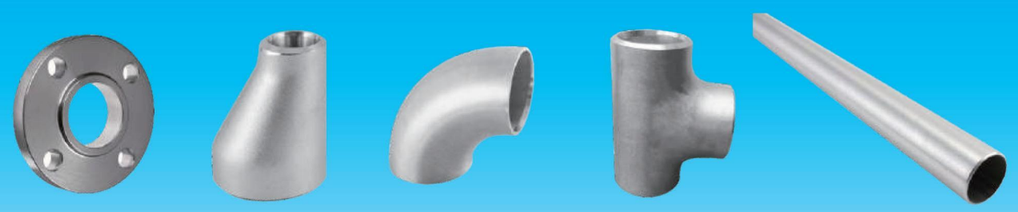
BSCO

www.baling-steel.com



Hunan Baling

Steel Co.,Ltd

Stainless Steel Products Catalogue

BSCO

Hunan Baling Steel Co.,Ltd

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COMPANY PROFILE

Hunan Baling Steel Co.,Ltd.(Short as BSCO) is your premium supplier and processor of specialty stainless steel, high temperature stainless grades, corrosion resistant stainless grades and duplex materials — in multiple product forms, including stainless steel plate, bar, tubular and structural forms. In the past, we have been assiduously surpassing our goals step by step in the stainless steel industry. Over the years, perseverance and ardor in our work helped us to carve out a path of success for us and our venerated clients. With state-of-the-art manufacturing processes, contemporary technologies, and proficient services, we consider: offering finest quality – best in class products – at the most advantageous rates, as our forte.

2008 Stainless steel pipe mill was established

2010 Stainless steel plate plant was found

2013 Stainless steel structure section was set up

2016 Stainless steel fittings was build

ADVANTAGES

Hunan Baling Steel Co.,Ltd.(Short as BSCO) are supplied in accordance with appropriate international standards as well as customer specifications in a large variety of steel grades and dimensions. Client specific requirements on execution, tolerances, lengths, mechanical and corrosion properties are offered on request. It ensures high degree of flexibility in production and planning, making possible economical manufacture, especially of small and medium sized production lots. In this manner, our customers enjoy appreciable economic advantages at an uncompromised level of quality. the company"s unflinching commitment to quality and customer delight has ensured client loyalty.

Hunan Baling Steel Co.,Ltd.(Short as BSCO) meet the requirements the wide product range of unified european standards (EN) as well as BS, DIN, ASTM, JIS standards, or any other specific customer request. The company has set up a state of the art 75,000 sq ft of modern manufacturing facilities with the best imported machinery. the manufacturing unit is in close proximity to all the ports and enjoys good connectivity with all the modes of transport. We have an installed capacity of 3,000 tonnes/PM of CR coils and sheets and to add value, we also set up 1,000 tonnes/pm capacity of pipes and tubes of various sizes and grades.

Benefits of Stainless Steel

Hygienic properties

Stainless steel is available in many surface finishes. It is easily and simply maintained resulting in a high quality, pleasing pearance..

Aesthetic appeal

Stainless steel is available in many surface finishes. It is easily and simply maintained resulting in a high quality, pleasing pearance..

Life cycle characteristics

Stainless steel is a durable, low maintenance material and is often the least expensive choice in a life cycle cost comparison.

Strength

The cold work hardening properties of many stainless steels can be used in design to reduce material thicknesses and reduce weight and costs. Other stainless steels may be heat treated to make very high strength components.

High and low temperature resistance

Some grades will resist scaling and maintain high strength at very high temperatures, while others showexceptional toughness at cryogenic temperatures.

Corrosion resistance

All stainless steels have a high resistance to corrosion.Low alloyed grades resist corrosion in atmospheric conditions; highly alloyed grades can resist corrosion in most acids, alkaline solutions, and chloridebearing environments, even at elevated temperatures and pressures.

Quality Control

Inside Camera Check

Dimension Check

P.M.I Test

Eddy Current Testing

Destructive Testing

- Tensile Test
- Hardness Test
- Flattening Test
- Flaring Test
- Flange Test
- Reverse - bend Test
- IGC Test - Prac A, B, C & E
- Reverse Flattening Test
- Impact Test

Non-Destructive Testing

- Hydrostatic Test
- Eddy Current Test
- Air Under Water Test
- P.M.I. Test
- Spectro Test
- Ultrasonic Test
- Dye Penetrant Test
- Baroscopic Test

Processing Services

Laser Cutting

Laser cutting provides the tightest tolerances and most precise cut surface. It produces the smallest heat-affected zone in the metal compared to all other thermal cutting processes, minimizing deformation and part failure. Laser cutting can be used to process sheet and plate in carbon, stainless, and aluminum.

Oxy-fuel Cutting

Oxy-fuel cutting, or flame cutting, is used to cut carbon plate from 5/8” through 12” thick. It is a cost effective process that provides a good edge quality. Hunan Standard Steel can cut parts from your drawings using DXF's or manual programming.

Plasma Cutting

Hunan Baling Steel provides standard and high definition plasma cutting services. Cutting speeds are faster and tolerances are tighter than oxy-fuel cutting; however, the thickness of the metal to be cut is typically limited to a maximum of 1/2". Plasma cutting can be used for carbon, stainless, and aluminum.

Shearing

Hunan Baling Steel offers metal shearing to meet requirements for length and width of sheet and plate. In addition, we offer re-squaring, which allows for much tighter tolerances. Shearing is available for carbon, stainless, and aluminum sheet and plate products, 1/2” thick and under.

Sawing

Production sawing is used to cut carbon, stainless, and aluminum long products to custom lengths. In addition to straight cutting,hunan balingsteel offers miter cutting. Sawing tolerances are typically +/- 1/16”, with variations possible for different products and finished length. We offfer standand and compound miter cutting.

Forming

We offer CNC forming using our CNC press brakes. CNC programming allows bend sequences to be computer programmed for consistent end products throughout your production run. Forming services are available for carbon, stainless steel, and aluminum products.

Pipe Threading

Threaded pipe is a length of pipe with threading at one or both ends to allow users to screw it into various pipe fittings and attachments. This type of pipe can be easier to work with in some settings, and there are a number of different types available for an assortment of applications.

Polishing

Hunan Baling Steel supplies polished materials #4 and #8 and other specialty finishes in a variety of product forms including sheet, plate, bar, structural and tubular items. Also can even process your polished requirement.

