



**Reliable**  
**Steel Distributors**

AN ISO 9001:2008 CERTIFIED COMPANY  
GOVT. RECOGNIZED EXPORT HOUSE



*Manufacturers, Stockists & Exporters of*

**Carbon Steel | Stainless Steel | Alloy Steel | High Nickel Alloy | Copper Nickel | Titanium**

**Pipe | Fittings | Flanges | Plates | Fabrication Products | Pipe Sleeve**

*[www.rsd fittings flanges.com](http://www.rsd fittings flanges.com)*

## *Profile*

Reliable Steel Distributors, is established with a view to cater to the needs of both domestic and international market. Reliable is one of the leading manufacturers for Pipes, Pipe Fittings, Flanges, Reli Sleeve based in Mumbai with a distance of 20 km from both sea port and airport. Reliable is into stock business supplying to the domestic as well as the international market in Stainless Steel, Carbon Steel, Alloy Steel, High Nickel Alloy, Aluminium Brass, Copper and Titanium materials.

Reliable has been exporting to USA, UAE, Kuwait, Iran, Iraq, Oman, Saudi Arabia, Qatar, Bahrain, Germany, UK, France, Netherlands, Brazil, Columbia, Mexico, Ecuador, Singapore, Malaysia, Indonesia, Vietnam, Korea, Australia, Etc.

Reliable has a wide stock range of material right from API 5L Seamless and Welded Pipes to Monel, Inconel, Duplex, Super Duplex, Hastelloy Pipes and Tubes in both seamless and welded. It specializes in API pipes and tubes from Grade B to X80 in PSL1/2 and High Nickel Alloy Pipes and Tubes.

## *Mission*

Our mission is to provide prompt delivery and quality products at competitive price. Reliable has been surviving the industry smoothly due to its sales network, certified quality, innovation, value for human resources and focus on clients.

## *Third Party Inspection (TPI)*

We can do TPI for following :  
LRIS, ABS, DNV, TUV, VELOSI, SGS, BV, GL etc.

## Carbon Steel Pipes & Tubes (Seamless and Welded)

### *ASTM Standard*

ASTM A53	ASTM A179	A333	ASTM A501	ASTM A556	ASTM A672	ASTM A1005
ASTM A134	ASTM A192	A334	ASTM A512	ASTM A587	ASTM A787	ASTM A1024
ASTM A135	ASTM A210	ASTM A369	ASTM A513	ASTM A589	ASTM A795	ASTM A1037
ASTM A139	ASTM A214	ASTM A381	ASTM A523	ASTM A595	ASTM A822	API 5L
ASTM A178	ASTM A252	ASTM A500	ASTM A524	ASTM A671	ASTM A984	API 5L DSAW/LSAW/SAW API 5L API Seamless Line Pipe

### *Origin*

Reliable imports & stocks material from :  
Europe, Japan, USA, South Africa, Korea, India, Germany, China, Taiwan, Turkey, Ukraine.

### *Supplementary Requirements*

NACE MR0175, MR0103 / ISO 3183 / NACE TM0284, HIC & SSC TESTED PIPES, SOUR SERVICES, OFF SHORE SERVICES, WITH LOW SULPHUR <0.002%, IMPACT TEST AT -50°C, BEAD CRUSH, RADIOGRAPHY (X RAY).

### *Coating*

Special Coating i.e Cement Mortar Lining, FBE Coating, Galvanized (Hot Dipped), 3 LPP, 3 LPE, PTFE Coating, Epoxy Coating can be provided.

### *Delivery Condition*

As Rolled, Normalized, Thermomechanical Rolled / Formed, Normalized & Tempered, Quenched & Tempered, Stress Relieved.

### *Services*

Sour Service, Cut Length, Bevelling, Grinding, Machining, Taper Boring, Low Stress Stamping, Non Destructive Testing, Destructive Testing, Colour Coding, Marking, Export Packing, Heavy Wall Thickness, Odd Sizes, Fast Delivery, Hydro testing, Hardness Test, PMI Test, Hot Tensile & Other testing Services available on request

## Stainless Steel Pipes & Tubes (Seamless and Welded)

### *ASTM Standard*

ASTM A 213	ASTM A 312	ASTM A 450	ASTM A 688	ASTM A 791	ASTM A 928	AS1163 201	MIL-P-1144 201
ASTM A 249	ASTM A 358	ASTM A 511	ASTM A 731	ASTM A 803	ASTM A 943	AS1528 201	
ASTM A 268	ASTM A 372	ASTM A 530	ASTM A 778	ASTM A 813	ASTM A 949	G3459 201	
ASTM A 269	ASTM A 376	ASTM A 554	ASTM A 789	ASTM A 814	ASTM A 1012	ANSI/ASME B36.10M 201	
ASTM A 270	ASTM A 409	ASTM A 632	ASTM A 790	ASTM A 903	ASTM A 1053	ANSI/ASME B36.19M 201	

### *Origin*

Reliable imports & stocks material from :

Europe, Japan, USA, South Africa, Korea, India, Germany, China, Taiwan, Turkey, Ukraine.

