



Alloy World Product Catalogue

Shaanxi Jiade Group Co Ltd — No 221 Shuangyong Avenue, Fengdong New Town, Xi'an City, Shaanxi Province, China — Mon to Sat 08:30 to 18:00 GMT+8. Stainless steel and nickel alloy pipe, sheet, bar and fittings. All figures in this catalogue are taken from the published product data on alloyworld.cn.

Works Summary

Established	1992
Works Area	25000 square metres
Employees	320+
Annual Output	40000 tons
Export Markets	Germany, Italy, United Kingdom, United States, Canada, Austria, New Zealand, Russia, Ukraine, South Korea, Japan, India
Standards	China GB, ISO, German DIN, European EN, 3A, Japan JIS
Loading Port	Shanghai

Stainless Steel Pipe (7 products)

Seamless and welded stainless pipe from 10 mm to 1219 mm, in round square and rectangular section, across 201 304 316L 317 321 310S and 904L.

ASTM A213 TP347 Cold Finished Seamless Pipe 168.3 x 4.2 x 8000 mm

This is a cold finished TP347 seamless pipe supplied to ASME B36.19 dimensions and ASTM A213 material requirements, in a fixed size of 168.3 mm outside diameter, 4.2 mm wall and 8000 mm length. TP347 is a niobium stabilised austenitic grade, which keeps chromium carbide out of the grain boundaries after welding and after service between 425 and 815 C. Buyers use it where a 304 or 316 line would sensitise and fail at the weld.

Standard	ASME B36.19 dimensions, ASTM A213 material
Grade	TP347
Outside Diameter	168.3 mm, 6 inch, DN150
Wall Thickness	4.2 mm
Length	8000 mm
Section Shape	Round
Type	TP347 seamless pipe
Surface Treatment	Pickled, 2B, No.4, BA, hairline, mirror
Chromium	17.0 to 20.0 percent
Nickel	9.0 to 13.0 percent

904L Stainless Steel Pipe

904L is one of the strongest stainless grades for corrosion resistance, written as 1.4539 or X1NiCrMoCu25-20-5 under EN and as UNS S08904 under the UNS system. It carries a very high level of nickel, molybdenum and chromium, and the combination is what makes it resistant to attack in acidic environments such as sulphuric, phosphoric and acetic acid. Pipe is supplied solution annealed in outside diameters from 10 mm to 1067 mm.

Grade	904L, 1.4539, X1NiCrMoCu25-20-5, UNS S08904
Standard	ASTM A249, A312, A213, A409, A358, A790, JIS G3459, JIS G3463
Outside Diameter	10 to 1067 mm

Wall Thickness	1.5 to 150 mm
Length	1000 to 13000 mm
Surface Finish	180, 240 or 320 grit polished, mill pickled
Delivery Condition	Solution annealed
Surface Treatment	Mill finished or polished

310S Stainless Steel Pipe

310S, also known as 1.4845 or X8CrNi25-21 under EN and UNS S31008, is the grade used in very high temperature environments. Theoretically it withstands up to 1100 C, and its very high nickel and chromium content is what makes it durable against corrosion at that heat. It is one of the most common heat resistant stainless grades in high temperature applications.

Grade	310S, 1.4845, X8CrNi25-21, UNS S31008
Standard	ASTM A249, A312, A213, JIS G3459, JIS G3463
Outside Diameter	10 to 1067 mm
Wall Thickness	1.5 to 150 mm
Length	1000 to 13000 mm
Chromium	24.0 to 26.0 percent
Maximum Service Temperature	Up to 1100 C theoretically
Surface Finish	180, 240 or 320 grit polished, mill pickled
Delivery Condition	Solution annealed
Packing	Woven bags and wooden cases

321 Stainless Steel Pipe

321 is the titanium stabilised austenitic grade preferred for heat resistant applications, written as 1.4541 or X6CrNiTi18-10 under EN and UNS S32100 under the UNS system. Its ingredient list is close to 304, and it behaves like a mix of 304 and 316Ti. It keeps good heat and corrosion resistance at temperatures around 600 to 700 C, and it is widely used in Germany and Russia.