Equipment & Testing

Sr.No.	Description of Machine	Make	Qty	Size/Capacity	Work Description
1	Spectro Testing Machine	Bruckers Make	1	42 Elements	Check chemical element of the material
2	Tensile Testing Machine	Tex Lab Eng.Works	1	60 Tons Capacity	Check mechanical and physical property of material
3	Tensile Testing Machine	Auto Instrument	1	40 Tons Capacity	Check mechanical and physical property of material
4	Tensile Testing Machine	FIE Make	1	60 Tons Capacity	Check mechanical and physical property of material
5	Hardness Tester	Saroj Eng.Udhyog	1	HRB/HRC.15T/30T/45T	Check the hardness of material
6	Hardness Tester	Saroj Eng.Udhyog	1	HRB/HRC.15T/30T/45T	Check the hardness of material
7	Offline Eddy Current Testing Machine	Technofour Pune	1	Max. 114.30mm OD	Find out surface imperfection/defect/hole
8	Offline Eddy Current Testing Machine	Technofour Pune	1	Max. 114.30mm OD	Find out surface imperfection/defect/hole
9	Offline Eddy Current Testing Machine	Technofour Pune	1	Max. 88.90mm OD	Find out surface imperfection/defect/hole
10	Hydro Testing Machine Flexible	Galson Engineering A'bad	2	6.00mm to 25.40mm	Check tubes/pipes leak - tightness at elevated pressure for 10 seconds
11	Hydro Testing Machine Flexible	Sigma Eng.Works	1	6.00mm to 168.00mm	Check tubes/pipes leak - tightness at elevated pressure for 10 seconds
12	Hydro Testing Machine Flexible	Sigma Eng.Works	1	114.30mm to 324.00mm	Check tubes/pipes leak - tightness at elevated pressure for 10 seconds
13	Hydro Testing Machine Flexible	Galson Engineering A'bad	2	6.00mm to 25.40mm	Check tubes/pipes leak - tightness at elevated pressure for 10 seconds
14	Air Under Water Test(Pneumatic Test)	Maxim Make	1	6.00mm to 38.10mm	Pneumatic test is to be carried out at 150psi with clean and dry compressed air while submerged in clean water
15	Polishing Machine	-	2	-	Polish the micro/macro sample at the required polish grit
16	PMI Machine	Niton	3	05 Elements	Identify grade of material at any stage of process
17	Surface Roughness Tester	Mitutoyo	1	RA Value	Check outside/inside surface of tube/pipe
18	Lnk Jet Marking Machine 1 & 2	Domino Printech	2	6.00mm to 323.90mm	Mark the required information on the tube/pipe surface
19	Lnk Jet Marking Machine 3	Domino Printech	1	6.00mm to 323.90mm	Mark the required information on the tube/pipe surface
20	Online Measuring Unit	Zumbach	1	Up to 114.30mm OD	Check online outside diameter and ovality of welded tube/pipe during process
21	Borescope	UCAN	6	Minimum 6.00mm OD	Check inside surface of small diameter tubes.
22	DP Testing	P-Met	1	-	Check scratch marks/surface defects on the surface of tubes and pipes
23	Chemical Testing Lab	-	1	IGC Practice A & E	Check material strength at various condition and enviroment
24	Microscope	-	1	100X TO 500X	Check grain size of material
25	Vernier	Mitutoyo Japan	1	0-200mm	Check O.D of tube/pipe with 0.02mm accuracy
26	Vernier	Mitutoyo Japan	1	0-300mm	Check O.D of tube/pipe with 0.02mm accuracy
27	Micrometer	Mitutoyo Japan	31	0-25mm	Check thickness of tube/pipe with 0.01mm accuracy
28	Micrometer	Mitutoyo Japan	8	25-50mm	Check O.D of tube/pipe with 0.01mm accuracy
29	Micrometer	Mitutoyo Japan	4	50-75mm	Check O.D of tube/pipe with 0.01mm accuracy
30	Micrometer	Mitutoyo Japan	1	0-150mm	Check O.D of tube/pipe with 0.01mm accuracy
31	Micrometer	Mitutoyo Japan	1	75-100mm	Check O.D of tube/pipe with 0.01mm accuracy
32	Micrometer	Mitutoyo Japan	1	100-125mm	Check O.D of tube/pipe with 0.01mm accuracy
33	Ultrasonic Thickness Gauge	Samsonic Model UTG-111	1	0.70 to 300.00mm	Check thickness at any portion of tube/pipe

Sr.No.	Process Operation	Quality Characteristics	Method of Control
1	Raw material	Dimensions	Actual measurement as per Std.
		Chemical analysis	Analysis of all elements as per Stad.
		Control of slit which within specified limits	Testing as per various Std.
		Surface	Measurement of width,thickness & recording visual inspection.
2	Tube mill	Weld test, flare flanges, flattering reverse bend& reverse flattening	Testing as per ASTM specification & recording the result. One test for every 30-35 mtrs.
		Inspection of weld, seam	Visual inspection weld zone.
		Dimensions	OD,thickness & length.
		Surface	Check roller surface profile & finish.
3	Solution annealing with continuous water quenching	Temperature	Automatic relay temp/controller.
		Hardness	Adjusted to present level.
		Micrometer	Measurement of hardness as per Std. One test/lot/heat
4	Straightening	Straightnss OD surface finish	Adjust roller setting measure visual
5	Cutting	Square cut length	Right angle to length,visual
6	Deburing	Burs removel on OD and ID edges	
7	Chemical treatment		
	a)Picking	Concentration	One test/bath day
	b)Passivation	Concentration	One test/bath day
	c)Bath	Temperature	
8	Hydrostatic pressure test	Test pressure	100% inspection at test pressure specified as per ASTM Std.
9	Final inspection	IGC test dimensions surface	As per standard 100% inspection of dimensions as specified.
		Physical testing	Visual inspection for surface defects,physical testing and chemical analysis as per ASTM standards.
		Grade check	
		Product analysis	
10	Marking	Marking as per Std.	Check for proper marking

Grade & Standard

Material	ASTM Grade	UNS Grade	DIN Grade	JIS Grade	Steel Name
Austenitic	TP 304	S30400	1.4301	SUS304TB	X5CrNi18-20
	TP 304L	S30403	1.4306		X2CrNi19-11
	TP 304L	S30403	1.4307	SUS304LTB	X2CrNi18-9
	TP 304H	S30409	1.4948	SUS304HTB	X6CrNi18-10
	TP 310S	S31008	1.4845	SUS310STB	X8CrNi25-21
	TP 310H	S31009			
			1.4335		X1CrNi25-21
	TP 316	S31600	1.4401	SUS316TB	X5CrNiMo17-12-2
	TP 316L	S31603	1.4404	SUS316LTB	X2CrNiMo17-12-2
	TP 316H	S31609	1.4918	SUS316HTB	X6CrNiMo17-13-2
	TP 316Ti	S31635	1.4571	SUS316TiTB	X6CrNiMo17-12-2
	TP 321	S32100	1.4541	SUS321TB	X6CrNiNb18-10
	TP 312H	S32109	1.4941	SUS321HTB	X6CrNiTiB18-10
	TP 347	S34700	1.455	SUS347TB	X6CrNiNb18-10
	TP 347H	S34709	1.4912	SUS347HTB	X7CrNiNb18-10
Ferritic & Martensitic	TP 405	S41500	1.4002	SUS 405TB	X6CrAl13
	TP 410	S41000	1.4006	SUS 410TB	X12Cr13
	TP 430	S43000	1.4016	SUS 430TB	X6Cr17
Ferritic / Austenitic		UNS S31803			
	2205	UNS S32205	1.4462		X2CrNiMoN22-5-3
	2507	UNS S32750	1.441		X2CrNiMoN25-7-4
		UNS S32760	1.4501		X2CrNiMoCuWN25-7-4
300 Series	301 – 302 – 303 – 304/L – 304H – 316/L – 317L – 317LMN – 321 – 321H – 347 – 347H				
300 Series High Temp	309 – 309S – 310 – 310S – 310H – 330				
400 Series	403 – 405 – 409 – 410 – 410S – 410HT – 416 – 416HT – 420 – 422 – 430 – 440C				
Duplex	2205 – 2304 – 2507 – LDX2101				
Precipitation Hardening	17-4PH H1150 - 17-4PH H1025 - 17-4PH H900 - 17-7				
Nickel	Alloy 20 – Alloy 200 – Alloy 400 – Monel 400				
6 Moly	Alloy 254				

