

Products

Flanges

We are engaged in providing a supreme range of Industrial Flanges widely used in diverse industrial application. The company has taken the leading position in providing the best possible Industrial Flanges available in the market. This range of Industrial Flanges is put through rigorous quality control checks to make it superior to other similar products available in the market. The Industrial Flanges are superbly engineered to fit the criteria dictated by the industry and is offered at affordable rates.

- Range Of Industrial Flanges Includes
- Plate Flanges
- Slip On Flanges
- Welding Flanges
- Forged Flanges
- Carbon Steel Flanges
- Mild Steel Flanges
- Stainless Steel Flanges

Plate Flanges

We have in store for our clients an extensive range of Plate Flanges that is highly popular among clients worldwide. The Plate Flanges are made in accordance with market demands and specifications. These Plate Flanges are available in a variety of sizes and types for their accurate and exact usage.

Salient Features

- Rust Proof
- Available in variety of sizes
- Resistance to high temperature and pressure
- Weather proof

Used In

- Oil and Gas Industry
- Pharmaceutical Industry
- Sugar Industry
- Food and Beverages
- Marine Equipment
- Cement Industry
- Steel Industry
- Chemical Industry



- | MANUFACTURER STOCKIST & SUPPLIERS OF :
- | MS, CS, SS FLANGES, PIPES.
- | PIPES FITTINGS & PROFILES
- | MS & SS ROUND PIPES
- | MS & SS SQUARE PIPES

GIVING FINITE SHAPES TO INFINITE DREAMS....

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Flange Dimensions



Royal Steel India is one of the leading producer of various plate flanges as per standard and of course in accordance with purchasers drawings, We also specialise in Forged Flanges and Rings as per the international standards and catering to the need of various international clients throughtout the globe with or without the inspection of third party arrangement.

The company is managed by experts and a professional team of engineers highly skilled technical staff, Customer satisfaction is our prime focus with continous commitment to after sales service by qualified technicians. Now we can manufacture and fabricate any size of the flange/ Ring to suit for large pipe connections as per sketch apart from our forging opeations. The company has stepped into export market, with a confidence to delivery our various customers accross the globe goods well before the stipulated time. Our vast infrastructure will help us in this future business.

BRIEF DESCRIPTION OF ITEMS : PLATE / FORGED / MILD STEEL, CARBON STEEL AND STAINLESS STEEL FLANGES

Types	Slip-on, Weld Neck, Blind, Threaded Socket-Weld Lap Joint	
Standards	BS 10 (Table - D, E, F, H, J & K) ASA 150, 300, 600, 900, 1500 and 2500 lbs. DINND6, 10, 16, 25 and 40 IS 6392, 1538. ANSI B 16.5, MSS-SP-44, API 605, AWWA 207	
MATERIALS OF CONSTRUCTION :		
	Size	
Mild Steel	½" - 90"	IS 2062
Carbon Steel	½" - 60"	ASTM A-105, IS 2002, Lf2
Stainless Steel	½" - 24"	ASTM, A-182, F 304, F 316, F 321, F 304L, F 316L
FITTINGS		
1) Buttweld Forged Steel Elbows (1.5D) and Bends (3D)		
Size ½" to 24"	in SCH. 40, 80 and 160 As per ANSI B 16.9	
2) Forged Carbon Steel Types Size Size ½" to 24" Ends	Fittings for High Pressure of 3000/6000 lbs. Union Coupling, Elbow, Tee, Nipple, Reducer. ½" to 6" DIA Socket / Butt Weld, Flanges BSPT / NPT	
Specifications	As per ANSI B 16.11	
Inspection	Lloyds / BVIS / DNV / IBR / SGS / RITES	
Ex-Stock Range	From ½" to 6" Fittings, ½" to 24" Flanges & ASA 150 and 300 lbs.	

Specialisation : DOUBLE FACE • SERRATED SURFACE • THREE GASKET GROOVES • IBR CERTIFICATES RAISED FACE • COLLAR SCREWED • BLUE PRINT & Also as per Drawings.

FLANGES SUITABLE FOR UPTO 60° O.D. PIPE

Company Profile



Royal Steel Industries, has been the leader in the design and manufacture of top quality irrigation equipment and products for the irrigation industry. Every product we manufacture reflects the our emphasis on craftsmanship, workmanship and quality.

Who are we?

We are one of the celebrated Manufacturers, Exporters and Suppliers of an assortment of Industrial Products, We offer a proven range of products that includes Metal Pipes, Metal Plates, Metal Pipe Fittings, Industrial Flanges, Steel Scraps, Sugar Mill Spares, Alloy Steel Tubes, Industrial Valves and many more.

Manufactured using exceptional quality raw materials such as Plats, Forgings and Rounds, the assortment of Industrial products is offered in varied sizes, shapes and surface finish.

The Industrial Product that we provide are well known for durability, dimensional accuracy, corrsion resistance and capacity to withstand temperature variations. The applications of our products are in varied industries namely Oil and Gas, Marine Equipments, Pharmaceuticals, Sugar, Food and Beverages, Cement, Steel and Chemicals and so on. Moverover, we also offer customized packaging materials for the range of products as per the client's specifications.



