



Stainless Steel Plates & Sheets

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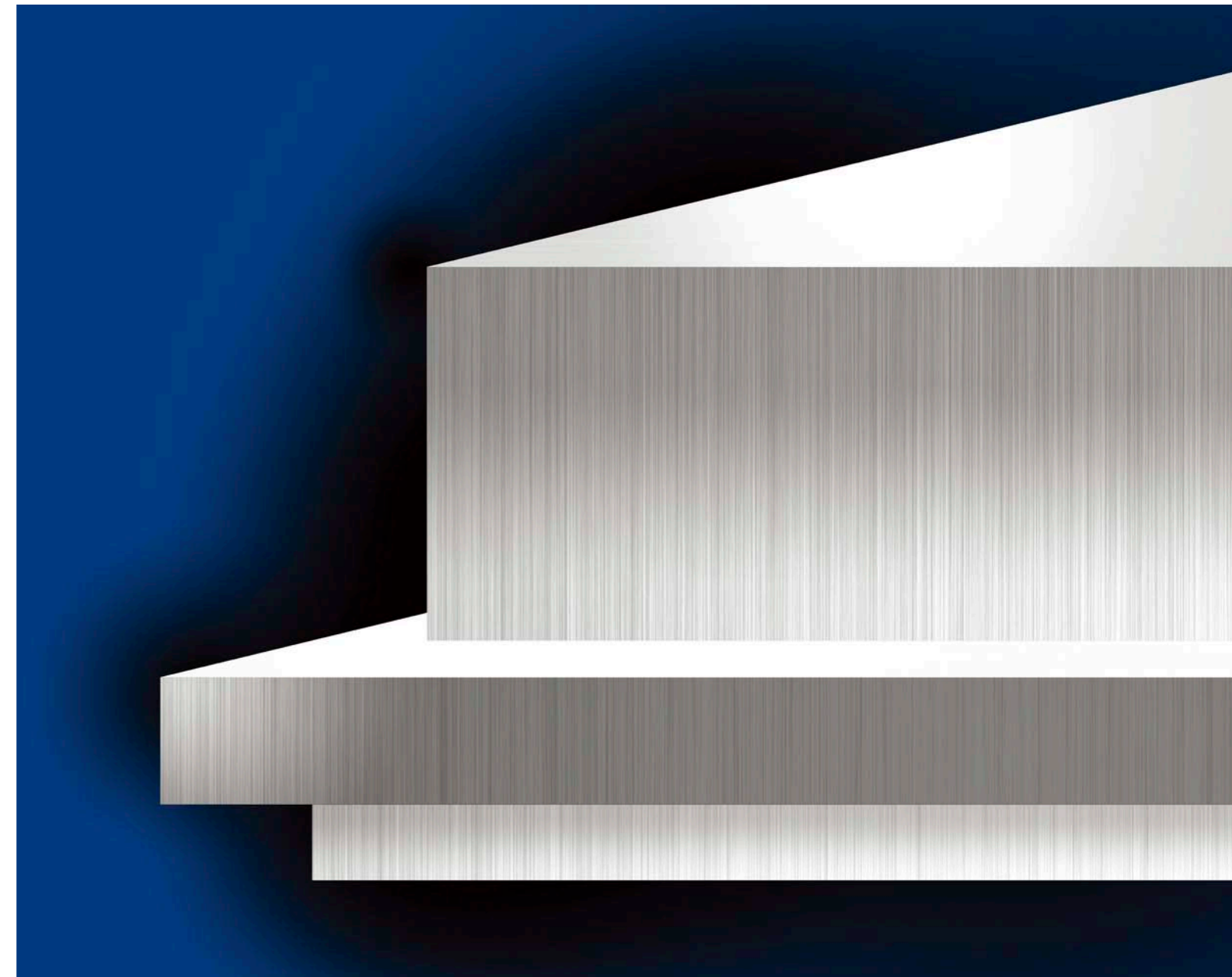
Nippon Steel & Sumikin Stainless Steel Corporation

Cat.No. HE001 2013.6① 2013.6②



Stainless Steel Plates & Sheets

Nippon Steel & Sumikin Stainless Steel Corporation





The stainless steel divisions of Nippon Steel Corporation and Sumitomo Metal Industries, Ltd. were consolidated into a new company named Nippon Steel & Sumikin Stainless Steel Corporation in 2003.

The most sophisticated stainless steel manufacturing technologies as well as state-of-the-art quality control systems, developed and held by each of these two companies, have now been integrated and wholly taken over by this new company.

Moreover, as Nippon Steel & Sumikin Stainless Steel Corporation plans to strengthen R&D focusing on stainless steel, the company is confident that it will be able to meet the strictest requirements demanded by customers with its stainless steel plates and sheets.

Stainless Steel Plates & Sheets

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Important notice

The technical information in this document simply describes typical characteristics and performance of the product and does not provide any guarantees except for the items clearly stated as specifications or standard values.
Note that NSSC takes no responsibility whatsoever for damage resulting from user failure to observe the instructions presented in this document or improper handling of the product.
The information presented in this document is subject to change without notice. Please contact the relevant division for the latest information.
No part of this document may be copied or reproduced in any form without the consent of NSSC.

Safety Data Sheet (SDS)

SDS is available on NSSC website or by contacting NSSC offices.

Stainless Steel Plates & Sheets

Features

Our abundant sizes and superior quality should lead you to the new horizon of high cost performance.

1 Wide Range of Products covering Large-Size Plates

- We have established technologies for extra large-size plates with the state-of-the-art production lines including a quarto rolling mill.
- Large plates will enable you to curtail the welding process in fabrication and, as a result, they contribute to reducing your cost and time.
- Large plates will also diminish the size of the undesirable heat-affected zone caused by welding.

2 High Performance Corrosion Resistance, with Abundant Grades for Various Applied Circumstances

- Up-to-date equipment, such as a heat treatment furnace, roller quencher, spray type cooling system, and so on, provide complete solid solution treatments for steel products.
Moreover, those facilities produce a wide range of grades designed for use in various kinds and levels of corrosive environments.
Authentic technical data on each product are available anytime for your reference.

3 Quality in Uniformly Highest Level

- Superior technology as well as extensive quality control from steelmaking to finishing assure the stable production of stainless steel plates in uniformly of excellent quality.