ASTM / ASME Standard	
A 213 / SA 213	Seamless Ferritic and Austenitic Alloy-steel Boiler,Superheater and Heat-Exchanger Tubes
A 249 / SA 249	Welded Austenitic Steel Boiler,Superheater, Hear Exchanger and Condenser Tubes
A 268 / SA 268	Seamless and Welded Ferritic and Martensitic Stainless Steel Tubing for General Service
A 269	Seamless and Welded Austenitic Stainless Steel Tubing for General Service
A 312 / SA 312	Seamless,Welded and Heavily Cold Worked Austenitic Stainless Steel Pipes
A 376 / SA 376	Seamless Austenitic Steel Pipe for High-temperature Service
A 688 / SA 688	Seamless and Welded Austenitic Stainless Steel Feedwater Heater Tubes
A 789 / SA 789	Seamless and Welded Ferritic/Austenitic Stainless Steel Tubing for General Service
A 790 / SA 790	Seamless and Welded Ferritic/Austenitic Stainless Steel Pipe
A 999 / SA 999	General Requirement for Alloy and Stainless Steel Pipe
A 1016 / SA 1016	General Requirement for Ferritic Alloy Steel, Austenitic Alloy Steel and Stainless Steel Tubes
European Standard	
DIN EN 10216-5	Seamless Steel Tubes for Pressure Purposes
DIN EN 10217-7	Welded Steel Tubes for Pressure Purposes
DIN EN 10297-2	Seamless Steel Tubes for Mechanical and General Engineering Purposes
DIN EN 10305-1	Steel Tubes for Precision Application
German Standard	
DIN 11850	Stainless Steel Tubes for the Food and Chemical Industries-Dimensions, Materials
DIN 17455	General Purpose Welded Circular Stainless Steel Tubes
DIN 17456	General Purpose Seamless Circular Stainless Steel Tubes
DIN 17457	Welded Circular Austenitic Stainless Steel Tubes Subject to Special Requirement
DIN 17458	Seamless Circular Austenitic Stainless Steel Tubes Subject to Special Requirement
DIN 28180	Seamless Steel Tubes for Heat-exchanger
DIN 11850	Welded Tubes and Pipe for Food, Beverages,Chemical&Pharmaceuticals Industry
Russian Standard	
GOST 9941	Seamless and Warm-deformed Tubes Made from Corrosion-resistant Steel
Norsok Standard	
Norsok M - 650	Qualification of Manufacturers of Special Material
Norsok M - 630	Material Data Sheets and Element Data Sheerts for Piping

Sizes and Weights

STAINLESS STEEL PIPE DIMENSION AS PER ASTM & WEIGHT-KG. PER MTR. (ANSI B36.19)

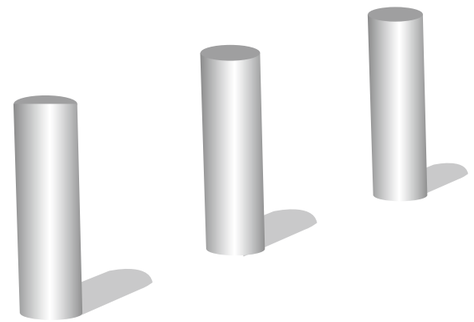
Nominal Bore		Outside Diameter	Sch 5S		Sch 10S		Sch-40S		Sch-80S		Sch-160S		Sch-XXS	
mm	INCH	mm	wt mm	weight (kg/mt)	wt mm	weight (kg/mt)	wt mm	weight (kg/mt)	wt mm	weight (kg/mt)	wt mm	weight (kg/mt)	wt mm	weight (kg/mt)
3	1/8	10.3	1.24	0.276	1.24	0.28	1.73	0.37	2.41	0.47	-	-	-	-
6	1/4	13.7	1.24	0.390	1.65	0.49	2.24	0.631	3.02	0.80	-	-	-	-
10	3/8	17.1	1.24	0.490	1.65	0.63	2.31	0.845	3.20	1.10	-	-	-	-
15	1/2	21.3	1.65	0.800	2.11	1.00	2.77	1.27	3.75	1.62	4.75	1.94	7.47	2.55
20	3/4	26.7	1.65	1.03	2.11	1.28	2.87	1.68	3.91	2.20	5.54	2.89	7.82	3.63
25	1	33.4	1.65	1.30	2.77	2.09	3.38	2.50	4.55	3.24	6.35	4.24	9.09	5.45
32	1 1/4	42.2	1.65	1.65	2.77	2.70	3.56	3.38	4.85	4.47	6.35	5.61	9.70	7.77
40	1 1/2	48.3	1.65	1.91	2.77	3.11	3.68	4.05	5.08	5.41	7.14	7.25	10.16	9.54
50	2	60.3	1.65	2.40	2.77	3.93	3.91	5.44	5.54	7.48	8.74	11.1	11.07	13.44
65	2 1/2	73.0	2.11	3.69	3.05	5.26	5.16	8.63	7.01	11.4	9.53	14.9	14.2	20.39
80	3	88.9	2.11	4.51	3.05	6.45	5.49	11.30	7.62	15.2	11.1	21.3	15.24	27.65
100	4	114.3	2.11	5.84	3.05	8.36	6.02	16.07	8.56	22.3	13.49	33.54	17.12	41.03
125	5	114.3	2.77	9.47	3.40	11.57	6.55	21.8	9.53	31.97	15.88	49.11	19.05	57.43
150	6	168.3	2.77	11.32	3.40	13.84	7.11	28.3	10.97	42.7	18.2	67.56	21.95	79.22
200	8	219.1	2.77	14.79	3.76	19.96	8.18	42.6	12.7	64.6	23.0	111.2	22.23	107.8
250	10	273.1	3.40	22.63	4.19	27.78	9.27	60.5	12.7	96.0	28.6	172.4	25.40	155.15
300	12	323.9	3.96	31.25	4.57	36.00	9.52	73.88	12.7	132.0	33.32	238.76	25.40	186.97
350	14	355.6	3.96	34.36	4.78	41.3	11.13	94.59	19.05	158.08	35.71	281.70	-	-
400	16	406.4	4.19	41.56	4.78	47.29	12.7	123.30	21.41	203.33	40.46	365.11	-	-
450	18	457.2	4.19	46.80	4.78	53.42	14.27	155.80	23.8	254.36	45.71	466.40	-	-
500	20	508.0	4.78	59.25	5.54	68.71	15.09	183.42	26.19	311.2	49.99	564.68	-	-
600	24	609.6	5.54	82.47	6.35	94.45	17.48	255.41	30.96	442.08	59.54	808.22	-	-

WEIGHT & THICKNESS OF S.S GUAGE PIPES

DIMENSION		10 SWG (3.2 MM)	12SWG (2.6 MM)	14SWG (2.1 MM)	16SWG (1.65 MM)	18SWG (1.2MM)	19SWG (1.0MM)
Size	OD	Weight/MTR	Weight/MTR	Weight/MTR	Weight/MTR	Weight/MTR	Weight/MTR
1/2"	12.7	0.754	0.651	0.552	0.452	0.342	0.290
5/8"	15.875	1.006	0.856	0.718	0.582	0.437	0.369
3/4"	19.05	1.258	1.061	0.883	0.712	0.531	0.448
1"	25.4	1.762	1.470	1.214	0.972	0.720	0.605
1 1/4"	31.75	2.266	1.880	1.544	1.232	0.909	0.763
1 1/2"	38.1	2.770	2.289	1.875	1.492	1.098	0.920
2"	50.8	3.778	3.108	2.537	2.012	1.476	1.235
2 1/2"	63.5	4.786	3.928	3.198	2.531	1.854	1.550
3"	76.2	5.794	4.747	3.860	3.051	2.232	1.865
3 1/2"	88.9	6.802	5.566	4.521	3.571	2.610	2.180
4"	101.6	7.810	6.385	5.183	4.091	2.988	2.495