Company Details

Name Of Company	: ROYAL STEEL INDIA
Office	: Plot No. 246, Kolsa Bundar, Darukhana, Mumbai - 400 010. INDIA
Factory (Unit)	: Plot No. 246, Kolsa Bundar, Darukhana, Mumbai - 400 010. INDIA
Communications	: T/F : 022-2370 5725 E : royalsteelindiamumbai@gmail.com W : www.royalsteelindia.in
VAT TIN NO	: 27310655352 V w.e.f. 31/03/2008
CST NO	: 27310655352 C w.e.f. 31/03/2008
PAN NO	: AFYPC8106N
Bankers	: UNION BANK OF INDIA Branch : Cotton Green
Account No	: 316501010035234
IFSC	: UBIN0531651
SSI No.	: 2723100832
Bankers	: ABHYUDAYA CO-OP. BANK LTD. Branch : Darukhana
Account No	: 005021100024722
IFSC	: ABHY0065005



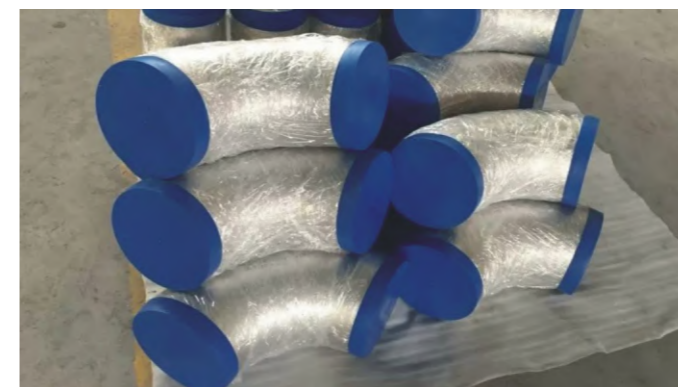
WROUGHT STEEL BUTT-WELDING FITTINGS

A butt weld pipe fitting is designed to be welded on site at its end(s) to connect pipe(s) together and allow change in direction or pipe diameter, or branching or ending.

This fitting then becomes part of a system for transporting fluids (oil, gas, steam, chemicals, ...) in a safe and efficient manner, over short or long distances.



Standard	Type	Size
ASME B16.9	Long Radius Elbows, Long Radius Reducing Elbows, Long Radius Returns, Short Radius Elbows, Short Radius 180-deg Returns, 3D elbows, Straight Tees, Straight Crosses, Reducing Outlet Tees, Reducing Outlet Crosses, Lap Joint Stub Ends, Caps, Reducers	Size: 1/2"-48" Wall thickness: SCH5S-SCHXXS
ASME B16.28	Short Radius Elbows, Short Radius 180-deg Returns	Size: 1/2"-24" Wall thickness: SCH5S-SCHXXS
ASME B16.49	30° 45° 60° 90° Long Radius Short Radius Bend	Size: 1/8"-12" Wall thickness: SCH5S-SCHXXS
MSS-SP43	Long Radius Elbows, Straight and Reducing-on-the-Outlet Tees, Lap Joint Stub Ends, Caps, Long Radius 180 Degree Returns, Concentric Reducers, Eccentric Reducers	Size: 1/2"-24" Wall thickness: SCH5S-SCHXXS
MSS-SP75	Long Radius Elbows, 3R Elbows, Straight Tees, Reducing Outlet Tees, Caps, Reducers	Size: 16"-60" Wall thickness: SCH5S-SCHXXS
ISO, DIN, JIS	All Kind of Buttwelding Products or As Per Client's Drawing	As Per Client's Drawing
Material Grade	Nickel Alloy	ASTM/ASME SB 366 Alloy 200/UNS N02200, Alloy 800HT/Incoloy 800HT/UNS N08811, Alloy 400/Monel 400/UNS N04400, WP904L/UNS N08904, Alloy 800/Incoloy 800/UNS N08800, Alloy C-2000/UNS N06200, Alloy 925/Incoloy 925/UNS N09925, Alloy C-22/UNS N06022, Alloy 201/UNS N02201, Alloy C-276/Hastelloy C-276/UNS N10276, Alloy 625/UNS N06625, Nimonic 80A/Nickel Alloy 80A/UNS N07080, Alloy K-500/Monel K-500, Alloy 20/UNS N08020, Alloy 800H/Incoloy 800H/UNS N08810, Alloy 600/Inconel 600/UNS N06600, Alloy 31/UNS N08031, Alloy 825/Incoloy 825/UNS N08825, Alloy 20/N08020
	Carbob Steel	ASTM/ASME SA 234 WPB
	Low Alloy Steel	ASTM/ASME SA 234 WP91, WP11, WP22, WP9
	Low Temp Carbon steel	ASTM/ASME SA420 WPL3-WPL 6
	Duplex and Super Duplex Steel	ASTM/ASME SA 815 WPS31803, WPS32205, WPS32750, WPS32760, WPS32550
	Stainless Steel	ASTM/ASME SA403 WP 304, WP 304L, WP 304H, WP 304LN, WP 304N, ASTM/ASME A403 WP 316, WP 316L, WP 316H, WP 316LN, WP 316N, WP 316Ti, ASTM/ASME A403 WP 321, WP 321H ASTM/ASME A403 WP 347, WP 347H
	High Strength Ferritic Steel	ASTM/ASME SA 860 WPHY 42, WPHY 46, WPHY 52, WPHY 60, WPHY 65, WPHY 70
	Titanium	ASTM/ASME SB337 Grade 1, Grade 2, Grade 11, Grade 12
Cu Ni Alloy	ASTM/ASME SB 466 UNS C70600 Cu/Ni 90/10	





FORGED PIPE FITTINGS

Forged Pipe Fittings (Socket Weld and Threaded) are made in accordance to ASME B16.11, MSS-SP-79/ 83/ 95/ 97 and BS3799 standards, and are used to connect nominal bore schedule pipes and pipelines.