Grade	321, 1.4541, X6CrNiTi18-10, UNS S32100
Standard	ASTM A409, ASTM A312, JIS G3459, JIS G3463
Outside Diameter	10 to 1067 mm
Wall Thickness	1 to 150 mm
Length	1000 to 13000 mm
Chromium	17.00 to 19.00 percent
Surface Treatment	Mill finished, polished
Related Grade	321H

316L Stainless Steel Pipe

316L stainless steel pipe is a hollow round steel bar used in petroleum, chemical, medical, food, light industry, machinery and instrument service, as well as for mechanical structural components. Because weight drops for the same bending and torsional strength, it is widely used in the manufacture of mechanical parts and engineering structures. It is made seamless and welded in round, square and rectangular shapes.

Grade	316L
Process	Seamless and welded
Shapes	Round, square, rectangular
Round Size	10 to 1219 mm
Square Size	20 x 20 mm to 500 x 500 mm

Rectangular Size	20 x 30 mm to 400 x 600 mm
Wall Thickness	0.6 to 62 mm
Length	3000 mm, 5800 mm
Standard	ASTM A213, A312, A249, A269, A409, A358, A511, A554
Surface Treatment	Pickled, polished

317 Stainless Steel Pipe

317 stainless steel pipe has very good corrosion resistance and in particular resists pitting in phosphoric and acetic acids. It also has very good intergranular corrosion resistance. It costs more than 316 or 316L because it contains 11 percent nickel minimum against the 10 percent minimum in 316, and that extra alloy content is what buys the additional pitting resistance.

Grade	317
Process	Seamless and welded
Shapes	Round, square, rectangular
Round Size	10 to 1219 mm
Square Size	20 x 20 mm to 500 x 500 mm
Rectangular Size	20 x 30 mm to 400 x 600 mm
Wall Thickness	0.6 to 62 mm
Length	3000 mm, 5800 mm, 6000 mm, 11800 mm, 12000 mm
Standard	ASTM A213, A312, A249, A269, A409, A358, A511, A554
Surface Treatment	Pickled, polished

304 Stainless Steel Pipe

304 is the versatile stainless steel used across equipment and machinery that needs good overall performance in both corrosion resistance and formability. The pipe is strong and tough, with high corrosion protection, high temperature resistance and the ability to be sterilised. It has high workability, can be manufactured to tight tolerances and welded, and resists corrosion across a wide range of atmospheric environments and many corrosive media.

Grade	304
Process	Welded and seamless
Shapes	Round, square, rectangular
Round Size	10 to 1219 mm
Square Size	20 x 20 mm to 500 x 500 mm
Rectangular Size	20 x 30 mm to 400 x 600 mm
Wall Thickness	0.6 to 62 mm
Length	1000 to 12000 mm
Standard	ASTM A213, A312, A249, A269, A409, A358, A511, A554

Stainless Steel Sheet (6 products)

Cold rolled 0.3 to 3 mm and hot rolled 3 to 120 mm sheet and plate in 304 316L 409 and 2205 duplex, up to 2500 mm wide and 12000 mm long.

409 Stainless Steel Plate and Sheet

Grade 409 is a thermostable ferritic stainless steel with better oxidation and corrosion resistance than carbon steel. This titanium stabilised sheet was developed for automotive exhaust systems, and its formability, weldability and corrosion resistance carry it into other applications. It is supplied cold rolled from 0.3 to 3 mm and hot rolled from 3 to 120 mm, in widths to 2000 mm and lengths to 12000 mm.