ASTM SPECIFICATION & TOLERANCE FOR TUBING & PIPING

Specification	Allowable Outside Diameter Variation in mm			Allowable Wall Thickness Variation		Exact Length Tolerance in mm		Testing
ASTM-A213 Seamless Boiler Superheater and Heat Exchanger Tubes	Nominal Diameter Under 25.4 25.4-38.1 incl 38.1-50.8 excl 50.8-63.5 excl 63.5-76.2 excl 76.2-101.6 incl	Over .1016 .1524 .2032 .254 .3048 .381	Under .1016 .1524 .2032 .254 .3048 .381	%Over +20 +22 +22 +22 +22 +22	%Under -0 -0 -0 -0 -0 -0	Over 3.175 3.175 3.176 4.46 4.76 4.76	Under 0 0 0 0 0 0	Flattening Test Tension Test Flare Test Hardness Test 100% Hydrostatic test Refer to ASTM A-450
ASTM-A249 Welded Boiler Superheater, Heat Exchanger And Condenser Tubes	Under 25.4 25.4-38.1 incl 38.1-50.8 Excl 50.0-63.5 excl 63.5-76.2 excl 76.2-101.6 incl	.1016 .1524 .2032 .254 .3848 .381	.1016 .1524 .2032 .254 .3848 .381	+10 +10 +10 +10 +10 +10 Minimum Wall tubes + 18% 0 available On request	-10 -10 -10 -10 -10 -10	3.175 3.175 3.175 4.762 4.762 4.762	0 0 0 0 0 0	Tension Test Flattening Test Flange Test Reverse Bend Test Hardness Test 100% Hydrostatic Test Refer to ASTM A-450
ASTM-A269 Seamless & Welded Tubing for General Service	Untp 12.7 12.7-38.1 excl 38.1-88.9 excl 88.9-139.7 excl 139.7-203.2 excl	.13 .13 .25 .38 .76	.13 .13 .25 .38 .76	+15 +10 +10 +10 +10	-15 -10 -10 -10 -10	3.2 3.2 4.8 4.8 4.8	0 0 0 0 0	Flare Test (Seamless Only) Flange Test (Welded Only) Hardness Test Reverse Flattening Test (Welded only) 100% Hydrostatic Test Refer to ASTM-A269
ASTM-A270 Seamless & Welded Sanitary Tubing	25.4 38.1 50.8 60.5 76.2 101.6	.05 .05 .05 .05 .08 .08	.20 .20 .28 .28 .30 .38	+10 +10 +10 +10 +10 +10	-10 -10 -10 -10 -10 -10	3.2 3.2 3.2 3.2 3.2 4.8	0 0 0 0 0 0	Reverse flattening Test 100% Hydrostatic Test External' polish on all tubes Refer to ASTM A-270
ASTM-A312 Seemless & Welded pipe	3.175-38.1 incl 38.1-1016 incl 101.6-203.2 incl	.4 .79 1.59	.79 .79 .79	Minimum Wall nominal wall	12.5% under Specified	6.4 6.4 6.4 (Normally Random Lengths ordered)	0 0 0	Tension Test Flattening Test 100% Hydrostatic Test Refer to ASTM A-530
ASTM A-358 Welded pipe	219.08-750mm +0.5%			-0.3		6.0		Refer to ASTM A-530



Chemical Analysis & Mechanical Properties

A.I.S.I	DIN	B.S.1449	No8904	SS	ANFOR	CMAX	Mn	P MAX	S MAX	Si MAX	Cr	Ni	Mo	Other
316	1.4436	316 S33	S316000	2347	Z 6 CN 17.11	2347	0.08	0.045	0.03	0.75	16 - 18	10--14	2--3	
316L	1.4435	316 S13	S3160003	2353	Z 2 CN 17.13	0.03	2	0.045	0.03	0.75	16 - 18	10--14	2--3	
304L	1.4306	304 S11	S30403	2353	Z 2 18.09	0.03	2	0.045	0.03	0.75	18--20	8--12		
304	1.4306	304 S11	S30403	2353	Z 2 18.09	0.03	2	0.045	0.03	0.75	18--20	8--12		
430	1.4016	430 S17	S43000	2320	Z 8 C 17	0.12		0.04	0.03	1	16--18	0.75		
409	1.4512	409 S19	S40900		Z 6 CT 12	0.08		0.045	0.045	1	10.5--11.75	0.5		
3 CR12	1.4003	409 S19	S41003			0.03	1.5	0.04	0.015	1	10.5--12.5	0.03--1		
3 CR12	1.4003	409 S19	S41003			0.03	1.5	0.04	0.015	1	10.5--12.5	0.03--1		
904L	1.4539	904 S13	No8904	2562	Z 1 NCDU 25.2	0.02					19-21	24-26	4--5	(Cu 1-2)
(SAF2205)	1.4462	318 S13	S31803	2377	Z 3 CND 22.05	0.03					21-23	4.5-6.5	2.5-3.5	
(SAF2507)	1.4404		S32570	2328	Z 3 CND 25.06	0.03					24	6	2	(– 2.04)
329	1.446		S32900	2324		0.1	2	0.04	0.03	1	25-30	3--6	1--2	
321	1.4541	321 S31	S32100	2337	Z 6 CNT 18.10	0.08	2	0.045	0.03	1	17-19	9--12		(Ti 5*Cmin)
317L	1.4438	317 S12	S31703	2367	Z 2 CD 19.15	0.03	2	0.045	0.03	1	18-20	11--15	15 3--4	
316LXK	1.4573	320 S33				0.08	2	0.045	0.03	1	16.5--18.5	11.5--14.5		Ti5C/0.8
316Ti	1.4571	320 S31	S31635	2350	Z 6 CNDT 17.12	0.08	2	0.045	0.03	0.75	16--18	10--14	2--3	5(C+N)MIN 0.7 max
316H						0.04--0.1	2	0.045	0.03	0.75	16--18	10--14	2--3	
310	1.4841	310 S24	S31400		Z 12 CN25.20	0.25	2	0.045	0.03	1.5	23--26	19--22		
310 S	1.4845	310 S24	S31008	2361	Z 12 CN25.20	0.08	2	0.045	0.03	1.5	24--26	19--22		
309	1.4828	309 S24	S30900		Z 15 CNS 20.12	0.2	2	0.045	0.03	1	22--24	12--15		
309 S	1.4833	309 S16	S30908		Z 15 CN 24.13	0.08	2	0.045	0.03	1	22--24	12--15		
305	1.4303	305S19	S30500		Z 8 CN 18.12	0.12	2	0.045	0.03	1	17 --19	10.5 --13		
304 DDQ	1.4301	304 S16				0.06	2	0.045	0.03	0.75	17.5--19	9--11		
304 H						0.04-0.1	2	0.045	0.03	0.75	18--20	8--11		
303	1.4305	303 S31	S30300	2346	Z 10 CNF18.09	0.12	2	0.06	0.35	1	17--19	8--10	0.7	
302	1.43		S30200		Z 10 CN18.09	0.15	2	0.045	0.03	1	17--19	8--10	0.5	
301	1.4301	301 S21	S30100	2331	Z 12 CN 17.07	0.15	2	0.045	0.03	1	16--18	6--8		
Cromanite	1.382					0.08	11	0.04	0.015	0.5	18.5-21	3.5		N 0.43-0.6
201						0.15	5.5-7.5	0.06	0.03	1	16-18	3.5-5.5		N 0.25
202						0.15	7.5-10	0.06	0.03	1	17-19	4--6		N 0.25
410			S41000			0.15		0.04	0.3	1	11.5-13.5			
416	1.4005	416S21	S41600	2380	Z 12 CF 13	0.15	1.25	0.06	0.15	1	12--14		0.6	
420	1.4021	420 S37	S42000	2303	Z 20 C 13	.05-0.15		0.04	0.03	1	12--14			
431	1.4057	431 S29	S4310	2321	Z 15CN 16 s	0.2		0.04	0.03	1	15-17	1.25-2.5		
434	1.4113	434S17	S43400	2325	Z 8 CD 17.01	0.12		0.04	0.03	1	16-18			
441	1.4509					0.03		0.04	0.015	1	17.5-18.5			X 2 Cr Ti Nb 18
403	1.4006		S40300	2302	Z 12 C 13	0.15		0.04	0.03	0.5	11.5--13			
405	1.4002	405 S17	S40500			0.08		0.04	0.03	1	11.5--14.5			A1 0.1--0.03