The applications range from chemical, petrochemical, power generation and OEM manufacturing industry as well other applications where vibration, high pressure or extremely corrosive conditions exist.



Standard	Type	Class Rating/Schedule	Ends	Size
ASME B16.11	90°Elbow/ 45°Elbow/ Tee/ Cross	2000LB	Threaded	1/4"-4"
	90°Elbow/ 45°Elbow/ Tee/ Cross/Pipe Cap/ Half Coupling/Full Coupling	3000LB/6000LB	Threaded	1/4"-4"
	90°Elbow/ 45°Elbow/ Tee/ Cross/Half Coupling/Full Coupling	9000LB	Socket-welding	1/8"-4"
	Street Elbow	3000LB	Threaded	1/8"-2"
		6000LB	Threaded	1/8"-1-1/2"
	Lateral Tee	3000LB	Socket-welding	1/4"-2"
		6000LB		1/2"-1-1/2"
		3000LB	Threaded	3/8"-2"
		6000LB		1/2"-2"
	9000LB	Threaded	1/2"-1-1/2"	
Flush Bushing/Hex Bushing/Hex Plug/Round Plug/Square Plug	3000LB/6000LB	Threaded	1/8"-4"	
MSS SP79	Reducer Inserts	3000LB/6000LB/9000LB	Socket-welding	3/8"x1/4"-2x1/2"
MSS SP83	Union	3000LB	Socket-welding/Threaded	1/8"-3"
MSS SP95	Concentric/Eccentric Swaged Nipples Bull Plugs		See Below Note1	1/4"-12"
			Threaded	1/8"-12"
MSS SP97	Weldolet	STD, XS, Sch 160/XXS	Butt-welding	1/8"-36" or larger
	Sockolet	3000LB/6000LB	Socket-welding	1/8"-6"
	Threadolet	3000LB/6000LB	Threaded	1/8"-6"
	Nipolet	XS/XXS	Plain/Threaded	1/2"-2"
	Elbolet	3000LB/6000LB	Socket-welding/Threaded	1/4"-2"
		STD/XS/160/XXS	Butt-welding	1/4"-2-1/2" or larger
	Latrolet	3000LB/6000LB	Socket-welding/Threaded	1/2"-2"
		STD/XS/160/XXS	Butt-welding	1/2"-2-1/2"
Flangolet,Nipolet,Sweepolet,etc. available as per client's demands.				
BS3799	Hex Nipple	3000LB/6000LB	Threaded	1/8"-2"x1/2"
	Bosses	3000LB	Threaded	1/8"-2"
		6000LB	Threaded	1/8"-4"
	Pipe Nipple	40/STD/80/XS /160/XXS	See Below Note1	1/8"-6"
Material Grade	Nickel Alloy	ASTM / ASME B/SB 564 UNS N02200 (NICKEL 200), UNS N04400 (MONEL 400), UNS N08825 (INCOLOY825), UNS N06600 (INCONEL 600), UNS 6601 (INCONEL 601), UNS N06625 (INCONEL 625), UNS N10276 (HASTELLOY C 276), ASTM / ASME B/SB 160 UNS N02201 (NICKEL 201) ASTM / ASME B/SB 472 UNS N08020 (ALLOY20 / 20CB3)		
	Copper Alloy	ASTM / ASME B/SB 151 C 70600 (CU -NI- 90/10), C 71500 (CU -NI- 70/30)		
	Stainless Steel	ASTM / ASME A/SA 182 F 304, 304L, 304H, 309H, 310H, 316, 316H, 316L, 316 LN, 317, 317L, 321, 321H, 347, 347 H.		
	Duplex and Super Duplex Steel	ASTM / ASME A/SA 182 F44, F45, F51, F53, F55, F60, F904L.		
	Carbon Steel	ASTM / ASME A/SA 105 (N)		
	Low Temp Carbon Steel	ASTM / ASME A/SA 350 LF 2.		
	High Yield Carbon Steel	ASTM / ASME A/SA694 F52 F56 F60, F65, F70		
	Alloy Steel	ASTM / ASME A182 GR F5, F9, F11, F12, F22, F91.		
	Titanium	ASME ASTM SB/B381 Grade 2, Grade 5, Grade 7		
Note1	PBE:Plain Both Ends BBE Bevel Both Ends TBE: Threaded Both Ends PSE:Plain Small End BSE:Bevel Small End TSE:Threaded Small End PLE:Plain Large End BLE:Bevel Large End TLE:Thread Large End			
Note2	For the swage nipples,pipe nipples,the material can be referred to the pipe standard.			
Note3	NPT(National Pipe Thread) FPT(Female Pipe Thread) MPT(Male Pipe Thread) BSPT(British Standard Pipe Thread)			






**FLANGES
FORGINGS
RINGS
DISC**

The flange is second most used joining method after welding. Flanges are used when joints need dismantling. It provides flexibility for maintenance. Flange connects the pipe with various equipment and valves. Breakup flanges are added in the pipeline system if regular maintenance is required during plant operation.

A flanged joint is composed of three separate and independent although interrelated components; the flanges, the gaskets, and the bolting; which are assembled by yet another influence, the fitter. Special controls are required in the selection and application of all these elements to attain a joint, which has acceptable leak tightness.