Grade	409
Width	500 to 2000 mm or customised

Length	1000 to 12000 mm or customised
Cold Rolled Thickness	0.3 to 3 mm
Hot Rolled Thickness	3 to 120 mm
Standard	ASTM A167, A176, A240/A240M, A263, A264, A265, A666, A480/A480M, EN 10088-2, JIS G4305
Surface Finish	2B, No.4, BA, No.1 hot rolled annealed and pickled, plus customer specific polish
Structure	Ferritic

316L Stainless Steel Sheet

Grade 316 is the standard molybdenum bearing austenitic stainless steel, second only to 304 in importance. The molybdenum gives it better overall corrosion resistance than 304, and in particular higher resistance to pitting and crevice corrosion in chloride environments. 316L is the low carbon version, which is highly resistant to sensitisation and is the grade to use when the sheet will be welded.

Grade	316L
Width	500 to 2000 mm or customised
Length	1000 to 12000 mm or customised
Cold Rolled Thickness	0.3 to 3 mm
Hot Rolled Thickness	3 to 120 mm
Standard	ASTM A240, JIS G4304, EN 10088-2
Surface Treatment	No.1, No.4, 2B, 2D, BA, HL, No.8, mirror
Structure	Austenitic

2205 Duplex Stainless Steel Sheet

2205 duplex stainless steel, UNS S32205 and S31803, is a 22 percent chromium, 3 percent molybdenum, 5 to 6 percent nickel and nitrogen alloyed duplex grade. It combines high general, localised and stress corrosion resistance with high strength and excellent impact toughness. Its pitting and crevice corrosion resistance is superior to 316L or 317L austenitic stainless in almost all corrosive media.

Grade	2205 duplex, UNS S32305 and S31803
Chromium	22 percent
Molybdenum	3 percent
Nickel	5 to 6 percent
Width	500 to 2500 mm
Length	1000 to 12000 mm
Cold Rolled Thickness	0.3 to 3 mm
Hot Rolled Thickness	3 to 120 mm
Standard	ASTM A240, ASTM A480, EN 10088-2
Surface Finish	No.1, No.4, 2B, 2D, BA, HL, No.8, mirror

Hairline Finish Stainless Steel Sheet

A hairline finish is a directional surface where the metal carries a straight, fine grain running the length of the sheet. The standard market hairline is 180 to 240 grit, and varying the roughness of the polished grain changes how the surface reads. Crossing the grain produces a cross hairline, and polishing in a circular pattern produces a circular hairline, which is why this is the most widely used decorative treatment for stainless steel.

Grade	201, 304, 304L, 430
Process	Hot rolled and cold rolled
Type	Sheet, plate, coil, strip
Polish	180 to 240 grit, No.4 satin or hairline

Width	500 to 2000 mm or customised
Length	1000 to 6000 mm or customised
Cold Rolled Thickness	0.3 to 3 mm
Hot Rolled Thickness	3 to 20 mm
Standard	ASME, ASTM, EN, GB, DIN, JIS
Delivery	15 to 20 days according to order quantity

Mirror Finish Stainless Steel Sheet

A mirror finish is a bright non directional surface polished with a 1000 grit abrasive belt and then buffed. EN 10088-2 classifies it as a 2P surface finish and ASTM A480/A480M as the No.8 finish, both achieved by mechanical polishing with successively finer abrasives. The surface is highly reflective with a high degree of image clarity, and very faint buffing or polishing lines may still be visible on the finished sheet.

Grade	201, 304, 304L, 316, 316L, 317, 317L
Finish Standard	EN 10088-2 2P, ASTM A480/A480M No.8
Polishing	1000 grit abrasive belt then buffing
Cold Rolled Thickness	0.3 to 3 mm
Hot Rolled Thickness	3 to 20 mm
Width	Up to 2000 mm
Length	Up to 6000 mm
Standard	ASME, ASTM, EN, GB, DIN, JIS
Packing	Plastic protective film

304 304L and 304H Stainless Steel Sheet

Grade 304 is the standard 18/8 austenitic stainless steel and the most widely used stainless grade, available in the widest range of products, forms and finishes. 304L is the low carbon version, which does not require post weld annealing and is used extensively in heavy gauge components of about 5 mm and over. 304H carries higher carbon and is used at elevated temperature.