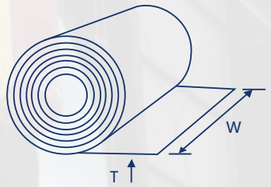
Grade of Stainless Steel	Condition (3)	Tensile Strength MPa (min)	0.2% Proof Strength MPa (min)	Elongation % in 50mm (min)	Hardness Brinell (max)
Plain carbon steel ie for comparison purposes only	Hot rolled	460	240	25	180
Austenitic stainless steels 301, 304, 304H, 304LN, 309S,	Annealed	515	205	40	200
310S, 316, 316H, 316TI, 321	Annealed	550	220	45	200
301L	Annealed	485	170	40	200
304L, 316L	Annealed	550	240	40	200
304N	Annealed	550	240	35	200
316N	Annealed	490	220	35	200
N08904 {904LTM, 1925LCTM, 2RK65TM}					
Duplex stainless steels	Annealed	600	400	25	290
S32304 (2304)	Annealed	620	450	25	290
S32205 (2205)	Annealed	795	500	15	310
S32750 (2507)					
Ferritic stainless steels	Annealed	380	170	20	180
409	Annealed	450	205	22	180
430	Annealed	460	300	20	220
3CR12™	Q & T (5)				
Martensitic stainless steels (2) & (4)					
410, 420, 431, 440B			Dependant on heat treatment		
Precipitation hardenable (PH) stainless steels (4)	Ppt. hard.				
S17400, S17700, S15700	(Aged) (6)		Dependant on heat treatment		

Stainless Steel Coil

Specification:

ASTM A240/A240M, A480/A480M, JIS G4304/G4305,

EN 10028-7/ 10088-2



Product Type	Finish	Grade	Thicknes(mm)	Widthe(mm)								Other Size	Application
				Main Size									
				750	914	1000	1219	1250	1500	1524	2000		
Coil	No.1	304/L,316L	2.0 ≦ t＜5.0	◎		◎	◎	◎	◎	◎		Upon Request	Petro-chemical industry, Tanks.
			5.0 ≦ t ≦ 10	◎		◎	◎	◎	◎	◎	◎		
			10.0＜t ≦ 12.7			◎	◎	◎	◎	◎	◎		
		430	2.0 ≦ t ≦ 6.0			◎	◎	◎	◎	◎			
		409,439	3.0 ≦ t ≦ 6.0			◎	◎	◎	◎	◎			
	2B	304L	3.5 ≦ t ≦ 5.0			◎	◎	◎	◎	◎			
		316L	3.5 ≦ t ≦ 4.0			◎	◎	◎	◎	◎			
		304/L, 316L	4.76 ≦ t ≦ 6.0						◎	◎			
	2B NO.4 NO.5 HL SB	304L	0.4 ≦ t ≦ 3.0	◎	◎	◎	◎	◎	◎	◎		Strip：25mm Above	Medical equipment, Food industry, Construction material, Kitchen utensils, BBQ grill.
		316L, 430	0.5 ≦ t ≦ 3.0	◎	◎	◎	◎	◎	◎	◎			
		409	0.5 ≦ t ≦ 3.0		◎	◎	◎	◎	◎	◎			
		439	0.4 ≦ t ≦ 1.5		◎	◎	◎	◎	◎	◎			
			1.5＜t ≦ 2.5			◎	◎	◎	◎				
	BA	304/L, 316L 430	0.4≦t≦2.0			◎	◎	◎	◎				
Remark				Feature 1.Oil base wet polished 2.Both-sides polished available 3.PE Coating normal/ laser film 4.Line-marking Optional for Front/ Back side 5.Package weight CR Coil: 1.0~10.0mts HR Coil： (1)Thickness 3.0~6.0 mm：2~10 mts (2)Thickness 7.0~10.0 mm：5~20 mts (3)Thickness 12.0~12.7 mm：10~20mts Sheet：1.25~2.2mts Plate：2~4mts									

No.1

A rough, dull surface, which results from hot rolling to the specified thickness, followed by annealing and descaling.

2D

A dull finish which results from cold rolling followed by annealing and descaling, and may perhaps get a final light roll pass through unpolished rolls. A 2D finish is used where appearance is not a concern.

2B

A bright, cold-rolled finish resulting in the same manner as 2D finish, except that the annealed and descaled sheet received a final light roll pass through polished rolls. This is the general -purpose cold-rolled finish that can be used as is, or a preliminary step to polishing.

BA

(Bright Anneal)
The bright annealed mill surface is obtained by annealing the material under an atmosphere, so that scale is not produced on the surface.

Brushed Finish

(No.3/No.4/No.5/No.6)
This is a ground unidirectional finish obtained with 150/180/240/320 grit abrasive, which is characterized by parallel brushing lines, it is also known as Satin.

Scotch Brite

It's a semi-dull finish with uniform grain, which is obtained using finer abrasives than No.4

Stainless Steel Sheet/Plate

Specification:

ASTM A240/A240M, A480/A480M, JIS G4304/G4305,
EN 10028-7/10088-2

Product Type	Finish	Grade	Thicknes(mm)	Widthe(mm)									
				Main Size								Other Size	Application
				750	914	1000	1219	1250	1500	1524	2000		
Sheet/ Plate	No.1	304/L,316L	2.0 ≦ t＜5.0			◎	◎	◎	◎	◎		Upon Request	Petro-chemical industry, Tanks.
			5.0 ≦ t ≦ 12.7			◎	◎	◎	◎	◎	◎		
			12.7＜t ≦ 30.0			◎	◎		◎	◎			
			t＞30.0	Upon Request									
		430	2.0 ≦ t ≦ 6.0			◎	◎	◎	◎	◎			
		409,439	3.0 ≦ t ≦ 6.0			◎	◎	◎	◎	◎			
	2B	304L	3.5 ≦ t ≦ 5.0			◎	◎	◎	◎	◎			
		316L	3.5 ≦ t ≦ 4.0			◎	◎	◎	◎	◎			
		304/L, 316L	4.76 ≦ t ≦ 6.0						◎	◎			
	2B NO.4 NO.5 HL SB	304L	0.4 ≦ t ≦ 3.0	◎	◎	◎	◎	◎	◎	◎		(1)Size Range : 71~1524mm (2)71~800mm Max. Thickness : 2.0mm	Medical equipment, Food industry, Construction material, Kitchen utensils, BBQ grill.
		316L, 430	0.5 ≦ t ≦ 3.0	◎	◎	◎	◎	◎	◎	◎			
		409	0.5 ≦ t ≦ 3.0		◎	◎	◎	◎	◎	◎			
		439	0.4 ≦ t ≦ 1.5		◎	◎	◎	◎	◎	◎			
			1.5＜t ≦ 2.5		◎	◎	◎	◎					
	BA	304/L, 316L 430	0.4≦t≦2.0		◎	◎	◎	◎					
	NO.8	304/L,316L	0.6≦t≦2.0				◎	◎					Construction material
Remark				Feature 1.Oil base wet polished 3.PE Coating normal/ laser film Optional for Front/ Back side Sheet：1.25~2.2mts					2.Both-sides polished available 4.Line-marking 5.Package weight Plate：2.0~4.0mts				

No.1

A rough, dull surface, which results from hot rolling to the specified thickness, followed by annealing and descaling.

2D

A dull finish which results from cold rolling followed by annealing and descaling, and may perhaps get a final light roll pass through unpolished rolls. A 2D finish is used where appearance is not a concern.

2B

(Mill Finish)
A bright, cold-rolled finish resulting in the same manner as 2D finish, except that the annealed and descaled sheet received a final light roll pass through polished rolls. This is the general-purpose cold-rolled finish that can be used as is, or a preliminary step to polishing.

BA

(Bright Anneal)
The bright annealed mill surface is obtained by annealing the material under an atmosphere, so that scale is not produced on the surface.

Brushed Finish

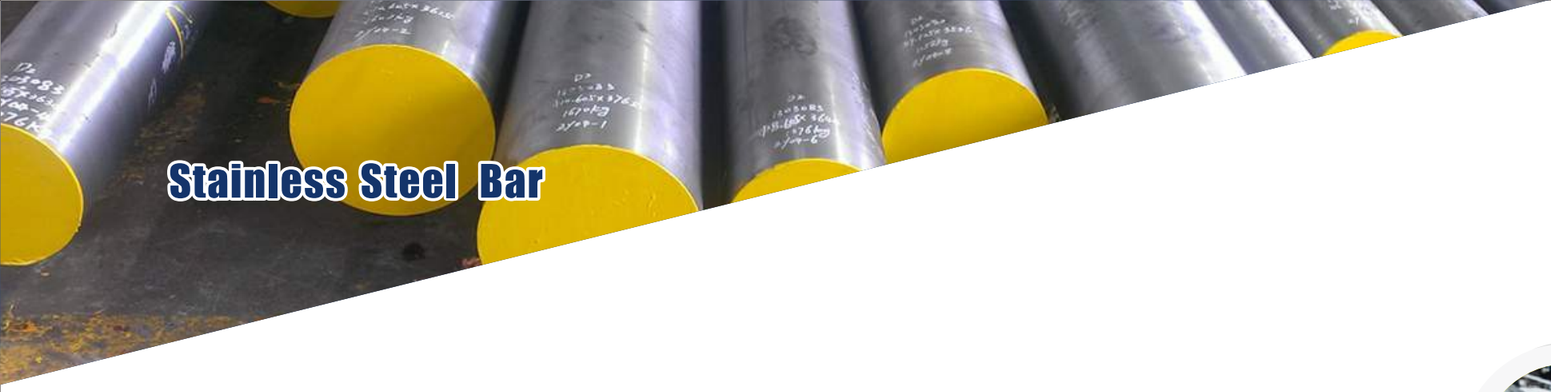
(No.3/No.4/No.5/No.6)
This is a ground unidirectional finish obtained with 150/180/240/320 grit abrasive, which is characterized by parallel brushing lines, it is also known as Satin.

Scotch Brite

It's a semi-dull finish with uniform grain, which is obtained using finer abrasives than No.4/NO.5/NO.6. This finish has smooth, soft and exquisite grains which has a low level of reflectivity and unidirectional texture.

Hairline

Seemingly endless polishing lines extend uniformly along with the length of the coil give the hairline. It's a well-defined directional finish with long-grain and fine-line.



Stainless Steel Bar

Round Bar	Square Bar	Hex Bar	Flat Bar
1/16" thru 16"	1/8" thru 6"	1/8" thru 4"	1/8 x 3/8" thru 4" x 8"

Product Series		
Classification	**Standard Specifications**	**Grade**
AUSTENITE CLASS	ASTM, DIN, JIS, GB200	201
		201H
		301
		304
		304L
		304Cu
		316
		316L
		316Ti
		316N
		317
		317L
		321
		310S
Ferrite Class	ASTM, DIN, JIS, GB	430
		430LX
Precipitate Hardening	ASTM, DIN, JIS, GB	630
Duplex	ASTM, DIN, JIS, GB	329
Other Grades	Tailor-made according to customer's requirements	

Stainles Steel Hollow Section




Description	Grade	Size	Height	Width	Thickness	Finishing	Standard Length
Stainless Square Hollow Section	304	10.0mm-150.0mm	–	–	1.2mm - 6.0mm	BA & HL	6M
	316 & 316L	75.0mm - 300.0mm					
Stainless Rectangular Hollow Section	304, 316 & 316L	–	10.0mm - 100.0mm	19.0mm - 200.0mm	1.2mm - 8.0mm	–	–

Wall Thickness Tolerance of Stainless Steel Hollow Sections

NPS	DN	OD(mm)	Wall Thickness(mm)						
			0.6	1	1.6	2.5	4	6	8
3/4	20	26.67	0.07	0.11	0.18	0.28	0.45	0.67	0.89
1	25	33.4	0.09	0.14	0.23	0.36	0.57	0.84	1.11
11/4	32	42.16	0.11	0.18	0.29	0.45	0.71	1.06	1.40
11/2	40	48.26	0.12	0.21	0.33	0.51	0.82	1.21	1.61
2	50	60.3	0.16	0.26	0.41	0.64	1.02	1.52	2.01
3	80	88.9	0.23	0.38	0.61	0.95	1.50	2.24	2.96
4	100	114.3	0.29	0.49	0.78	1.22	1.93	2.88	3.80
6	150	168.28	0.43	0.72	1.15	1.79	2.85	4.24	5.60
8	200	219.08	0.56	0.94	1.50	2.33	3.71	5.52	7.29
10	250	273.05	0.70	1.17	1.87	2.91	4.62	6.87	19.09
12	300	323.85	0.83	1.39	2.22	3.45	5.48	8.15	10.78
14	350	355.6	0.92	1.52	2.43	3.79	6.02	8.95	11.84
16	400	406.4	1.05	1.74	2.78	4.33	6.88	10.23	13.53

Stainless steel Seamless Pipe

Sizes:1/8″ thru 24″

Grade:304H, 316H, 309/S, 310/S, 317/L, 321/H, 347/H, 904L, 330, 254SMO, 410.