4 Prompt Delivery

- An exclusive rolling mill is available at all times for the production of stainless steel plates.
Moreover, an unrivaled volume production system and strict quality control program assure smooth production and on-time delivery.

5 Marvelously Aesthetic Surface Finishes

- We apply the process of surface finishing to our products by pickling or buff-polishing.
We would sincerely like you to enjoy the marvelously aesthetic surface finishes of our products.
- Levels of finishing can be adjusted according to your requirements.

Application Examples



Seawater Pump (S31803, S32760, S32750)



Desalination Plant
(S32101, S82122, NSSC2120, S32304, S31803, S32205, S32750, S31254, NSSC270)



Soy sauce tanks (NSSC270, S31254)

※These two pictures show a different type of soy sauce tank.
Outer wall uses SUS304 sheets, and internal tank SUS304 plates in the left picture.



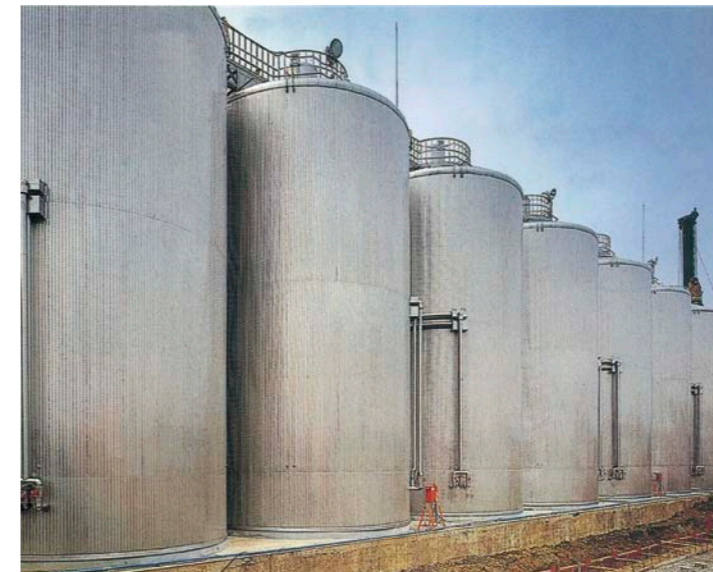
Umihotaru Monument (NSSC270)



Water supply plant (304, 316, SUS329J4L)



Dam's head gate tower (304)



Beer tanks (304 #400 polished)

※Outer wall uses SUS304 sheets, and internal tank SUS304 plates finished by high-quality polishing.

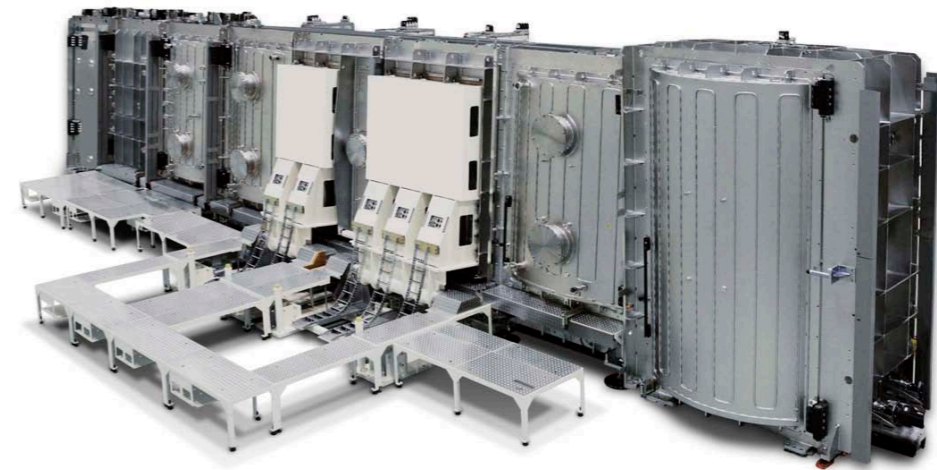


Hot water tanks (SUS444, NSSC190L)

Application Examples



Chemical tanker (NSSC2120, 316L, 316LN, S31803, e.t.c.)



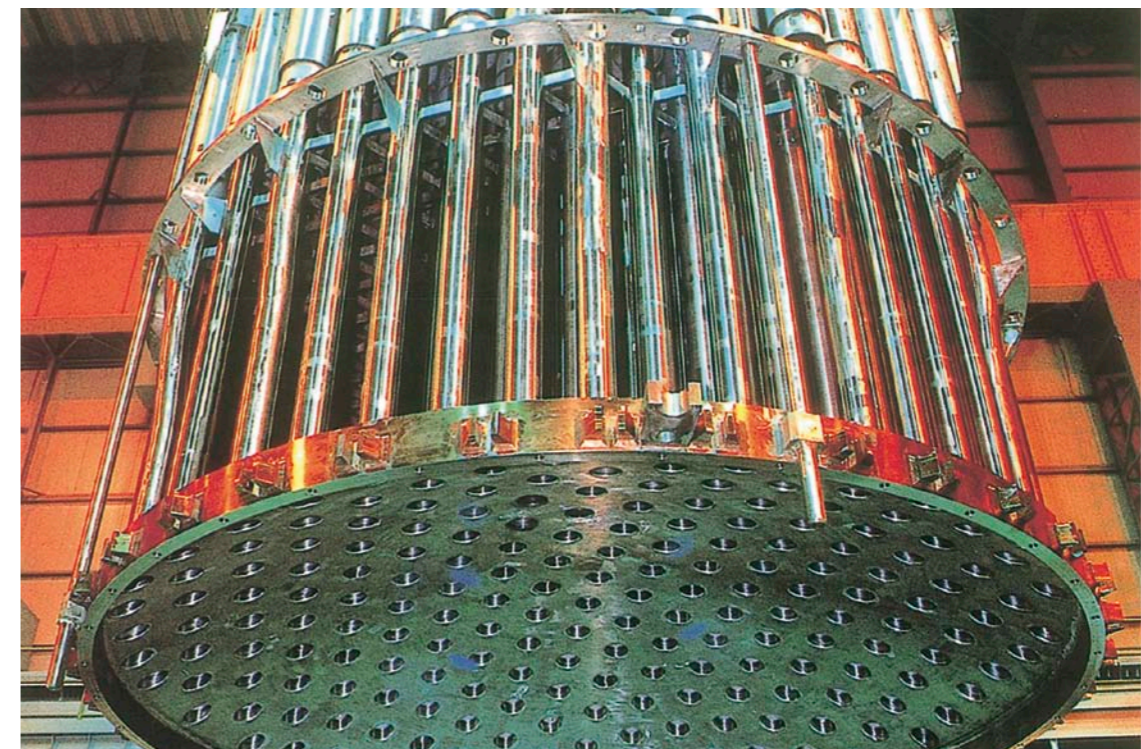
Display Manufacturing Equipment (304)