Grade	304, 304L, 304H
Width	500 to 2000 mm
Length	1000 to 12000 mm
Cold Rolled Thickness	0.3 to 3 mm
Hot Rolled Thickness	3 to 120 mm
Surface Finish	No.1, No.4, 2B, BA, HL, No.8, satin finish
Minimum Order	1 ton per specification
Lead Time	7 days after receipt of the deposit
Shipment	LCL, FCL, bulk
Loading Port	Shanghai

Stainless Steel Bar (6 products)

Round square flat and hexagonal bar in 301 316 316L 317 410 and 904L, hot rolled or cold drawn, black peeled bright or polished, 0.3 m to 12 m.

317 Stainless Steel Bar

SUS317 and 317L is a molybdenum bearing stainless steel whose molybdenum content sits slightly above that of 316. Bar is produced hot rolled and cold drawn, in round, flat, square and hexagonal profiles, and supplied black, peeled, bright or polished. It is used for industrial transmission components and mechanical structural parts in petroleum and related process plant.

Grade	317, SUS317, 317L
Type	Hot rolled and cold drawn
Round Bar Diameter	1/4 inch to 16 inch
Square Bar Size	15 x 15 mm to 300 x 300 mm
Length	0.3 to 12 m or customised
Standard	ASTM A276, A564, A582, A484
Surface Treatment	Black, peeled, bright, polished
Product Forms	Round bar, flat bar, square bar, hexagonal bar
Supply Status	Bright wire drawing, bright annealing

316L Stainless Steel Bar

316L is widely used in the chemical industry for its corrosion resistance. It is a derivative of 18-8 austenitic stainless steel with 2 to 3 percent molybdenum added, and further grades have been derived from it, including 316Ti with a small titanium addition, 316N with a small nitrogen addition and 317L with higher nickel and molybdenum. Most 316L on the market is produced to American standards, and steel mills generally hold the nickel content toward the lower end of the range for cost reasons.

Grade	316L
Type	Hot rolled and cold drawn
Round Bar Diameter	5 to 900 mm
Square Bar Size	15 x 15 mm to 300 x 300 mm
Length	0.3 to 12 m or customised
Standard	ASTM A276, A564, A582, A484
Surface Treatment	Black, peeled, bright, polished
Certification	MTC, CE, ISO, PED
Minimum Order	1000 kg
Shipping	Air, express, rail, road, sea

316 Stainless Steel Bar

316 stainless steel bar carries high nickel and chromium, which gives it oxidation resistance, corrosion resistance, acid and alkali resistance and high temperature resistance. Stainless steel begins to soften above 800 C and the allowable stress then falls continuously, with a maximum service temperature of 1200 C. Bar is supplied hot rolled and cold drawn in round and square sections, black, peeled, bright or polished.

Grade	316
Type	Hot rolled and cold drawn
Round Bar Diameter	1/4 inch to 16 inch
Square Bar Size	15 x 15 mm to 300 x 300 mm
Length	1 to 12 m or customised
Standard	ASTM A276, A564, A582, A484
Surface Treatment	Black, peeled, bright, polished
Maximum Service Temperature	1200 C
Softening Onset	Above 800 C

301 Stainless Steel Bar

Type 301 is a chromium nickel austenitic stainless steel that reaches high strength and ductility by cold working rather than by heat treatment. It is not hardenable by heat treatment. In the annealed condition it is non magnetic, and it becomes increasingly magnetic as it is cold worked.

Grade	301
Type	Hot rolled and cold drawn
Round Bar Diameter	3 to 1200 mm
Square Bar Size	10 x 10 mm to 800 x 800 mm
Hexagonal Bar Size	H8 to H100 mm
Length	1000 to 12000 mm or customer specified
Standard	ASTM A276, A564/A564M, A582, A193/A193M, A194/A194M, A320/A320M, A453/A453M, A479/A479M, A484/A484M, EN 10088-3
Magnetic Response	Non magnetic annealed, increasingly magnetic with cold working

410 Stainless Steel Bar

Grade 410 is the basic martensitic stainless steel, written as 1.4006 or X12Cr13 under EN and UNS S41000 under the UNS system. AISI 410 is heat treatable, and it is often supplied in the hardened but still machinable condition for applications that need high strength together with moderate heat and corrosion resistance. Chromium sits between 11.50 and 13.50 percent.