### *Type*

Seamless, Welded, ERW & EFW, Straight-Seam Welded, Heavily Cold Worked

### *Supplementary Requirements*

Transverse Tension Test, Flattening Test, Etching Test, Stabilizing Heat Treatment, Stress-Relieved Annealed Tes

### *Delivery Condition*

Solution Annealed, Polished, Mill Finish, Electropolished, Solution treatment, Normalize and Tempered, Full or Isothermal Anneal

### *Speciality*

Nace MR0175 / ISO15156, Impact Test at -100°C, Radiography (X-Ray), Grain Size 7 or Coarser (For High Carbon), IGC Test with Practice A, B, C, D & E

## API 5L Pipes

### *Types*

Seamless | LSAW | DSAW | HSAW | ERW | HFW

### *Grades*

PSL 1 - API 5L Gr B, X42, X46, X52, X56, X65, X70

PSL 2 - API 5L Gr B, X42, X46, X52, X56, X65, X70, X80, X100, X120

PSL 1 / PSL 2 - L245, L290, L320, L360, L415, L450, L485, L555

### *Sizes*

LSAW / DSAW - 16" OD to 120" OD (6.35MM to 100MM THK)

HSAW - 8" NB to 120" NB (5MM to 25MM THK)

Seamless - 1/2" NB to 48" NB (SCH 10 to SCH XXS & Heavier)

ERW / HFW - 1/2" NB to 24" NB (2 MM to 24MM THK)

### *Origin*

Reliable imports & stocks material from :

Europe, Japan, USA, South Africa, Korea, India, Germany, China, Taiwan, Turkey, Ukraine.

### *Supplementary Requirements*

NACE MR0175, MR0103 / ISO 3183 / NACE TM0284, HIC & SSC TESTED PIPES, SOUR SERVICES, OFF SHORE SERVICES, WITH LOW SULPHUR <0.002%, IMPACT TEST AT -50°C, BEAD CRUSH, RADIOGRAPHY (X RAY).

### *Coating*

Special Coating i.e Cement Mortar Lining, FBE Coating, Galvanized (Hot Dipped), 3 LPP, 3 LPE, PTFE Coating, Epoxy Coating can be provided.

### *Delivery Condition*

As Rolled, Normalized, Thermomechanical Rolled / Formed, Normalized & Tempered, Quenched & Tempered, Annealed, Stress Relieved.

## RELI SLEEVE

### SIZE : 2" TO 72" OD (LIQUID EPOXY & FBE COATING)

#### *INSERT / PIPE SLEEVE – FEATURES*

- 100% Holiday free area internally and externally coated.
- A two layer heat shield.
- Sealing Rings acts as a physical barrier to seal the clearance between the pipe and the sleeve.
- Tabs / Pins set a uniform weld gap and anchor.
- Refractory clamp to prevent heat transfer during welding and to protect the refractory tape and the external coated area of the sleeve.



#### *FBE & LIQUID EPOXY COATING FOR PIPE SLEEVE*

**Corvel – 10-8158** - Oil & gas industry

**FBE 3M XC 6171** - Seawater and sour gas service requirements.

**Hempel-Hempadur 85671** - Water and chemical resistance.

**Interline 984** - Corrosion protection to the internals of steel storage

**Interzone 954** - Cathodic disbondment resistance.

**Scotchkote 134** - Is resistant to wastewater, corrosive soils, hydrocarbons, harsh chemicals, and sea water

**Sigma EPH 7497** – Suitable for bell holing jobs.

**Sigma Phenguard 930** – Resistance to a wide range of organic acids, alcohol, edible oils, fats & solvents

**Sigma Phenguard 935** - Good resistance to hot water

**Sigma Phenguard 940** - Tank coating system for Chemical tankers

**Sigma Line 2000** – To metal for pipe externals.

**Sigma Shield 1200** – Water hull of ice going & ice breaking vessels.

**Plasite 7159** - High abrasion resistant .

**Enviroline 405 HT** - Two Component polycyclamine cured lining system process vessels and tanks operating at high temperature.