LNG satellite (304)



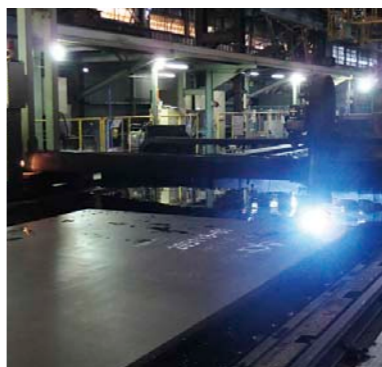
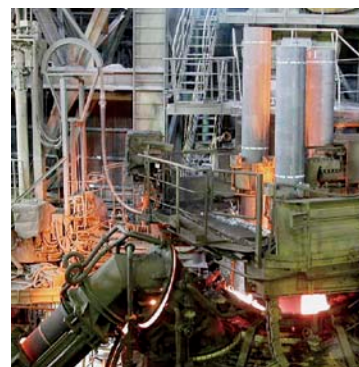
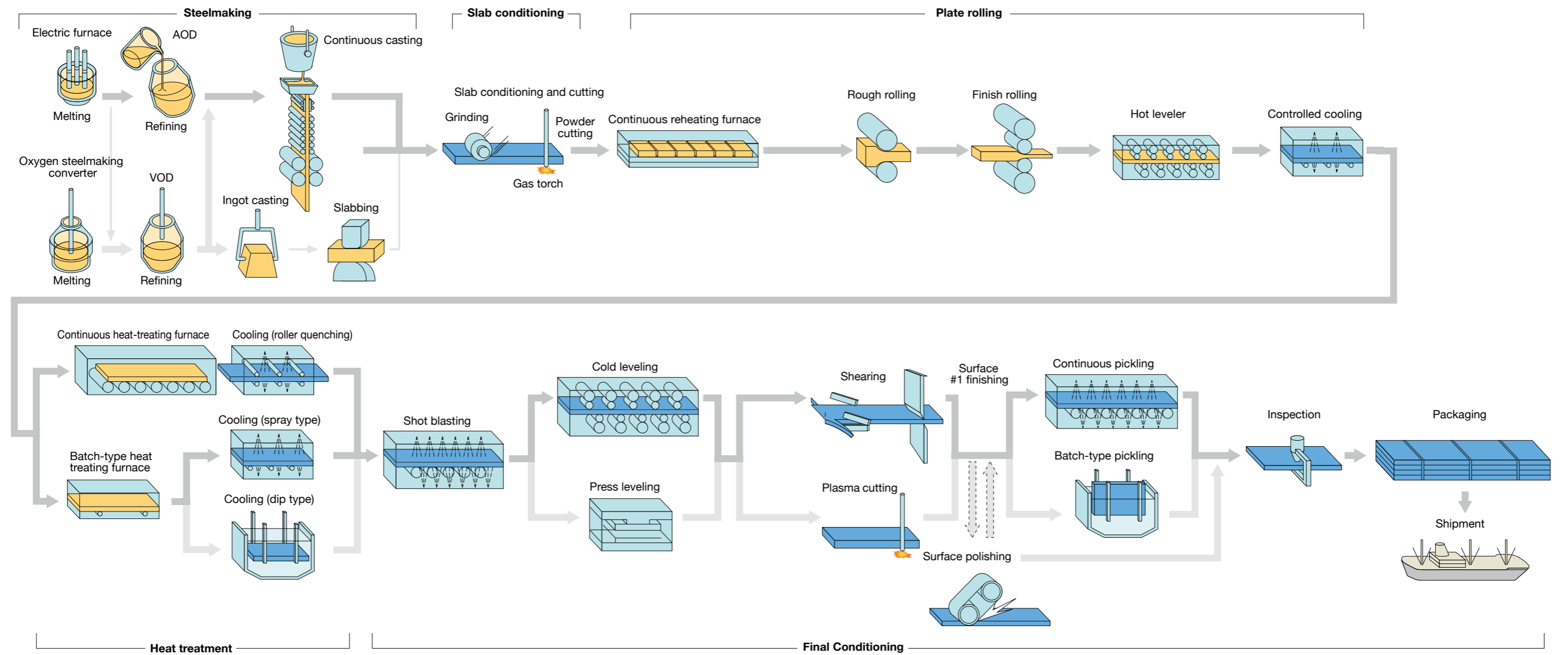
Petrochemical plant (304, 316L, S31803, e.t.c.)



Shroud head of light-water reactor for nuclear power plant (316L)

Manufacturing Flow

VOD : Vacuum Oxygen Decarburization
 AOD : Argon Oxygen Decarburization
 RQ : Roller Quench