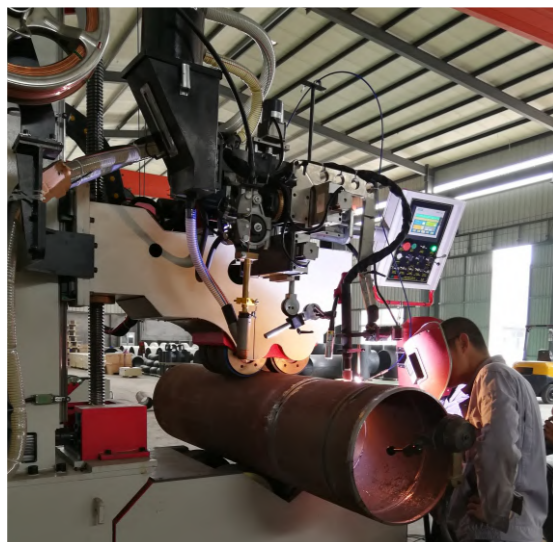
Standard	Type	Class	Size
ASME B16.5	WN/LWN/SO/Blind/Lap Joint	150#-2500#	1/2"-24"(Except Blind Flange 2500lb 1/2"-12")
	SW flange	150#-1500#	1/2"-3"(Except 1500# 1/2"-2 1/2")
	Threaded	150#-900#	1/2"-24"
ASME B16.47 Series A	WN/blind flange	1500# 2500#	1/2"-2 1/2"
ASME B16.47 Series B	WN/blind flange	150# -900#	22"-48"(Except 900# Size:26"-48")
		75#-300#	26"-48"
DIN2527	Blind flange	400# 600# 900#	26"-36"
DIN2543	SO flange	PN6-PN100	DN10-DN1000
DIN2544	SO flange	PN16	DN10-DN1000
DIN2545	SO flange	PN25	DN10-DN1000
DIN2565	Threaded flange with Neck	PN40	DN10-DN500
DIN2566	Threaded flange with Neck	PN6	DN6-DN200
DIN2567	Threaded flange with Neck	PN16	DN6-DN150
DIN2568	Threaded flange with Neck	PN25 PN40	DN6-DN150
DIN2569	Threaded flange with Neck	PN64	DN10-DN150
EN1092-1:2002	Plate flange for welding/loose plate flange with weld-on plate collar or for lapped pipe end/Blind Flange /WN flange	PN100	DN10-DN150
JIS B2220	Welding flange, lap joint flange, threaded flange	PN2.5-PN100	DN10-DN4000
BS4504 BS10 TableD/E	Plate Flange for welding/WN flange/Blank Flange	PN6-PN100	DN10-DN1500
Other Products	Anchor/swivel/girth/lap joint/reducing/orifice		
	Spectacle blind/paddle blind/spacer ring/orifice plate/bleed ring		
	Special Products: rings/forgings/disc/shaft sleeves		
Sealing Surface	RF FF RTJ TF GF LF LM		
Flange Face Finish	Stock Finish/Spiral Serrated/Concentric Serrated/Smooth Finish(Ra 3.2 and 6.3 micrometers)		
	125-250 AARH(it is called smooth finish) 250-500 AARH(it is called stock finish)		
Coating	Vanish, yellow paint, anti-rust oil, galvanizing etc		
Material Grade	Nickel Alloy Steel	ASTM/ASME B/SB564 UNS N02200(NICKEL 200), UNS N04400(MONEL 400), UNS N08825(INCOLOY 825), UNS N06600(INCONEL 600), UNS N06601(INCONEL 601), UNS N06625(INCONEL 625), UNS N10276(HASTELLOY C276), ASTM/ASME B/SB160 UNS N02201(NICKEL 201), ASTM B/SB472 UNS N08020(Alloy 20)	
	Copper Alloy	ASTM/ASME B/SB151 UNS C70600(CuNi 90/10), C71500(CuNi 70/30)	
	Stainless Steel	ASTM/ASME A/SA182 F304,304L,304H,309H,310H,316,316H,316L,316LN, 317,317L,321,321H,347,347H	
	Duplex and Super Duplex Steel	ASTM/ASME A/SA182 F44,F45,F51,F53,F55,F60,F61	
	Carbon steel	ASTM /ASME A/SA105(N)	
	Low Temp Carbon Steel	ASTM/ASME A/SA350 Lf2	
	High Yield Carbon Steel	ASTM/ASME A/SA694 F52, F56 F60, F65, F70	
	Alloy Steel	ASTM/ASME A/SA182 GR F5,F9, F11,F12,F22,F91	
Titanium	ASTM/ASME B/SB381 Grade 2, Grade 5, Grade 7		





PIPE SPOOLS/ PREFABRICATION

The prefabricated components of a piping system are called pipe spools. They include the pipes, flanges and fittings, and they are mounted during the fabrication before they are delivered to the construction site. They are delivered pre-mounted so to make them easier to assemble using hoists, gauges, and other tools for assembly. Pipe spools connect long pipes with flanges at the tips so that they can be bolted to another pipe with matching flange. Pipe spools are imbedded into concrete walls before the concrete is poured. The pipe spool has to be positioned properly before concrete is to make sure that it can withstand the weight and force of the concrete as it is poured. This process is important because you will need to go back and run the pipe sometime in the future.



Pipe Spools/Prefabrication

A pipe Spool is an assimilation of piping components, which is prefabricated in a piping shop, for installation in the field. They are often flanged to facilitate the connection to other spools.

HT will fabricate these spools and will give as a complete package as per the clients' requirements. We can also provide removable containerized prefabrication workstations, including modules of pipeline cutting, bevelling, assembling and welding, which makes much easier to do on-site prefabrication.