Grade	410, EN 1.4006, X12Cr13, UNS S41000
Structure	Martensitic
Round Bar Diameter	10 to 900 mm
Square Bar Size	10 x 10 mm to 500 x 500 mm
Length	1000 to 12000 mm
Carbon	0.08 to 0.15 percent
Silicon	1.00 percent maximum
Manganese	1.00 percent maximum
Phosphorus	0.040 percent maximum
Sulphur	0.030 percent maximum

201 Stainless Steel Pipe

201 stainless steel pipe is produced as decorative pipe, industrial pipe, boiler pipe to A249 TP201, seamless pipe and A213 TP201 pipe. It carries acid and alkali resistance and high density, and it polishes without bubbles or pinholes. It is used mainly as decorative pipe, industrial pipe and in shallow stretch products such as watch cases and watch strap bottom caps.

Grade	201, TP201
Standard	ASTM A213 TP201, ASTM A249 TP201
Types	Decorative pipe, industrial pipe, boiler pipe, seamless pipe
Surface	Polished without bubbles or pinholes
Typical Uses	Decoration pipe, industrial pipe, shallow stretch products

Stainless Steel Pipe Fittings (3 products)

Butt weld elbows tees and reducers from DN10 to DN1200 in SCH 5S to SCH XXS, to ASTM A403 ASME B16.9 DIN and JIS, with ISO 9001 API Q1 and 3.1 certificates.

Stainless Steel Concentric and Eccentric Reducer

A stainless steel reducer changes pipe diameter in one direction. The concentric type is normally used in vertical lines and the eccentric type in horizontal lines, where the flat side is set top flat or bottom flat depending on whether the line needs to drain or vent. Reducers are forged and hot formed from DN12 to DN1200 in wall thicknesses from SCH 5S up to SCH XXS.

Type	Concentric, eccentric
Technique	Forged, hot formed
Grades	201, 202, 304, 304L, 316, 316L, 310S, 317, 317L, 321
Standard	DIN 2527, 2573, 2576, 2642, 2633, JIS B2311, ASME B16.9

Outer Diameter	DN12 to DN1200
Wall Thickness	SCH 5S to SCH XXS
Delivery	15 to 20 days according to order quantity
Shipping	FCL, LCL, bulk
Loading Port	Shanghai
Packing	Woven bags

Stainless Steel Elbow 45 90 and 180 Degree

A stainless steel elbow changes direction in a piping system. The standard set is 45, 90 and 180 degree in long radius, plus 90 and 180 degree in short radius, with 3D and 5D bends available where a gentler change is needed. Elbows are produced seamless and welded to ASTM A403 and ASME B16.9 from DN10 to DN1200, in grades from 304 through to super duplex S32760.

Products	45 degree, 90 degree and 180 degree elbow
Radius	LR, SR, 3D, 5D
Type	Seamless and welded
Materials	304, 304L, 316, 316L, 310S, 317, 317L, 321, 348, 347H, 2205, 2507, S32760, S31803
Standard	ASTM A403, ASME B16.9
Outer Diameter	DN10 to DN1200
Wall Thickness	SCH 5S to SCH XXS
Certification	ISO 9001:2000, API, SGS
Packing	Wooden case, pallet or as requested
Delivery	7 days from stock, 15 days for non stock material

Stainless Steel Equal and Reducing Tee

A stainless steel tee is a T shaped fitting with three branches, used to divide or combine pipelines, adjust flow rate and change direction. It is made as an equal tee where all three ends share one size, and as a reducing tee where the branch is smaller. Tees are hot worked by extrusion, drawing, forging and rolling, seamless up to NPS 24 inch and welded above that, in grades from WP304 through 904L.