Specifications: ASTM A312, ASTM A358, ASTM A813, ASTM A814

Stainless Steel Seamless Pipe Tolerances:

NPS Designator	Permissible Variations in Outside Diameter	
	Over In.	Under In.
1/8 to 1-1/2 inch	1/64 (0.015)	1/32 (0.031)
Over 1-1/2 to 4 inch	1/32 (0.031)	1/32 (0.031)
Over 4 to 8 inch	1/16 (0.062)	1/32 (0.031)
Over 8 to 18 inch	3/23 (0.093)	1/32 (0.031)

Nominal Wall Thickness:

NPS Designator	Outside Diameter in.	Schedule 10S in.	Schedule 40S in.	Schedule 80S in.	Schedule 160 in.	Schedule XX in.
1/4	0.540	0.065	0.088	0.119	0.188	
3/8	0.675	0.065	0.091	0.126	0.218	
1/2	0.840	0.083	0.109	0.147	0.250	0.294
3/4	1.050	0.083	0.113	0.154	0.250	0.308
1.0	1.315	0.109	0.133	0.179	0.281	0.358
1 1/4	1.660	0.109	0.140	0.191	0.343	0.382
1 1/2	1.900	0.109	0.145	0.200	0.375	0.400
2	2.375	0.109	0.154	0.218	0.438	0.436
2 1/2	2.875	0.120	0.203	0.276		0.552
3	3.500	0.120	0.216	0.300	0.534	0.600
3 1/2	4.000	0.120	0.226	0.318	0.625	0.636
4	4.500	0.120	0.237	0.337	0.719	0.674
5	5.563	0.134	0.258	0.375	0.906	0.750
6	6.625	0.134	0.280	0.432	1.125	0.864
8	8.625	0.148	0.322	0.500	1.312	0.875
10	10.750	0.165	0.365	0.500	1.406	
12	12.750	0.180	0.375	0.500	1.594	
14	14.000	0.188	0.375	0.500		
16	16.000	0.188	0.375	0.500		

Stainless Steel Welded Pipe

Sizes:11/8″ thru 36″

Grade:304, 304L,304H, 316, 361L,316H, 309/S, 310/S, 317/L, 321/H, 347/H, 410, 410S, Duplex 2205, Duplex 2507

Specifications: ASTM A312, ASTM A358, ASTM A240, ASTM A778

Stainless Steel Seamless Pipe Tolerances:

NPS Designator	Permissible Variations in Outside Diameter	
	Over In.	Under In.
1/8 to 1-1/2 inch	1/64 (0.015)	1/32 (0.031)
Over 1-1/2 to 4 inch	1/32 (0.031)	1/32 (0.031)
Over 4 to 8 inch	1/16 (0.062)	1/32 (0.031)
Over 8 to 18 inch	3/23 (0.093)	1/32 (0.031)

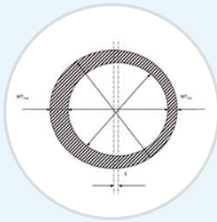
Nominal Wall Thickness:

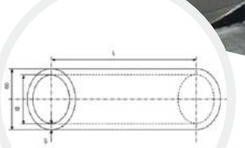
NPS Designator	Outside Diameter in.	Schedule 10S in.	Schedule 40S in.	Schedule 80S in.	Schedule 160 in.	Schedule XX in.
1/4	0.540	0.065	0.088	0.119	.0188	
3/8	0.675	0.065	0.091	0.126	0.218	
1/2	0.840	0.083	0.109	0.147	0.250	0.294
3/4	1.050	0.083	0.113	0.154	0.250	0.308
1.0	1.315	0.109	0.133	0.179	0.281	0.358
1 1/4	1.660	0.109	0.140	0.191	0.343	0.382
1 1/2	1.900	0.109	0.145	0.200	0.375	0.400
2	2.375	0.109	0.154	0.218	0.438	0.436
2 1/2	2.875	0.120	0.203	0.276		0.552
3	3.500	0.120	0.216	0.300	0.534	0.600
3 1/2	4.000	0.120	0.226	0.318	0.625	0.636
4	4.500	0.120	0.237	0.337	0.719	0.674
5	5.563	0.134	0.258	0.375	0.906	0.750
6	6.625	0.134	0.280	0.432	1.125	0.864
8	8.625	0.148	0.322	0.500	1.312	0.875
10	10.750	0.165	0.365	0.500	1.406	
12	12.750	0.180	0.375	0.500	1.594	
14	14.000	0.188	0.375	0.500		
16	16.000	0.188	0.375	0.500		

Geometries of Stainless Steel Pipe

Eccentricity

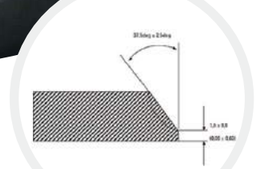
E is half of the difference between biggest and smallest wall thickness (WT) values in one cross section.
In terms of mm:
However, eccentricity is expressed as a percentage ofthe mean wall thicknessof this cross section
D0 is the arithmetic mean between the smallest and biggest tube diameter on any one tube circumference.
If minimum wall thickness is required variations are allowed on the plus side only!
As a percentage of the mean diameter this is: Ovality must not be confused with eccentricity. WTmax WTmin
D0 Dmax Dmin
E E(mm)= WTmax - WTmin
2 E(%)= WTmax - WTmin 100
WTmax + WTmin





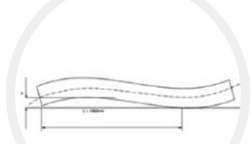
Dimension

OD ⋯ Outside Diameter
ID ⋯ Inside Diameter
WT ⋯ Wall Thickness
L ⋯ Length
If minimum wall thickness is required variations areallowed on the plus side only!



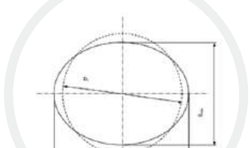
Buttwelding ends

ANSI / ASME B16.25-2007
Fig. 4 Weld Bevel Details for GTAW Root Pass
[WT > 3mm (0,12 in.) to 10mm (0,38 in.), Inclusive]
GENERAL NOTES:
a) This detail applies for gas tungsten arc welding(GTAW) of the rootpass wherenominal thickness is over 3mm
b) Linear dimensions are in millimeters with inchvaluesin parentheses



Straightness

Standard pipes and tubes are supplied straightened to the eye:for special applications the permissible deviation from the straight line may be agreedbetween purchaser and tube manufacturer; the maximumpermissible deviation from the straight line related to the length of measurement L is to be indicated, e.g. 1mm/1000mm.



Mean diameter outside or inside

D0 is the arithmetic mean between the smallest and biggest tube diameter on any one tube circumference.
If minimum wall thickness is required variations are allowed on the plus side only!

Stainless Steel Flange

Stainless Steel Weld Neck Flanges

Applications

◆Chemical Industry
◆Petrochemical Industry

Available Grades : F 304, 304L, 304H, 316, 316L, 316Ti, 310, 310S, 321, 321H, 317, 347, 347H, 904L.
Available Stainless Steel : ASTM A 182, A 240
Available Size : 1/8" NB TO 48"NB.
Available Class : 150#, 300#, 600#, 900#, 1500# &2500 #.

Stainless Steel Slip On Flanges

Applications

◆Cement Industry
◆Petrochemical Industry
◆Ship Building Industry
◆Sugar Mills
◆Chemical Industry

Available Grades : F 304, 304L, 304H, 316, 316L,316Ti, 310, 310S, 321, 321H, 317, 347, 347H, 904L
Available Sizes : 1/8" NB TO 48"NB.
Available Stainless Steel Standards : ASTM A 182, A 240
Available Class : 150#, 300#, 600#, 900#, 1500# & 2500 #.