Electric furnace

Continuous casting

Plate rolling

Heat treating furnace

Cold leveling

Plasma cutting

Continuous pickling

Production

Available Product Grades

Stainless Steel Group	Grade				Chemical Composition (%)									Mechanical Properties					
	ASTM (A240M)	EN Number	Symbol of Grades (NSSC)	Others (JIS)	C	Si	Mn	P	S	Ni	Cr	Mo	Others	Tensile Properties (1MPa=1N/mm ²)			Hardness		Bend Test
														Yield Strength MPa	Tensile Strength MPa	Elongation %	HBW	HRBW	
Austenitic Steels	304	(1.4301)		(SUS304)	≤0.07	≤0.75	≤2.00	≤0.045	≤0.030	8.0/10.5	17.5/19.5	—	N≤0.10	≥205	≥515	≥40	≤201	≤92	—
	304H				0.04/0.10	≤0.75	≤2.00	≤0.045	≤0.030	8.0/10.5	18.0/20.0	—		≥205	≥515	≥40	≤201	≤92	—
	304L	(1.4307)		(SUS304L)	≤0.030	≤0.75	≤2.00	≤0.045	≤0.030	8.0/12.0	17.5/19.5	—	N≤0.10	≥170	≥485	≥40	≤201	≤92	—
	304N	(1.4315)		(SUS304N1)	≤0.08	≤0.75	≤2.00	≤0.045	≤0.030	8.0/10.5	18.0/20.0	—	N:0.10/0.16	≥240	≥550	≥30	≤217	≤95	—
	304LN	(1.4311)		(SUS304LN)	≤0.030	≤0.75	≤2.00	≤0.045	≤0.030	8.0/12.0	18.0/20.0	—	N:0.10/0.16	≥205	≥515	≥40	≤217	≤95	—
	309S	(1.4950)		(SUS309S)	≤0.08	≤0.75	≤2.00	≤0.045	≤0.030	12.0/15.0	22.0/24.0	—		≥205	≥515	≥40	≤217	≤95	—
	310S	(1.4951)		(SUS310S)	≤0.08	≤1.50	≤2.00	≤0.045	≤0.030	19.0/22.0	24.0/26.0	—		≥205	≥515	≥40	≤217	≤95	—
	316	(1.4401)		(SUS316)	≤0.08	≤0.75	≤2.00	≤0.045	≤0.030	10.0/14.0	16.0/18.0	2.00/3.00	N≤0.10	≥205	≥515	≥40	≤217	≤95	—
	316L	(1.4404)		(SUS316L)	≤0.030	≤0.75	≤2.00	≤0.045	≤0.030	10.0/14.0	16.0/18.0	2.00/3.00	N≤0.10	≥170	≥485	≥40	≤217	≤95	—
	316H				0.04/0.10	≤0.75	≤2.00	≤0.045	≤0.030	10.0/14.0	16.0/18.0	2.00/3.00		≥205	≥515	≥40	≤217	≤95	—
	316LN	(1.4406)		(SUS316LN)	≤0.030	≤0.75	≤2.00	≤0.045	≤0.030	10.0/14.0	16.0/18.0	2.00/3.00	N:0.10/0.16	≥205	≥515	≥40	≤217	≤95	—
	317L	(1.4438)		(SUS317L)	≤0.030	≤0.75	≤2.00	≤0.045	≤0.030	11.0/15.0	18.0/20.0	3.0/4.0	N≤0.10	≥205	≥515	≥40	≤217	≤95	—
	317LN	(1.4434)		(SUS317LN)	≤0.030	≤0.75	≤2.00	≤0.045	≤0.030	11.0/15.0	18.0/20.0	3.0/4.0	N:0.10/0.22	≥240	≥550	≥40	≤217	≤95	—
	321	(1.4541)		(SUS321)	≤0.08	≤0.75	≤2.00	≤0.045	≤0.030	9.0/12.0	17.0/19.0	—	N≤0.10 Ti:5×(C+N) /0.70	≥205	≥515	≥40	≤217	≤95	—
	347	(1.4550)		(SUS347)	≤0.08	≤0.75	≤2.00	≤0.045	≤0.030	9.0/13.0	17.0/19.0	—	Nb:10×C/1.00	≥205	≥515	≥40	≤201	≤92	—
	N08904 (904L)	(1.4539)		(SUS890L)	≤0.020	≤1.00	≤2.00	≤0.045	≤0.035	23.0/28.0	19.0/23.0	4.00/5.00	N≤0.10 Cu:1.0/2.0	≥220	≥490	≥35	—	≤90	—
	S31254	(1.4547)	(NSSC 270)		≤0.020	≤0.80	≤1.00	≤0.030	≤0.010	17.5/18.5	19.5/20.5	6.0/6.5	N:0.18/0.25 Cu:0.50/1.00	≥310	≥655	≥35	≤223	≤96	—
		(NSSC 170)	SUS317J2	≤0.06	≤1.50	≤2.00	≤0.045	≤0.030	12.00/16.00	23.00/26.00	0.50/1.20	N:0.25/0.40	≥345	≥690	≥40	≤250	≤100	—	

Available Product Grades

Stainless Steel Group	Grade				Chemical Composition (%)									Mechanical Properties					
	ASTM (A240M)	EN Number	Symbol of Grades (NSSC)	Others (JIS)	C	Si	Mn	P	S	Ni	Cr	Mo	Others	Tensile Properties (1MPa=1N/mm ²)			Hardness		Bend Test
														Yield Strength MPa	Tensile Strength MPa	Elongation %	HBW	HRBW	
Ferritic Steels	405	(1.4002)		(SUS405)	≤0.08	≤1.00	≤1.00	≤0.040	≤0.030	≤0.60	11.5/14.5	—	Al:0.10/0.30	≥170	≥415	≥20	≤179	≤88	*5
	430	(1.4016)		(SUS430)	≤0.12	≤1.00	≤1.00	≤0.040	≤0.030	≤0.75	16.0/18.0	—		≥205	≥450	≥22	≤183	≤89	*5
			(NSSC 190L)	SUS444	≤0.025	≤1.00	≤1.00	≤0.040	≤0.030	*1	17.00/20.00	1.75/2.50	*2	≥245	≥410	≥20	≤217	≤96	*6
			(NSSC 410W)	SUS410L	≤0.030	≤1.00	≤1.00	≤0.040	≤0.030	*1	11.00/13.50	—		≥195	≥360	≥22	≤183	≤88	*6
		(NSSC 409L)	SUH409L	≤0.030	≤1.00	≤1.00	≤0.040	≤0.030	*1	10.50/11.75	—	Ti:6(C+N)/0.75	≥175	≥360	≥25	≤162	≤80	*7	
Martensitic Steels	(410)	(1.4006)		SUS410	≤0.15	≤1.00	≤1.00	≤0.040	≤0.030	*1	11.50/13.50	—		≥205	≥440	≥20	≤201	≤93	*6
	410S	(1.4000)		(SUS410S)	≤0.08	≤1.00	≤1.00	≤0.040	≤0.030	≤0.60	11.5/13.5	—		≥205	≥415	≥22	≤183	≤89	*5
Austenitic-Ferritic Steels	S32101**	(1.4162)			≤0.040	≤1.00	4.00/6.00	≤0.040	≤0.030	1.35/1.70	21.0/22.0	0.10/0.80	N:0.20/0.25 Cu:0.10/0.80	≥450	≥650	≥30	≤290	—	—
	S82122		(NSSC 2120)		≤0.030	≤0.75	2.0/4.0	≤0.040	≤0.020	1.5/2.5	20.5/21.5	≤0.60	N:0.15/0.20 Cu:0.50/1.50	≥400	≥600	≥30	≤290	≤32 (HRC)	—
	S32304	(1.4362)			≤0.030	≤1.00	≤2.50	≤0.040	≤0.030	3.0/5.5	21.5/24.5	0.05/0.60	N:0.05/0.20 Cu:0.05/0.60	≥400	≥600	≥25	≤290	≤32 (HRC)	—
	S31803	(1.4462)	(NSSC DX1)	(SUS329J3L)	≤0.030	≤1.00	≤2.00	≤0.030	≤0.020	4.5/6.5	21.0/23.0	2.5/3.5	N:0.08/0.20	≥450	≥620	≥25	≤293	≤31 (HRC)	—
	S32205	(1.4462)			≤0.030	≤1.00	≤2.00	≤0.030	≤0.020	4.5/6.5	22.0/23.0	3.0/3.5	N:0.14/0.20	≥450	≥655	≥25	≤293	≤31 (HRC)	—
	S32760	(1.4501)			≤0.030	≤1.00	≤1.00	≤0.040	≤0.020	6.0/8.0	24.0/26.0	3.0/4.0	*3	≥550	≥750	≥25	≤270	—	—
	S32750	(1.4410)			≤0.030	≤0.80	≤1.20	≤0.035	≤0.020	6.0/8.0	24.0/26.0	3.0/5.0	*4	≥550	≥795	≥15	≤310	≤32 (HRC)	—
	(1.4507)		SUS329J4L	≤0.030	≤1.00	≤1.50	≤0.040	≤0.030	5.50/7.50	24.00/26.00	2.50/3.50	N:0.08/0.30	≥450	≥620	≥18	≤302	≤32 (HRC)	—	