Type	Equal tee, reducing tee
Technique	Hot working by extrusion, drawing, forging and rolling
Grade	ASTM A403 WP304, 304L, 321, 316, 316L, 310S, 317, 317L, 347H, 2205, 2507, S31803, 904L
Standard	ASME B16.9, ASME B16.25, DIN 2615, JIS B2311, JIS B2312, JIS B2313
Outer Diameter	DN12 to DN1200, NPS 1/2 inch to 24 inch seamless, above 24 inch welded
Wall Thickness	SCH10 to SCH160, STD, XS and XXS
Certification	ISO 9001:2015, API Q1, 3.1 certificate
Packing	Wooden case, pallet or as customer requested
Delivery	7 days from stock, 15 days for non stock material

Special Alloy (13 products)

Nickel and nickel copper alloys including Inconel 600 and 625, Monel 400 and K500, Hastelloy C-276 and G30, Nickel 200 and 201, plus 904L and flanges.

Nickel 200 Seamless Pipe

Nickel 200 seamless pipe is commercially pure wrought nickel supplied to ASTM B161 under UNS N02200. It is the standard choice for caustic, chlorine and food contact service where an alloyed stainless would pick up metallic contamination. The same programme covers Nickel 201 welded tube for lower carbon, cold formed duty, in sizes from 1/8 inch to 30 inch.

Standard	ASTM B161
Grade	Nickel 200, UNS N02200
Companion Grade	Nickel 201, UNS N02201
Size Range	1/8 inch to 30 inch
Construction	Seamless, welded or electric resistance welded
Density	8.9 g per cubic centimetre
Approval	PED approved supply
Origin	Xi'an, Shaanxi, China

Nickel Alloy 625 Exhaust Tubing

Nickel alloy 625 exhaust tubing is cold worked seamless tube covered by ASTM B444 under UNS N06625, also carried as BS 3074 NA21 and DIN material 2.4856. It is supplied in two grades: Grade 1 in the annealed condition and Grade 2 in the solution annealed condition. Both are used where an exhaust or hot gas path has to survive heat, vibration and corrosive condensate at once.

Standard	ASTM B444, ASME SB444, BS 3074 NA21, DIN 2.4856
Grade	Inconel 625, UNS N06625
Seamless Tubing Size	1/2 inch to 12 inch OD
Seamless Outside Diameter	3.00 to 219.10 mm
Seamless Wall Thickness	0.40 to 12.70 mm
Welded Tubing Size	1/2 inch to 12 inch OD
Welded Outside Diameter	6.35 to 114.3 mm
Welded Wall Thickness	0.8 to 12.7 mm
Gauge	25 SWG to 10 SWG
Length	Single random, double random and cut length

SS316 Equal Angle Bar 75 x 75 x 6 mm x 6 m

This is a 316 stainless equal angle bar in 75 x 75 x 6 mm section at 6 m length, produced to JIS, AISI and ASTM chemical requirements. It is the structural member used where a painted carbon steel angle would corrode away, typically inside chemical plant, metallurgical works and water treatment structures. Length is made to order rather than cut from stock random bar.

Standard	JIS, AISI, ASTM
Grade	Stainless steel 316
Model Number	316
Type	Equal angle bar
Section	75 x 75 x 6 mm
Standard Length	6 m, or to your request
Thickness Tolerance	plus minus 0.02 mm
Application	Chemical industry, metallurgy, water
Place of Origin	Shaanxi, China
Packing	To customer requirement or export standard

Monel Alloy K500

Monel Alloy K500 is a nickel copper superalloy with high strength and strong corrosion resistance in marine environments. It is held in stock as coils, sheets, strips, plates, round bars, pipe fittings, flanges, fasteners, valves, angles and channels, so a complete assembly can be sourced in one grade. Stock deliveries run about 7 to 10 days.