#### *Application For Pipe Sleeve*

- Water Pipe Line
- Internal Coated Pipeline
- Water Injection Lines
- Fire Water Line
- Onshore Pipelines
- Offshore Pipelines
- Injection and Re-injection
- Crude Oil Gathering
- Highly Corrosive Gas Piping
- Portable & Waste Water
- Jet Fuel Transfer

## Alloy Steel Pipes & Tubes (Seamless and Welded)

### *ASTM Standard*

ASTM A209	ASTM A369	ASTM A530	ASTM A714
ASTM A213	ASTM A426	ASTM A595	ASTM A847
ASTM A250	ASTM A450	ASTM A618	ASTM A1016
ASTM A334	ASTM A513	ASTM A691	
ASTM A335	ASTM A519	ASTM A697	

### *Grade*

ASTM A209 T1, T1a, T1b

ASTM A213 T2, T5, T5b, T5c, T9, T11, T12, T17, T21, T22, T23, T24, T36, T91, T92, T122, T911

ASTM A250 T1, T1a, T1b, T2, T11, T12, T22

ASTM A335 P1, P2, P5, P5b, P5c, P9, P11, P12, P15, P21, P22, P23, P24, P36, P91, P92, P122, P911

ASTM A369 FPA, FPB, FP1, FP2, FP5, FP9, FP11, FP12, FP21, FP22, FP91, FP92

ASTM A691 CM65, CM70, CM75, CMSH70, CMS75, CMSH80, ½ Cr, 1Cr, 1¼ Cr, 2 ¼ Cr, 3Cr, 5Cr, 9Cr, 91

### *Type*

Seamless, Welded, ERW, Chromium Molybdenum, Low Temperature Service, High Temperature Service

### *Supplementary Requirements*

NACE MR0175, MR0103 / ISO 3183 / NACE TM0284, HIC & SSC TESTED PIPES, SOUR SERVICES, OFF SHORE SERVICES, WITH LOW SULPHUR <0.002%, IMPACT TEST AT -50°C, BEAD CRUSH, RADIOGRAPHY (X RAY).

### *Delivery Condition*

Solution Annealed, Polished, Mill Finish, Solution treatment, Normalize and Tempered, Full or Isothermal Anneal

### *Services*

Sour Service, Cut Length, Bevelling, Grinding, Machining, Taper Boring, Low Stress Stamping, Non Destructive Testing, Destructive Testing, Colour Coding, Marking, Export Packing, Heavy Wall Thickness, Odd Sizes, Fast Delivery, Hydro testing, Hardness Test, PMI Test, Hot Tensile & Other testing Services available on request

## Fittings

### *ASTM Standard*

ASTM A181	ASTM A320	ASTM A453	ASTM A733	ASTM A854	ASTM B381
ASTM A182	ASTM A350	ASTM A522	ASTM A758	ASTM A860	ASTM B462
ASTM A193	ASTM A403	ASTM A540	ASTM A774	ASTM A988	ASTM B564
ASTM A194	ASTM A420	ASTM A694	ASTM A815	ASTM B363	ASTM B637
ASTM A234	ASTM A437	ASTM A727	ASTM A836	ASTM B366	

### *Origin*

Reliable imports & stocks material from :  
Europe, Japan, USA, South Africa, Korea, India, Germany, China, Taiwan, Turkey, Ukraine.

### *Supplementary Requirements*

Macro Tech Test, Heat Treatment, Corrosion Test, Hardness Test, Grain Size, Stabilization Treatment,

### *Speciality*

NACE MR0175, MR0103 / ISO 3183 / NACE TM0284, HIC & SSC Tested, Sour Services, with Low Sulphur <0.002%, Low Carbon, Heavy Wall Thickness, Odd Sizes.

### *Coating*

Special Coating i.e Cement Mortar Lining, FBE Coating, Black / Galvanized (Electro / Hot Dip), 3 LPP, 3 LPE, PTFE Coating, Epoxy Coating can be provided.

### *Delivery Condition*

Normalized, Annealed, Normalized and Tempered, Quenched & Tempered, Stress Relieved, Solution Annealed

### *Services*

Sour Service, Cut Length, Bevelling, Grinding, Machining, Taper Boring, Low Stress Stamping, Non Destructive Testing, Destructive Testing, Colour Coding, Marking, Export Packing, Heavy Wall Thickness, Odd Sizes, Fast Delivery, Hydro testing, Hardness Test, PMI Test, Hot Tensile & Other testing Services available on request



## Flanges

### *ASTM Standard*

ASTM A105	ASTM A420	ASTM B381
ASTM A182	ASTM A522	ASTM B462
ASTM A234	ASTM A694	ASTM B564
ASTM A350	ASTM A707	
ASTM A403	ASTM A988	

### *Origin*

Reliable imports & stocks material from : Europe, Japan, USA, South Africa, Korea, India, Germany, China, Taiwan, Turkey, Ukraine.