** S32101: Sold under license from Outokumpu Stainless AB (re. patents on LDX2101® grade) in the Territory (designated countries) .

- * 1 : ≤0.60
- * 2 : N≤0.025, Ti,Nb(Cb),Zr or their combination:8(C+N)~0.80
- * 3 : N:0.20/0.30, Cu:0.50/1.00, W:0.50/1.00, Cr+3.3Mo+16N≥40
- * 4 : N:0.24/0.32, Cu≤0.50, Cr+3.3Mo+16N≥41

- * 5 : Bending Angle : 180°, Inside Radius t≤9.52 : equal to one half the specimen thickness, 9.52<t≤25.4 : equal to the specimen thickness
25.4<t : not required
- * 6 : Bending Angle : 180°, Inside Radius : equal to the specimen thickness
- * 7 : Bending Angle : 180°, Inside Radius t<8 : equal to one half the specimen thickness, 8≤t : equal to the specimen thickness

Quality Management System (at Yawata Works)

General Purpose Pressure Vessel

Quality System Standard/Specification	Standard/Specification	Grade
ISO9001	Available Standard	Available Grade
ISO9001 (JIS Q9001) (JIS Q1001 Certification System)	JIS G4304	Approved Grade
PED 97/23/EC (PRESSURE VESSEL)	JIS G4304 ASTM A240/A240M ASME SA-240/SA-240M EN 10028-7	Approved Grade
AD2000-W0 (PRESSURE VESSEL)	EN10028-7 AD2000-W2, W10 VdTUV418	Austenitic : Available Grade Austenitic-Ferritic : 1.4410, 1.4462

Offshore Structure

Quality System Standard/Specification	Standard/Specification	Grade
NORSOK M-650	NORSOK M-630	MDS R15 UNS S31254 MDS D45 UNS S31803 UNS S32205 MDS D55 UNS S32750

Ship Classification Societies

Society	Grade	Products
Nippon Kaiji Kyokai (NK)*1	KSUS304, KSUS316L, KSUS316LN e.t.c.	Stainless Steel
Lloyd's Register of Shipping (LR)	LR304L, LR316L, LR316LN e.t.c.	Stainless Steel
Det Norske Veritas (DNV)	NV304L, NV316L, NV316LN e.t.c.	Stainless Steel
Bureau Veritas (BV) Mode I *1	BV304L, BV316L, BV316LN e.t.c.	Stainless Steel
Korean Resister of Shipping (KR)	RSTS304L, RSTS316L, RSTS316LN	Stainless Steel
Germanischer Lloyd (GL)	1.4306 (304N), 1.4541 (321), 1.4404 (316L), 1.4550 (347)	Stainless Steel specified in EN Standard

*1 Manufacturing Process Approved

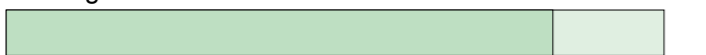
Sizes Available

Ferritic Steels / Martensitic Steels (TYPE 405, 410S, 430, SUS444, NSSC 190L)

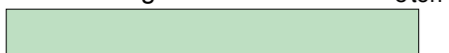
Size

Width (m) Thickness (mm)	1.5	2.0	2.5	3.0	3.5	4.0	4.5
4.0 to less than 4.5 4.0~4.5							
4.5~5.0							
5.0~5.5							
5.5~6.0							
6.0~7.0							
7.0~8.0							
8.0~9.0							
9.0~10.0							
10.0~12.0							
12.0~20.0							
20.0~30.0							
30.0~40.1							
40.1~50.0							
50.0~60.0							
60.0~80.0							
80.0~100.0							
100.0~120.0							
120.0~200.0							

Length



Unit Weight



Minimum Size

Width ≥ 1,219mm, Length ≥ 2,000mm

Please contact us when you need other type or size than mentioned above.

- Orders are always acceptable with standard delivery time.
- Orders are acceptable subject to conditions.
- SUS 444, NSSC 190L Orders are always acceptable.
- SUS 444, NSSC 190L Orders are acceptable subject to conditions.