Grade	Monel Alloy K500
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Alloy Family	Nickel copper superalloy
Product Forms	Coils, sheets, strips, plates, round bars, pipe fittings, flanges, fasteners, valves, angles, channels
Delivery from Stock	About 7 to 10 days
Typical Applications	Fasteners, pump shafts, valves, marine equipment

Nickel Alloy 200 and 201

Nickel Alloy 200 is 99.6 percent commercially pure wrought nickel, designated UNS N02200 and W.Nr. 2.4060 and 2.4066. Nickel 201 has almost the same composition with lower carbon, which drops the base hardness and the work hardening rate and makes it the grade for spinning and cold forming. Both are supplied as rod and bar, fittings, forgings and wire against ASTM, ASME, DIN and ISO specifications.

Grade	Nickel Alloy 200 and 201
Nickel 200 Designation	UNS N02200, W.Nr. 2.4060, 2.4066
Nickel 201 Designation	UNS N02201, W.Nr. 2.4061, 2.4068
Purity	99.6 percent commercially pure wrought nickel
Rod and Bar	ASTM B160, ASME SB160, DIN 17752, ISO 9723, VdTUV 345
Fittings	ASTM B366, ASME SB366
Forgings	ISO 9725, DIN 17754
Chemical Composition	DIN 17740
Wire	DIN 17753, ISO 9724

Stainless Steel Flange DN15 to DN1200

A stainless steel flange is the disc shaped part that joins two lengths of pipe, with a gasket between the faces and bolts pulling them together. This programme covers DN15 through DN1200 in Class 150, 300, 600, 900 and 1500, in the plate, slip on, weld neck, blind and threaded types. Material runs from ASTM A182 F304 and F316 through to 904L, 2205, 2507 and 321, so the flange can be matched to the line it serves.

Size	DN15 to DN1200
Standard	GB, ASTM, JIS, EN, DIN
Pressure Class	150, 300, 600, 900, 1500
Flange Types	PL, SO, WN, BL, TH
Materials	ASTM A182 F304, 304L, F316, 316L, 904L, 2205, 2507, 1Cr18Ni9Ti, 0Cr18Ni9Ti, 321, 18-8
Bolt Hole Centre Circle Diameter	50 mm to 2130 mm
Bolt Hole Diameter	11 mm to 30 mm
Number of Bolt Holes	4 to 48
Thread	M10 to M27
Flange Thickness	12 mm to 58 mm

904L Stainless Steel Plate

904L stainless steel plate is a highly alloyed austenitic grade with very low carbon, high chromium, sufficient nickel and an addition of copper. It is specified where dilute sulphuric acid and other harsh corrosive conditions would attack 316L. Plate is supplied in hot rolled, cold rolled and fine rolled condition from 0.3 mm up to 350 mm thick, in lengths as required.

Grade	904L, N08904, 1.4539
Thickness	0.3 mm to 350 mm
Length	As required
Rolling Condition	Hot rolled, cold rolled, fine rolled
Carbon	0.03 percent maximum
Silicon	1.00 percent maximum

Manganese	2.00 percent maximum
Phosphorus	0.03 percent maximum
Sulphur	0.03 percent maximum
Nickel	23.0 to 25.0 percent

904L Stainless Steel Bar

904L bar is a low carbon, high nickel and molybdenum super austenitic stainless steel with strong activation and passivation behaviour. It resists non oxidising acids such as sulphuric, acetic, formic and phosphoric acid, and it holds up against pitting, crevice corrosion and stress corrosion cracking in neutral chloride media. Bar is produced to ASTM A276 and ASTM A182 or ASME SA-182 in round, square, flat and hexagonal sections.

Standard	ASTM A276, ASTM A182, ASME SA-182
Grade	904L
Round Bar Diameter	3 mm to 800 mm
Square Bar Size	4 x 4 mm to 100 x 100 mm
Flat Bar Thickness	2 mm to 100 mm
Flat Bar Width	10 mm to 500 mm
Hexagonal Bar Size	2 mm to 100 mm
Length	6 m or customised
Certificate	ISO 9001, third party inspection by SGS or BV

Hastelloy G30 Alloy N06030

Hastelloy G30 is a nickel base superalloy of nickel, chromium, cobalt and tungsten with a nickel content of about 37 percent and a high chromium level. Compared with most other nickel and iron base alloys, it stands up to mixed environments of commercial phosphoric acid and highly oxidising acid media such as nitric and hydrochloric, nitric and hydrofluoric, and sulphuric acid. It also suppresses grain boundary precipitation in the weld heat affected zone, which is why welded G30 fabrications are used across chemical treatment projects.