Pipe Fabrication is one of our core capabilities. Fabricating carbon and alloy piping systems, Our projects consist of large capital projects with thousands of spools, as well as routine maintenance and one spool orders. Our shops and fabrication facilities are filled with highly skilled craftsmen, pipe fitters, pipe fabricators, pipe welders with excellent safety and quality performance records. Greater quality, efficiency and, ultimately, significant cost savings for customers. We take great pride in not only meeting, but exceeding our customers' expectations in all areas, including performance, design, logistics, schedule, delivery, and cost. We are your preferred pipe fabricators.

HT is highly qualified to produce piping spools and assemblies for all grades of:



- Carbon Steel
- Stainless Steel
- Chrome-molly
- Chrome Alloys (including P91)
- High Alloy
- Nickel Base Alloy
- Hastelloy
- Low Temperature
- Duplex Grade
- And Many Other Alloy Materials

Pipe sizes ranging from 1/2" diameter small bore up to 60" diameter large bore piping spools. Our shops are equipped with the most modern welding equipment on the market, enabling us to provide very competitive pricing for our customers.






FASTENERS

A fastener is a hardware device that mechanically joins or affixes two or more objects together. In general, fasteners are used to create non-permanent joints; that is, joints that can be removed or dismantled without damaging the joining components.



Type	Stud Bolt	Hex Bolt (full thread, partial thread)	Threaded Rod
	U-Bolt	Hex Socket Cap Screw	Hex Nut
	Flat Washer	Spring Washer	
Size	Stud Bolt Hex Bolt	DIN: M6-M100 DIN: M6-M64	ASME: 1/4"-5" ASME: 1/2"-2 1/2"
Finish	Cold galvanizing ,Hot-dip Galvanizing ,PTFE ,Zinc Nickel ,Black coating ,Plain		
Producing Standard	ASME	ASME B18.2.1 ASME B18.2.2 ASME B18.22.1	Hex Bolts Hex Nuts Plain Washers
	DIN	DIN931 DIN933 DIN912 DIN934 DIN125 DIN127 DIN975 DIN976 DN3570	Hex Bolt with partial thread Hex Bolt with full thread Hex Socket Cap Screw Hex Nut Plain Washer Spring Washer Threaded Rods Stud Bolts U-Bolt
Material Grade	Stainless Steel	304/304L,316/316L,316Ti, 317/317L, 321, 347/347H, 310, 309, A453 660C ,660D,S31254 /254SMO, 904L/1.4539/N08904, N08367, N08926/1.4529	
	Duplex Steel	2205 /S31803 ,S32750/2507 ,S32760	
	Nickel Alloy Steel	UNS N02200/Ni 200, UNS N02201 /Ni201, UNS N04400/ Monel 400, UNS N05500/ Monel K500 , UNS N06600/ Inconel 600, UNS N06601/ Inconel 601, UNS N06625/ Inconel 625, UNS N08825/ Incoloy 825,UNS N08800 /Incoloy 800, UNS N08810 /Incoloy 800H , UNS N08811 /Incoloy 800HT, UNS N08020 /Alloy 20, UNS N06002 /Hastelloy X, UNS N06022/ Hastelloy C22, UNS N06200/C2000, UNS N10276/ Hastelloy C276, UNS N10665 /Hastelloy B2, UNS N10675/Hastelloy B3, UNS N08020/ Alloy 20, UNS N08031/ Alloy 31	
	Carbon Steel	Grade 4.8, 5.8, 6.8, 8.8, 10.8, 12.9	
	Alloy Steel	A193 B7, A194 2H, A320 L7, L7M	



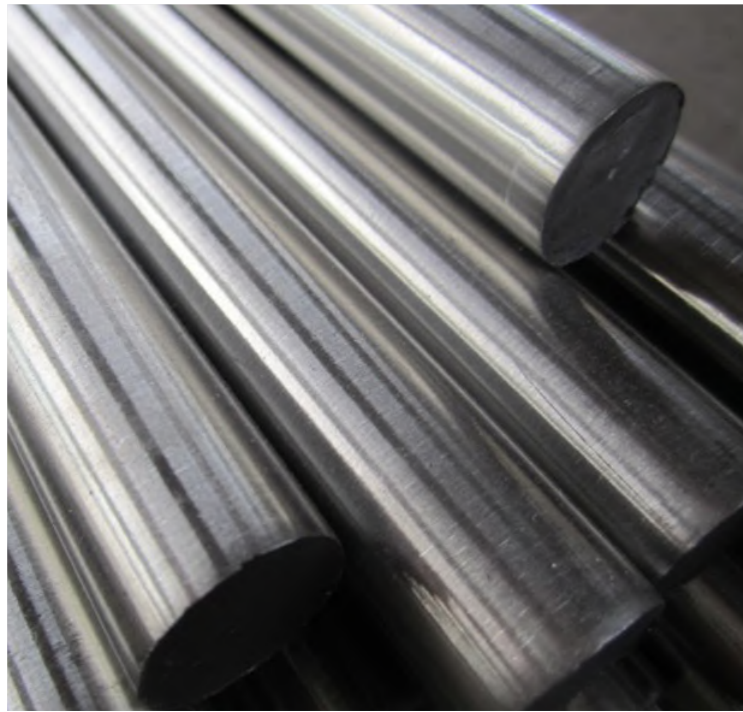


Steel pipes can be disintegrated on the basis of its application. Typical applications of steel pipes are in the area of water pipelines, industrial water lines, oil pipe lines, cross country pipe line, agriculture and irrigation pipes, tube lines for natural gas, chemical industries, automobile industry, construction industries and other purposes