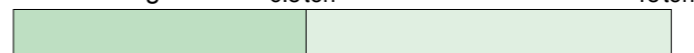
Austenitic Steels ① (TYPE 304, 304L, 321, 347, 309S, 310S)

Width (m) Thickness (mm)	1.5	2.0	2.5	3.0	3.5	4.0	4.5
4.0 to less than 4.5 4.0~4.5							
4.5~5.0							
5.0~5.5							
5.5~6.0							
6.0~7.0							
7.0~8.0							
8.0~9.0							
9.0~10.0							
10.0~12.0							
12.0~18.0							
18.0~30.0							
30.0~40.0							
40.0~45.1							
45.1~50.1							
50.1~55.1							
55.1~60.1							
60.1~70.1							
70.1~80.1							
80.1~90.1							
90.1~101.1							
101.1~110.1							
110.1~120.1							
120.1~200.0							

Length



Unit Weight



Minimum Size

Width ≥ 1,219mm, Length ≥ 2,000mm (heavy plate 2,500mm)

Please contact us when you need other type or size than mentioned above.

Maximum thickness by specific type is as below.
120mm for TYPE 321
45mm for TYPE 347
50mm for TYPE 309S, TYPE 310S

- Orders are always acceptable with standard delivery time.
- Orders are acceptable subject to conditions

Austenitic Steels ② (TYPE 316, 316L, 317L)

■ Size

Width (m) Thickness (mm)	1.5	2.0	2.5	3.0	3.5	4.0	4.5
4.0 to less than 4.5 4.0~4.5	✓	✓	✓	✓	✓	✓	✓
4.5~5.0	✓	✓	✓	✓	✓	✓	✓
5.0~5.5	✓	✓	✓	✓	✓	✓	✓
5.5~6.0	✓	✓	✓	✓	✓	✓	✓
6.0~7.0	✓	✓	✓	✓	✓	✓	✓
7.0~8.0	✓	✓	✓	✓	✓	✓	✓
8.0~9.0	✓	✓	✓	✓	✓	✓	✓
9.0~10.0	✓	✓	✓	✓	✓	✓	✓
10.0~12.0	✓	✓	✓	✓	✓	✓	✓
12.0~18.0	✓	✓	✓	✓	✓	✓	✓
18.0~30.0	✓	✓	✓	✓	✓	✓	✓
30.0~40.0	✓	✓	✓	✓	✓	✓	✓
40.0~50.0	✓	✓	✓	✓	✓	✓	✓
50.0~60.1	✓	✓	✓	✓	✓	✓	✓
60.1~70.1	✓	✓	✓	✓	✓	✓	✓
70.1~80.1	✓	✓	✓	✓	✓	✓	✓
80.1~90.1	✓	✓	✓	✓	✓	✓	✓
90.1~100.1	✓	✓	✓	✓	✓	✓	✓
100.1~110.1	✓	✓	✓	✓	✓	✓	✓
110.1~120.0	✓	✓	✓	✓	✓	✓	✓
120.0~200.0	✓	✓	✓	✓	✓	✓	✓

■ Length 12.5m 14m



■ Unit Weight 6.5ton 15ton



■ Minimum Size Width ≥ 1,219mm, Length ≥ 2,000mm (heavy plate 2,500mm)

Please contact us when you need other type or size than mentioned above.

Austenitic-Ferritic (Dual-phase) Steels (S32304, S31803, S32205, SUS329J3L, NSSC DX1)

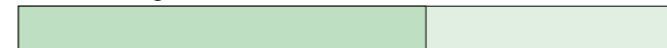
■ Size

Width (m) Thickness (mm)	1.5	2.0	2.5	3.0	3.5	4.0	4.5
4.0 to less than 4.5 4.0~4.5	✓	✓	✓	✓	✓	✓	✓
4.5~5.0	✓	✓	✓	✓	✓	✓	✓
5.0~5.5	✓	✓	✓	✓	✓	✓	✓
5.5~6.0	✓	✓	✓	✓	✓	✓	✓
6.0~7.0	✓	✓	✓	✓	✓	✓	✓
7.0~8.0	✓	✓	✓	✓	✓	✓	✓
8.0~9.0	✓	✓	✓	✓	✓	✓	✓
9.0~10.0	✓	✓	✓	✓	✓	✓	✓
10.0~16.0	✓	✓	✓	✓	✓	✓	✓
16.0~18.0	✓	✓	✓	✓	✓	✓	✓
18.0~20.0	✓	✓	✓	✓	✓	✓	✓
20.0~25.0	✓	✓	✓	✓	✓	✓	✓
25.0~30.0	✓	✓	✓	✓	✓	✓	✓
30.0~40.0	✓	✓	✓	✓	✓	✓	✓
40.0~50.0	✓	✓	✓	✓	✓	✓	✓
50.0~60.0	✓	✓	✓	✓	✓	✓	✓
60.0~80.0	✓	✓	✓	✓	✓	✓	✓
80.0~100.0	✓	✓	✓	✓	✓	✓	✓
100.0~200.0	✓	✓	✓	✓	✓	✓	✓