Grade	Hastelloy G30, Alloy N06030
Technical Standard	ASTM B366, B581, B582, B619, B622
Product Forms	Pipes, plates, bar, fittings
Nickel	About 37 percent
Chromium	28 to 31.5 percent
Molybdenum	4.0 to 6.0 percent
Copper	1.0 to 2.4 percent
Manganese	1.5 percent maximum

Hastelloy C-276 Alloy N10276

Hastelloy C-276 is a nickel molybdenum chromium alloy with tungsten, designated UNS N10276. High molybdenum and chromium let it resist chloride ion attack, and the tungsten addition improves that further. It is one of the few materials that will take wet chlorine gas, hypochlorite and chlorine dioxide solution, which is why it appears in chemical process plant handling both oxidising and reducing media.

Grade	Hastelloy C-276, UNS N10276
Alloy Family	Nickel molybdenum chromium alloy with tungsten
Key Resistance	Wet chlorine gas, hypochlorite, chlorine dioxide solution
Chloride Service	High concentration chloride solutions including ferric chloride and copper chloride
Carbon	Low carbon content to minimise carbide precipitation

Inconel 625 Alloy N06625

Inconel 625 is a nickel chromium molybdenum alloy with a niobium addition that hardens the alloy together with aluminium, so it reaches high strength without a separate heat treatment or strengthening step. It resists a wide range of harsh corrosive environments, and it is particularly strong against pitting and crevice corrosion. Typical uses are chemical plant, aviation and marine engineering, pollution control equipment and nuclear reactors.

Grade	Inconel 625, UNS N06625
Alloy Family	Nickel chromium molybdenum alloy with niobium
Strengthening	Niobium with aluminium, no separate heat treatment required
Key Resistance	Pitting and crevice corrosion
Typical Sectors	Chemical, aviation, marine engineering, pollution control, nuclear reactors

Inconel 600 Alloy N06600

Inconel 600 is a nickel chromium alloy with good oxidation resistance at high temperature. It resists chloride ion stress corrosion cracking, high purity water corrosion and alkali corrosion, which is why it turns up in heating furnace components, chemical and food industry equipment, nuclear engineering and ignition electrodes. It is supplied as pipe, plate, strip, round bar, flat bar, forgings, wire, profile and extruded parts.

Grade	Inconel 600, UNS N06600
Nickel	72.0 percent minimum
Chromium	14.0 to 17.0 percent
Iron	6.0 to 10.0 percent
Carbon	0.15 percent maximum
Silicon	0.5 percent maximum
Manganese	1.0 percent maximum
Copper	0.5 percent maximum
Density	8.47 g per cubic centimetre
Product Forms	Pipe, plate, strip, round bar, flat bar, forgings, wire, profile, extruded parts

Monel 400 Alloy N04400

Monel 400 is a nickel copper alloy with high strength and broad corrosion resistance, including seawater, hydrofluoric acid, sulphuric acid and alkali. It is used across marine engineering, chemical and hydrocarbon production equipment, valves, pumps, shafts, fittings, fasteners and heat exchangers. Supply covers pipe, plate, strip, round bar, wire and profile in the same grade.

Grade	Monel 400, UNS N04400
Alloy Family	Nickel copper alloy
Nickel	63.0 percent minimum
Copper	28.0 to 34.0 percent
Iron	2.5 percent maximum
Manganese	2.0 percent maximum
Carbon	0.3 percent maximum
Silicon	0.5 percent maximum
Sulphur	0.024 percent maximum
Product Forms	Pipe, plate, strip, round bar, wire, profile