Type	Seamless Pipe & Tube	SAW/ ERW/ EFW Pipe & Tube	
End	BE (Beveled End)	PE (Plain End)	
Size	OD 1/2" ~48"	Thickness SCH5~SCHXXS Length As per client's requirement.	
Manufacturing Technique	Hot rolling	Hot work Cold rolling Cold-drawn	
Producing Standard	ASME B36.10	ASME B36.19	
Material Grade	Nickel Alloy	ASTM B474	UNS N02200/Ni 200, UNS N02201 /Ni201, UNS N04400/ Monel 400, UNS N06002/ Hastelloy X, UNS N06022/ Hastelloy C22, UNS N08825/ Incoloy 825, UNS N10276/ Hastelloy C276, UNS N10665 /Hastelloy B2, UNS N10675/Hastelloy B3, UNS N06600/Inconel 600, UNS N06601/ Inconel 601, UNS N06625 /Inconel 625, UNS N08020 /Alloy 20
		ASTM B161	UNS N02200/Ni 200, UNS N02201 /Ni201
		ASTM B163	UNS N02200/Ni 200, UNS N02201 /Ni201, UNS N06601/ Inconel 601 UNS N04400/ Monel 400, UNS N06600/Inconel 600
		ASTM B165	UNS N04400/ Monel 400
		ASTM B407	UNS N08800 /Incoloy 800, UNS N08810 /Incoloy 800H, UNS N08811 /Incoloy 800HT
		ASTM B729	UNS N08020 /Alloy 20
		ASTM B444	UNS N06625 /Inconel 625
		ASTM B423	UNS N08825/ Incoloy 825
		ASTM B464	UNS N08020 /Alloy 20
	ASTM B622	UNS N10665/Hastelloy B2, UNS N10675/Hastelloy B3, UNS N06200/C2000, UNS N10276 /C276, UNS N06002/ Hastelloy-X, UNS N08031/Alloy 31	
	Duplex Steel	ASTM A789	S31803,S32205,S32750, S32760
		ASTM A790	S31803,S32205,S32750, S32760
	Stainless Steel	ASTM A312	TP304,TP304L,TP316,TP316L,316Ti, TP317, TP317L, TP321, TP310S, TP347, S31254,N08367,N08926,N08904
ASTM A213		TP304,TP304L,TP316,TP316L,316Ti TP317,TP317L,TP321,TP310S,TP347,S31254, N08367, N08926,N08904	
ASTM A269		TP304,TP304L,TP316,TP316L,TP317,TP317L,TP321,TP347, S31254,N08367, N08926	
ASTM B676		N08367	
ASTM B677		UNS N08925, UNS N08926	
Alloy Steel	ASTM A333	Grade 3, Grade 6, Grade 8, Grade 9	
	ASTM A335	P5,P9,P11,P12,P22,P91,P92	
Carbon Steel	ASTM A106 /A53	GR.B	
	API 5L	GR.B, X42, X46, X52, X56, X60, X65, X70 PSL1 & PSL2	



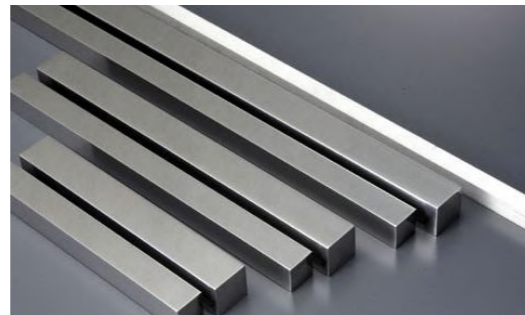



STEEL BARS AND RODS

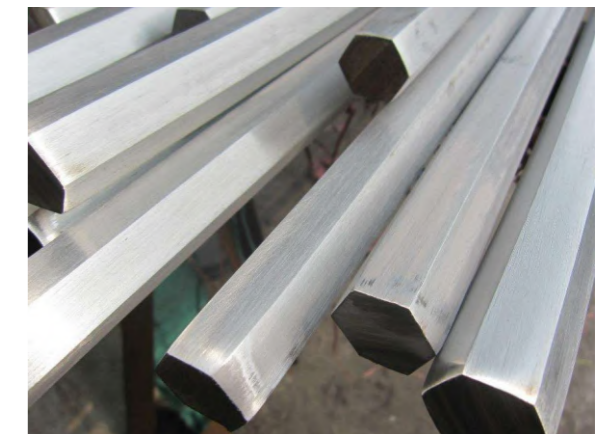
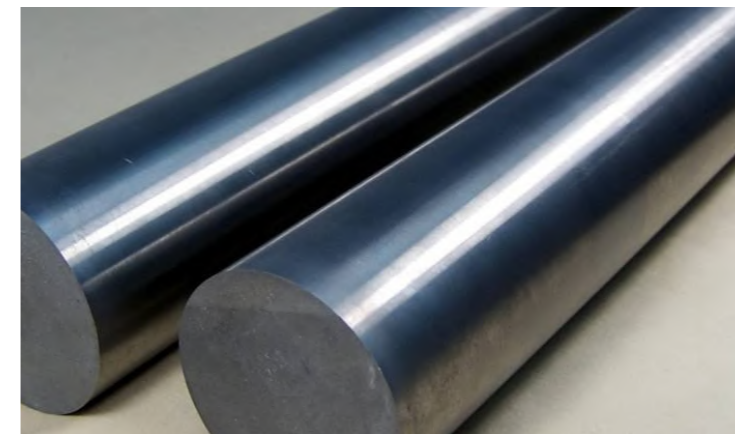
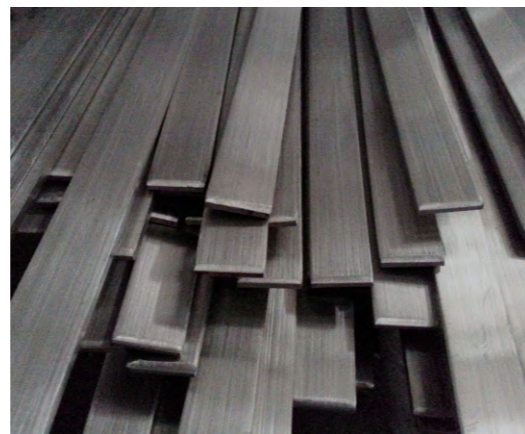
Steel bars are one of the core components of any manufacturing industry or for that matter any industry that relies on machineries. Thanks to its versatile applications, steel bars find itself in the epicenter of most of engineering industries, be it automotive, textile, fabrication, construction, cement, ship building, paper and pulp, defence, heavy earth moving equipments or aerospace.