■ Length 12.5m 14m



■ Unit Weight 4.5ton 6.5ton



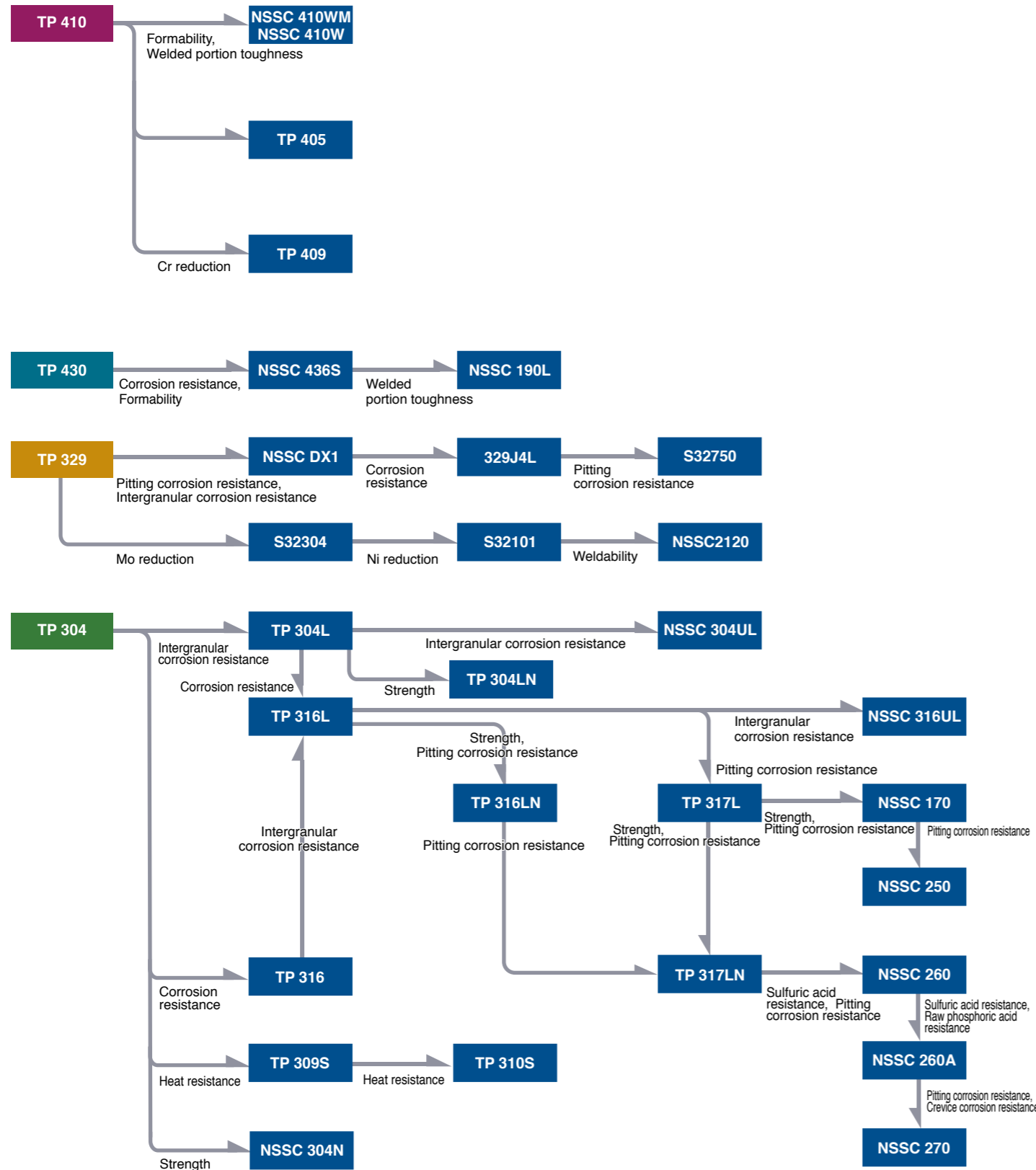
■ Minimum Size Width ≥ 1,219mm, Length ≥ 2,500mm

Please contact us when you need other type or size than mentioned above.

Orders are always acceptable with standard delivery time.
 Orders are acceptable subject to conditions.

Orders are always acceptable with standard delivery time.
 Orders are acceptable subject to conditions.
 TYPE 317L : Thickness ≤ 50mm

Guide to Selection of Appropriate Grade of NSSC Series Stainless Steels



List of NSSC Series Stainless Steels

Stainless Steel Group	Symbol of Grade (similar grade)	Chemical Composition Mechanical Properties Upper/Tensile Properties Lower/Hardness, (Bend)	Corrosion resistance				Formability/Deep drawability	Strength	Heat-resistance	Weldability	Application examples
			Oxidation resistance	Stress corrosion resistance	Pitting corrosion resistance	Intergranular corrosion resistance					
Austenitic Steels	NSSC 270 (S31254)	20Cr-18Ni-6Mo-0.7Cu-0.2N-LC 0.2YS≥300, TS≥650, EL≥35 HBW≤223, HRB≤96	○	○	○	○	○				Seawater water conversion device, Chimney, Salt manufacture plant, Food manufacture plant
	NSSC 260A (—)	22Cr-16Ni-3.5Mo-2Cu-0.2N-LC 0.2YS≥315, TS≥600, EL≥35 HBW≤230, HRB≤95	○		○	○	○				Chemical tanker, Chimney, Sulfuric acid plant
	NSSC 260 (—)	20Cr-15Ni-3Mo-1.5Cu-0.2N-LC 0.2YS≥275, TS≥550, EL≥35 HBW≤217, HRB≤95	○		○	○	○				Chimney, Sulfuric acid plant
	NSSC 250	25Cr-18Ni-2.5Mo-0.3N-LC 0.2YS≥345, TS≥690, EL≥40 HBW≤250, HRB≤100	○	○	○	○	○				Chemical plant, Food manufacture plant
	NSSC 170 (SUS 317J2)	25Cr-13Ni-0.9Mo-0.3N 0.2YS≥345, TS≥690, EL≥40 HBW≤250, HRB≤100			○		○				Exhaust gas desulfurizer, Waste fluid processor, High temperature usage
	NSSC 304ULC (TYPE304L)	18Cr-10Ni-ULC 0.2YS≥175, TS≥480, EL≥40 HBW≤187, HRB≤90					○				Nuclear fuel reprocess equipment
Austenitic-Ferritic Steels	NSSC 316ULC (TYPE316L)	17Cr-15Ni-2Mo-ULC 0.2YS≥175, TS≥480, EL≥40 HBW≤187, HRB≤90					○				Nuclear fuel reprocess equipment
	NSSC 304N (TYPE304N)	18Cr-8Ni-0.2N 0.2YS≥345, TS≥690, EL≥40 HBW≤250, HRB≤100							○		Equipment which needs higher strength than Type 304
Austenitic-Ferritic Steels	NSSC DX1 (S31803)	22Cr-5Ni-3Mo-0.13N-LC 0.2YS≥450, TS≥620, EL≥25 HBW≤290		○	○				○		Chemical plant, Energy related plant, Chemical tanker
	NSSC 2120 (S82122)	21Cr-2Ni-1Cu-0.17N-LC 0.2YS≥400, TS≥600, EL≥30 HBW≤290, HRC≤32		○					○		Desalination plants Chemical tanker
Ferritic Steels	NSSC 190L (SUS 444)	19Cr-2Mo-Nb-V-ULC-LN 0.2YS≥275, TS≥410, EL≥22 HBW≤217, HRB≤96, Bend*3		○	○	○				○	Chemical plant, Hot water tank
	NSSC 436S (SUS 436L)	17Cr-1.2Mo-0.2Ti-LC-LN 0.2YS≥205, TS≥390, EL≥25 HBW≤162, HRB≤85, Bend*2			○	○					Automotive exhaust system part, Kitchen equipment, Household electric appliances part, Building interior material, Gate
	NSSC 410WM (SUS 410L)*1	11Cr-LC-LN-Ni 0.2YS≥315, TS≥430, EL≥20 HBW≤230, Bend*4								○	Marine container frame material
	NSSC 410W (SUS 410L)	12Cr-LC 0.2YS≥195, TS≥360, EL≥22 HBW≤183, HRB≤88, Bend*2								○	Heat-resistant equipment
	NSSC 409L (SUH 409L)	11Cr-Ti-LC 0.2YS≥175, TS≥360, EL≥25 HBW≤183, Bend*2								○	Equipment related to automotive exhaust system