### *Type*

Weld Neck, Slip On, Socket Weld, Lap Joint, Threaded, Blind, Reducing, Spectacle, Oriface

### *Supplementary Requirements*

Macrotech Test, Heat Treatment, Corrosion Test, Hardness Test, Grain Size, Stabilization Treatment,

### *Speciality*

NACE MR0175, MR0103 / ISO 3183 / NACE TM0284, HIC & SSC Tested, Sour Services, with Low Sulphur <0.002%, Low Carbon, Heavy Wall Thickness, Odd Sizes.

### *Coating*

Special Coating i.e Cement Mortar Lining, FBE Coating, Black / Galvanized (Electro / Hot Dip), 3 LPP, 3 LPE, PTFE Coating, Epoxy Coating can be provided.

### *Delivery Condition*

Normalized, Annealed, Normalized and Tempered, Quenched & Tempered, Stress Relieved, Solution Annealed

### *Services*

Cut Length, Bevelling, Grinding, Machining, Taper Boring, Low Stress Stamping, Non Destructive Testing, Destructive Testing, Colour Coding, Marking, Export Packing, Heavy Wall Thickness, Odd Sizes, Fast Delivery, Hydro testing, Hardness Test, PMI Test, Hot Tensile & Other testing Services available on request

## Titanium Pipes & Tubes (Seamless & Welded)

### *ASTM Standard*

- ASTM B265 - Titanium and Titanium Alloy Strips, Sheets and Plates
- ASTM B299 - Titanium Sponge
- ASTM B338 - Seamless and Welded Titanium and Titanium Alloy Condenser and Heat Exchanger Tubes
- ASTM B348 - Titanium and Titanium Bars and Billets
- ASTM B363 - Seamless and Welded Unalloyed Titanium and Titanium Alloy Welded Fittings
- ASTM B367 - Titanium and Titanium Alloy Castings
- ASTM B381 - Titanium and Titanium Alloy Forgings
- ASTM B861 - Titanium and Titanium Alloy Seamless Pipe
- ASTM B862 - Titanium and Titanium Alloy Welded Pipe
- ASTM B863 - Titanium and Titanium Alloy Wire

### *Origin*

Reliable imports & stocks material from :

Europe, Japan, USA, South Africa, Korea, India, Germany, China, Taiwan, Turkey, Ukraine.

### *Type*

Seamless, Welded, ERW, Fabricated

### *Condition*

Hot Finished, Cold Drawn

### *Services*

Sour Service, Cut Length, Bevelling, Grinding, Machining, Taper Boring, Low Stress Stamping, Non Destructive Testing, Destructive Testing, Colour Coding, Marking, Export Packing, Heavy Wall Thickness, Odd Sizes, Fast Delivery, Hydro testing, Hardness Test, PMI Test, Hot Tensile, Hot Dip Galvanizing, Draw & Expansion, Epoxy & FBE Coating, Electro Polish & Other testing Services available on request

### *Titanium & their Alloys (Grade)*

Grade 1, Grade 2, Grade 2H, Grade 3, Grade 4, Grade 5, Grade 6, Grade 7, Grade 7H, Grade 9, Grade 11, Grade 12, Grades 13, Grade 14, Grade 15, Grade 16, Grade 16H, Grade 17, Grade 18, Grade 19, Grade 20, Grade 21, Grade 23, Grade 24, Grade 25, Grades 26, Grade 26H, Grade 27, Grade 28, Grade 29, Grades 30, Grade 31, Grade 32, Grades 33, Grade 34, Grade 35, Grade 36, Grade 37, Grade 38.