Stainless Steel Blind Flanges

Applications

◆Used to provide positive closer on the ends of pipes, valves or equipment nozzles

Available Grades : F 304, 304L, 304H, 316, 316L, 316Ti, 310, 310S, 321, 321H, 317, 347, 347H, 904L.
Austenitic Stainless Steel Standards : ASTM A 182, A 240
Available Sizes : 1/8" NB TO 48"NB.
Available Class : 150#, 300#, 600#, 900#, 1500# & 2500 #

Stainless Steel Lap Joint Flanges

Applications

◆Steel plants
◆Heavy Pumps
◆Sugar mills
◆Distilleries
◆Cement Industry
◆Construction Industry
◆Petrochemical Industry

Available Grades : F 304, 304L, 304H, 316, 316L, 316Ti, 310, 310S, 321, 321H, 317, 347, 347H, 904L.
Austenitic Stainless Steel Standards : ASTM A 182, A 240
Available Sizes : 1/8" NB TO 48"NB.
Available Class : 150#, 300#, 600#, 900#, 1500# & 2500 #.

Stainless Steel Flange & Elbow

Stainless Steel Socket Weld Flanges

Applications

◆Chemical Industry
◆Petrochemical Industry

Available Grades : F 304, 304L, 304H, 316, 316L, 316Ti, 310, 310S, 321, 321H, 317, 347, 347H, 904L.
Available Stainless Steel : ASTM A 182, A 240
Available Size : 1/8" NB TO 48"NB.
Available Class : 150#, 300#, 600#, 900#, 1500# & 2500 #.

Stainless Steel Threaded Flanges

Applications

◆Water Systems
◆Gas Plants
◆Ship Building Industries
◆Power Plants
◆Offshore Industry

Available Grades : F 304, 304L, 304H, 316, 316L, 316Ti, 310, 310S, 321, 321H, 317,347, 347H, 904L.
Available Stainless Steel : ASTM A 182, A 240
Available Size : 1/8" NB TO 48"NB.
Available Class : 150#, 300#, 600#, 900#, 1500# & 2500 #.

Stainless Steel Forged Flanges

Applications

◆Ship building industry
◆Valve industry
◆Petrochemical and gas industry
◆Power generation industry
◆Dairy industry

Technical specifications
Standards :ASTM / ASME A/SA 182 & A240
Grade :F 304, 304L, 304H, 309S, 309H, 310S, 310H, 316, 316TI, 316H, 316L, 316LN, 317, 317L, 321, 321H, 347, 347H, 904L
Size range :1/2" TO 36" (15 mm to 900 mm)
Pressure class :75 LBS, 150 LBS, 300 LBS, 400 LBS, 600 LBS and 900 LBS

Stainless Steel Elbows

Types: 45°long or short radius elbow, 90°long or short radius elbow,180°longor short radius elbow

Applications

◆Petrochemical industry
◆Oil field
◆Chemical industry
◆Water supply
◆Food & beverage industry
◆Pharmaceutical industry

Technical specifications
Size :1/2"NB TO 48"NB IN
Schedule :SCH20, SCH30, SCH40, STD, SCH80, XS, SCH60, SCH80, SCH120, SCH140, SCH160, XXS

Stainless Steel Tee & Reducer

Stainless Steel Tee

Types: Equal tee, reducing tee, barred tee, lateral tee, unequal tee.

Applications

- ◆Chemical industry
- ◆Water supply
- ◆Petrochemical industry
- ◆Food & beverage industry
- ◆Pharmaceutical industry
- ◆Oil field
- ◆Power plants

Technical specifications
Sizes available :1/2" NB TO 48" NB
Specification:ASTM A403 WP Gr.304,304H,309,310,316,316L,321,347,904L

Stainless Steel Reducer

Types: Eccentric reducer, concentric reducer

Applications

- ◆Chemical industry
- ◆Water supply
- ◆Petrochemical industry
- ◆Food & beverage industry
- ◆Pharmaceutical industry
- ◆Oil field
- ◆Power plants

Technical specifications
Sizes available :1/2" NB TO 48" NB
Specification:ASTM A403 WP Gr.304,304H,309,310,316,316L,321,347,904L

Projects

- Heat Exchangers, Condensers & Pressure Vessels
- Chemical and Petrochemical
- Energy and Power Generation
- Automotive
- Aerospace Industry
- Shipping Industry & Naval Engineering
- Centralize Heating System
- Mechanical and Plant Engineering
- Liquefaction Projects




Industry: Piling Engineering in Singapore
Product:TP316 Stainless Welded Pipe

Industry: SEACOR Marine Project in Mexico
Product: TP321H Tee & Reducer

Industry: Industrial Exhaust Ducts in Romania
Product: 45°Elbow & Tee

Industry: Oil Plant in Kuwait
Product: TP347H Stainless Welded Pipe

Industry: Geothermal Exploration in Swizerland
Product:TP410 Stainless Seamless Pipe

Industry: Smart Shipyard Project in Myanmar
Product: Socket Weld Flange

Industry: Energy Project in Nigeria
Product: S32304 Duplex Stainless Pipe

Industry: Coastal Chemical in Chile
Product: 409 Ferritic Stainless Steel Tube

Industry: Water Supply System in Denmark
Product:TP904L Tee & Flange

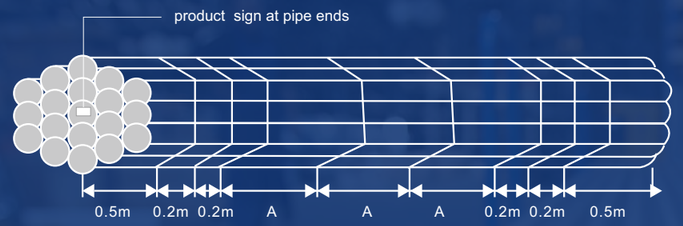
Industry: Gas Exploration in Columbia
Product: TP304L Stainless welded pipe

Industry: Oil Refinery in Angola
Product: 202 Stainless Steel Pipe & Flange

Industry: Petrochemical Project in United Arab Emirates
Product: 301 Stainless Steel Seamless Pipe & Elbow

Bundled Package

On bundle of steel tube shall be the same in batch number, steel grade and specification.the rest of tubing less than one bundle should be tied into small bundles. The weight of each bundle should be less than 50kg.The max weight cannot exceed 80kg of the bundle If there are special requirements.



steel strips bundling for fixed pipes(>6 meters or=6 meters)

When the length of the steel tube is greater than or equal to 6m, with at least 8 strapping bands for eachbundle, divided into 3 groups and 3-2-3.

When the length of the steel tube is less than 6m, and each bundle is tied at least 5 knots and divided into 3 groups, which are 2-1-2.

When the length of the tube is greater than or equal to 3m, and each bundle is tied with at least 3 bands, divided into 3 groups, 1-1-1 showed below.

Wooden Box Package

The wooden box is suitable for cold rolling or cold drawing seamless steel tube, polished hot rolled stainless steel tube.

When the outer diameter of steel pipe is greater than or equal 10mm, the maximum weight of the container should be 50kg.

When the outer diameter of steel pipe is less than or equal 10mm, the maximum weight of the container should be 30kg.

Sr. No. Type of Packing

1. Hessian / PVC Cloth Bundles with PVC Box Strap or Hexagonal Bundles
2. Wooden Crate
3. Wooden Box made of treated wood or Plywood sheet
4. Bare Tubes Bundles
5. Tubes With PVC Sleeve and packed in Wooden Boxes
6. Tubes bundles with PVC Film and Plywood Sheets on the bundles