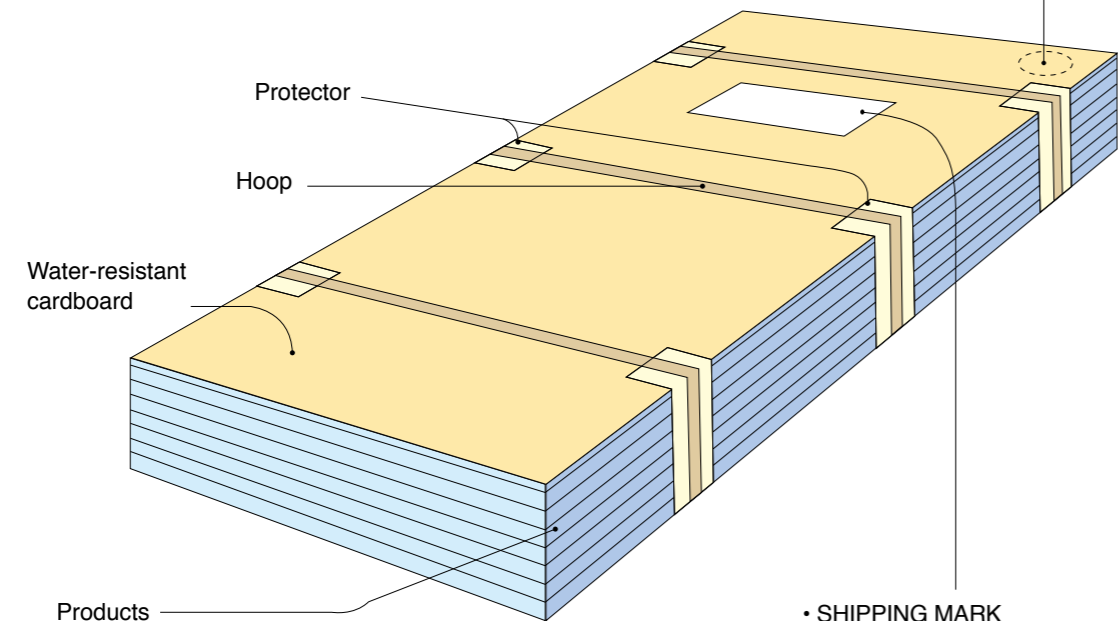
*1 Please consult us to need discussion before your order.
 *2 Bending Angle: 180°, Inside Radius: equal to the specimen thickness
 *3 Bending Angle: 180°, Inside Radius t<8: equal to one half the specimen thickness, 8≤t: equal to the specimen thickness
 *4 Bending Angle: 180°, Inside Radius 4.0≤t<5.0: equal to the specimen thickness, 5.0<t≤6.4: equal to one and a half the specimen thickness, 6.4<t: equal to twice the specimen thickness

Marking and Packaging

[Example]

Record on the actual product

Grade _____ A240 TYPE 304
 Product Size _____ 12×2500×6100
 Heat Number _____ Heat No. E74800
 Product Number (Plate Number) _____ Plate No. 123456—01
 Works name _____ NSSC YAWATA
 Finish _____ No.1



- SHIPPING MARK
- GRADE
- SIZE
- FINISH
- NO. OF PLATE
- NET MASS
- GROSS MASS
- C/NO.
- NIPPON STEEL & SUMIKIN
STAINLESS STEEL CORP.
- MADE IN JAPAN

Precautions in Use

If stainless steel sheets are improperly handled or used, they cannot fully exhibit their characteristic features. When handling or using stainless steel sheets, attention should be paid to the following points.

● Storage and Unloading

1. If stainless steel sheets get wet during unloading or storage, rusting will occur. Accordingly, stringent care should be taken to avoid their unloading on rainy days or their getting wet by seawater. Storage at high humidity or in a sulfur-dioxide atmosphere should be avoided. Storage in a dry, clean place is recommended.
2. Damaged packing paper should be repaired.

● Handling SDS is available on NSSC website or by contacting NSSC offices.

1. Because cutting bundling and packaging hoops (bands) may touch your face and your body, be careful about bouncing hoops and hoop-tips.
2. To avoid injury, do not handle unpacked sheets by bare hand. In handling these sheets, particularly with Cut-ends and cutting chips with burr may be injurious, careful handling and use of protective gloves are recommended.

Directions for Ordering

Stainless steel sheet and strip can demonstrate their optimum characteristic performances when the appropriate steel grade is properly selected in terms of application, design, fabrication and other similar conditions. Please place your orders after obtaining the advice of Nippon Steel & Sumikin Stainless Steel regarding the above conditions.

● When placing orders

Please include the following information as specifically as possible.

1. Standard to be applied
for example, JIS G 4304, ASTM, ASME, EN, any special specification, etc.
2. Grade
for example, JIS (SUS No.), ASTM, ASME (Type No.), etc.
3. Surface Finish
as heat-treated or not, pickled or not, Buff finish No., one or both side(s)
4. Size
Thickness×Width×Length (availability of enlarged scale)
5. Volume
Number of plate(s) and weight
6. Usage and how to be processed
Name of plant, Temperature to be applied, Pressure, Kind of liquid or gas applied, Method and conditions of processing, Method of welding, etc.
7. Delivery time

● Technical services

Please feel free to consult Nippon Steel & Sumikin Stainless Steel's headquarters as to technical matters such as grade selection and applications of stainless steel sheet and strip. Nippon Steel & Sumikin Stainless Steel is ready to offer appropriate technical services on the basis of extensive research and expertise and achievements accumulated over long years of technical services.

MEMO
