5.54	80 (XS)	5.02	7.47	2500	176
2-1/2"	2.875	73.00		0.203	5.16	40 (STD)	5.79	8.62	2500	176
				0.276	7.01	80 (XS)	7.66	11.4	2500	176
3"	3.500	88.90		0.216	5.49	40 (STD)	7.58	11.28	2220	156
				0.300	7.62	80 (XS)	10.25	15.25	2500	176
3-1/2"	4.000	101.60		0.226	5.74	40 (STD)	9.11	13.56	2030	143
				0.318	8.08	80 (XS)	12.51	18.62	2800	197
4"	4.500	114.30		0.237	6.02	40 (STD)	10.79	16.06	1900	134
				0.337	8.56	80 (XS)	14.98	22.29	2700	190
5"	5.563	141.30		0.258	6.55	40 (STD)	14.62	21.76	1670	117
				0.375	9.53	80 (XS)	20.78	30.92	2430	171
6"	6.625	168.30		0.280	7.11	40 (STD)	18.97	28.23	1520	107
8"	8.625	219.10		0.250	6.35	20	22.36	33.28	1040	73
				0.277	7.04	30	24.7	36.76	1160	82
				0.322	8.18	40 (STD)	28.55	42.79	2000	94
10"	10.750	273.00		0.250	6.35	20	28.04	41.73	840	59
				0.279	7.09	~	31.2	46.43	930	65
				0.307	7.80	30	34.24	50.95	1030	72
				0.365	9.27	40 (STD)	40.48	60.24	2000	86
12"	12.750	323.80		0.330	8.38	30	43.77	65.14	930	65
				0.375	9.53	STD	49.56	73.75	1060	75
				0.406	10.31	40 (STD)	53.65	82.1	2000	85
14"	14.000	355.60		0.312	7.92	20	45.61	67.94	800	56
				0.375	9.53	30 (STD)	54.57	81.21	960	67
				0.438	11.1	40 (STD)	62.33	101.68	2500	68
16"	16.000	406.40		0.312	7.92	20	52.27	77.86	700	49
				0.375	9.53	30 (STD)	62.58	93.13	840	59
				0.500	12.7	40 (STD)	70.5	134.48	2500	72
18"	18.000	457.20		0.312	7.92	20	58.94	87.79	620	44
				0.375	9.53	STD	70.59	105.05	750	53
				0.562	14.27	40 (STD)	82.35	170.56	2500	66
20"	20.000	508.00		0.375	9.53	20 (STD)	78.6	117.07	680	48
				0.594	15.1	40 (STD)	88.3	200.08	2500	59
22"	22.000	559.00		0.375	9.53	20 (STD)	98.68	137.76	2000	52
24"	24.000	609.60		0.375	9.53	20 (STD)	104.33	150.88	2000	61
				0.688	17.47	40 (STD)	115.94	275.94	2500	75

Other sizes and specifications according to ASTM standards are available on request

On the Leading Edge:Nippon Steel

NIPPON STEEL

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