The overwhelming popularity of steel bars is owed to the fact that it is possible to be produced in varying types, shapes, sizes, and grades of bars to cater the exact technical requirements. Steel bars generally have the shapes such as flat, round, hexagonal, square and channel and on most of the occasions, it is the shape of the bar that defines its application area



Type	Round Bar	Square Bar	Hexagon Bar	Flat Bar	
Surface	Black or Bright or Pickling white				
Standard	SUS, AISI, DIN				
Manufacture Technique	Hot Rolling, Cold-drawing				
Diameter	5-500mm				
Length	≤ 12M or As Per Client's Requirements.				
Diameter Tolerance	H7 H9 H10 H11				
Material Grade	ASTM/ASME SB 425		Alloy 825/Incoloy 825/UNS N08825		
	ASTM/ASME SB 446		Alloy 625/UNS N06625		
	ASTM/ASME SB164		Monel 400/Alloy 400/UNS N04400		
	ASTM/ASME SB 408		Alloy 800HT/Incoloy 800HT/UNS N08811, Alloy 800/Incoloy 800/UNS N08800, Alloy 800H/Incoloy 800H/UNS N08810		
	ASTM/ASME SB 649		Alloy 925/Incoloy 925/UNS N09925, Alloy 926/Incoloy 926/UNS N08926, Alloy 31/UNS N08031		
	ASTM/ASME SB 166		Alloy 600/Inconel 600/UNS N06600, Alloy 601/Inconel 601/UNS N06601		
	ASTM/ASME SB160		Alloy 200/UNS N02200, Alloy 201/UNS N02201		
	ASTM/ASME SB 472		Hastelloy C-276/UNS N10276, Alloy 926/Incoloy 926/UNS N08926, Alloy 31/UNS N08031, Alloy 20/N08020, Alloy C-22/Hastelloy C-22/N06022, Alloy 600/Inconel 600/UNS N06600,		
	ASTM/ASME SB 473		Alloy 20/UNS N08020		
	ASTM/ASME SB 574		Hastelloy C-276/UNS N10276		
	ASTM/ASME SB 637		Alloy 718/Inconel 718/N07718		
	Stainless Steel	ASTM/ASME SA 276 /479		304/SUS304/UNS S30400, 304L/UNS S30403, 316/UNS S31600, 316Ti/UNS S31635, 316H/UNS S31609, 316L/UNS S31603, 310S/UNS S31008, 321/UNS S32100, 321H/UNS S32109, 347/UNS S34700, 347H/UNS S34709, F51/S31803/2205, F53/S32750/2507, F55/S32760, F44/S31254/254SMO, S31050/1.4466, F904L/N08904, Alloy 800HT/Incoloy 800HT/UNS N08811, Alloy 800/Incoloy 800/UNS N08800, Alloy 800H/Incoloy 800H/UNS N08810	
		ASTM/ASME SA 479		304H/UNS S30409	
Carbon Steel and Low Alloy Steel	ASTM/ASME SA 694		F42, F46, F48, F50, F52, F56, F60, F65, F70		
	ASTM/ASME SA 350		LF2, LF3		
	ASTM A105/ASME SA105				





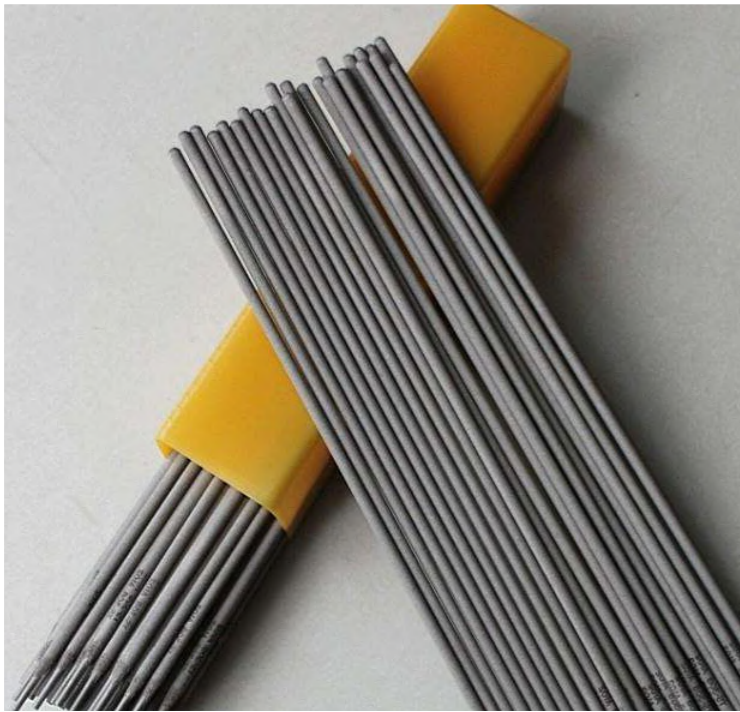
**STEEL PLATES
SHEETS
STRIPS
COILS**

Steel plates are often used for structural and construction applications, pressure vessels, marine and offshore equipment, and military applications. The grade, elements and parameters of a steel plate are also important in how it is used.

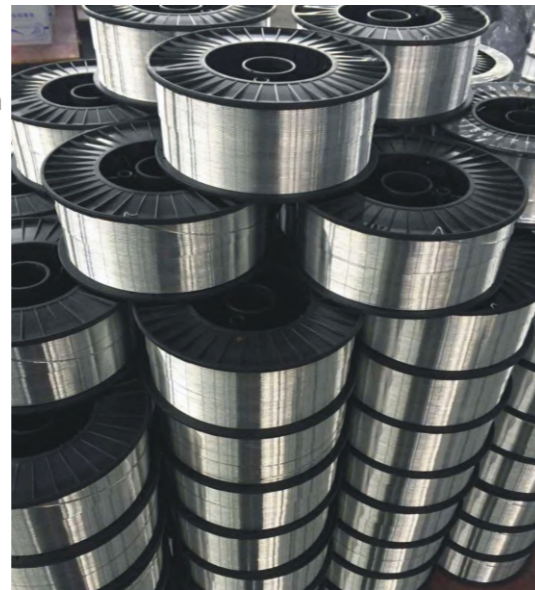


Type	Plate, Sheet, Strip, Coil		
Length	0-12m or as per your requirements		
Width	0-2500mm or as per your requirements		
Thickness	0.3-1200mm or as per your requirements		
Process	Hot/Cold Rolled		
Surface	No.1 No.2D No.2B BA No.3 No.4 No.6 No.7		
Packing	Steel Frame, waterproof paper, wooden pallet, wooden case or as per the client's requirements		
Material Grade	Carbon Steel	ASTM A36	
		ASTM A515	GR.60/65/70
		ASTM A516	GR.55/60/65/70
	Alloy Steel	ASTM A387	Grade 11/12/22
	Stainless Steel	ASTM A240	304/316L/316Ti/317L/310S/410
			S31803/S32750/S32760/904L/S31524/S31050
			UNS N08367/N08926/N08800/N08810
	Nickel Alloy	ASTM B409	UNS N08800(Incoloy 800)/UNS N08810(Incoloy 800H)/UNS N08811(Incoloy 800HT)
		ASTM B463	UNS N08020/Alloy 20)
		ASTM B575	UNS N10276(Hastelloy C276)/N06022(Hastelloy C22)/N06200(Hastelloy C2000)
		ASTM B127	UNS N04400/Monel 400
		ASTM B162	UNS N02200(Nickel 200)/N02201(Nickel 201)
		ASTM B688	UNS N08367
ASTM B424		UNS N08825(Aloy 825)	
ASTM B443		UNS N06625(Inconel 625)	
ASTM B168		UNS N06600(Inconel 600)	
Ti	ASTM B265	Ti 1/2/5/7	





Consumers have access to many different types of welding electrodes. Each offers features that make it ideal for a certain application. In welding applications, electricity is drawn through an electrode, creating an arc of electricity at the tip of the electrode. Welds are created when the electric arc at the tip of an electrode is drawn onto a work piece. Many types of electrodes melt and are transferred onto a work piece, creating a metal filler, while others do not melt and simply provide a location for an electric arc.



Type	Filler Metal, Welding Electrode			
Diameter	Φ1.0, Φ1.2, Φ1.6, Φ2.0, Φ2.4, Φ2.5, Φ3.2, Φ4.0			
Length	914mm or 1000mm			
Package	5KG/box			
Origin	USA Hastelloy/SMC/ATI; VDM, Sweden: Avesta; Austria: G&G			
Standard	AWS A5.14 Specification for Nickel & Nickel-Alloy Bare Welding Electrodes & Rods			
	AWS A5.11 Specification for Nickel and Nickel-Alloy Electrodes for Shielded Metal Arc Welding			
Material Grade	Duplex and Super Duplex Steel	E2209	2205	Φ3.2, Φ4.0
		ER2209		Φ1.6, Φ2.4
		ER2594	2507	Φ2.4
		E2594		Φ2.5, Φ3.2, Φ4.0
		E385	904L/N08904	Φ3.2, Φ4.0
		ER385		Φ1.6, Φ2.4
	Nickel Alloy	ERNi-1	Nickel 201	Φ2.4
		ENiCu-7	Monel 400	Φ3.2, Φ4.0
		ERNiCu-7		Φ2.4
		ENiCrFe-3	Inconel 600	Φ3.2, Φ4.0
		ERNiCr-3		Φ2.4
		ENiCrCoMo-1	Incoloy 800	Φ3.2, Φ4.0
		ERNiCrCoMo-1		Φ2.4
		ENiCrMo-3	1.4529 AL-6XN Alloy 20 254SMO Inconel 625 Inconel 825	Φ3.2, Φ4.0
		ERNiCrMo-3		Φ1.0, Φ1.2, Φ1.6, Φ2.4
		ENiCrMo-10	Hastelloy C22	Φ3.2, Φ4.0
		ERNiCrMo-10		Φ2.4
		ENiCrMo-4	Hastelloy C276	Φ1.0, Φ1.2, Φ1.6, Φ2.0, Φ2.4
ENiCrMo-4	Φ2.4, Φ3.2, Φ4.0			
Ti	ERTI-1	Gr.1/Gr.2	Φ2.4	