## Nickel Alloy Pipes & Tubes

### *ASTM Standard*

ASTM B163 (Nickel 200 / Nickel 201 / UNS N02200 / UNS N02201)

ASTM A209, ASTM A213, ASTM A250, ASTM A335, ASTM A369, ASTM A691

ASTM B 161    ASTM B 517    ASTM B 407    ASTM B690

ASTM B165    ASTM B 444    ASTM B 514    ASTM B423

ASTM B622    ASTM B 704    ASTM B 515    ASTM B 673

ASTM B626    ASTM B 705    ASTM B 535    ASTM B 674

ASTM B163    ASTM B 464    ASTM B710    ASTM B 677

ASTM B 167    ASTM B 468    ASTM B675

ASTM B 516    ASTM B 729    ASTM B676

### **Ni-Mo alloys**

N10001	Ni-cr-fe-mo-cu alloys n06007	N06059
N10665	N06030	Low c-ni-cr-mo-cu alloy n06200
N10675	Ni-Mo-Cr-Fe Alloy N10242	Low c-ni-fe-cr-mo-cu alloy n08031
N10629	Low C Ni Cr-Mo Alloys N10276	Low c-ni-cr-mo-w alloy n06686
N06022	Ni-fe-cr-mo alloys n08320	Ni-co-cr-si alloy n12160
N06035	Ni-cr-mo-fe alloy n06002	Cr-ni-fe-n alloy r20033
N06455	Ni-fe-cr-co alloy r30556	Low c-ni-mo-cr-ta alloy n06210
N06975	Ni-cr-w-mo alloy n06230	
N06985	Low c-ni-cr-mo alloy n06058	

### *Origin*

Reliable imports & stocks material from :

Europe, Japan, USA, South Africa, Korea, India, Germany, China, Taiwan, Turkey, Ukraine.

### *Supplementary Requirements*

NACE MR0175, MR0103 / ISO 3183 / NACE TM0284, HIC & SSC TESTED PIPES.

### *Condition*

Hot Finish, Cold Drawn

### *Speciality*

Normalized, Normalized & Tempered, Quenched & Tempered.

## Nickel Alloy Forging

### *ASTM Standard*

ASTM B160	ASTM B 574	ASTM B 649	ASTM B691
ASTM B564	ASTM B 462	ASTM B335	ASTM B425
ASTM B164	ASTM B472	ASTM B473	ASTM B 573
ASTM B572	ASTM B166	ASTM B408	
ASTM B581	ASTM B446	ASTM B512	

### *Origin*

Reliable imports & stocks material from :

Europe, Japan, USA, South Africa, Korea, India, Germany, China, Taiwan, Turkey, Ukraine.

### *Supplementary Requirements*

NACE MR0175, MR0103 / ISO 3183 / NACE TM0284, HIC & SSC TESTED PIPES.

### *Delivery Condition*

Annealed, Stress Relieved.

## Copper Nickel Pipes & Tubes

### *ASTM Standard*

Alloy UNS	Common Name	European
C70600	90-10	CuNi10Fe
C71500	70-30	CuNi30Fe
C71640	66-30-2-2	

### Applications

Sea water pipework, Offshore fire water systems, Heat exchangers and condensers, Sheathing of legs and risers on offshore platforms and boat hulls, Hydraulic lines, Fish cages for aquaculture, Desalination units.

### *Origin*

Reliable imports & stocks material from :

Europe, Japan, USA, South Africa, Korea, India, Germany, China, Taiwan, Turkey, Ukraine.

### *Supplementary Requirements*

NACE MR0175, MR0103 / ISO 3183 / NACE TM0284, HIC & SSC TESTED PIPES.

### *Delivery Condition*

Normalized, Normalized & Tempered, Quenched & Tempered, Annealed, Stress Relieved.

## 4130 Pipes & Pipe Fittings

This low alloy steel containing nominally 0.3% carbon, 1% chromium and 0.2% molybdenum is used widely in oil patch applications. It is similar to 4140 which has a higher carbon level giving 4130 improved weldability in comparison to 4140, though this is achieved at the expense of through thickness strength. The hardenability limitations of this grade (depth to which it will harden / obtain the specified mechanical properties after heat treatment) must always be taken into account when designing and selecting equipment.

### *ASTM Standard*

ASTM A519  
AISI 4130  
API 5CT

### *Products*

Elbows, Tees, Reducers, Flanges, API Connections, Hammer Lug Unions, Manifold Fittings, High Pressure Couplings & Hoses  
API 6A Valves, High Pressure Seamless Pipe, Turnkey Manifold, Solid Round Bars

### *Speciality*

NACE MR0175, MR0103 / ISO 3183 / NACE TM0284, YS - Min 85,000 Psi, UTS - 1,10,000 Psi withstanding 15,000 pressure, Low Sulphur, HIC, SSC, Sour Service, High Tensile, High Pressure.

### *Delivery Condition*

Annealed, Normalized, Stress Relieved, Quenched & Tempered

### *Services*

Cut to Length, Painting, Additional Testing, Sand Blasted, Colour Coding.

## Hollow Section

### *ASTM Standard*

ASTM A554, EN 10219-2

### *Grade*

301, 302, 304, 304L, 305, 309S, 309S-Cb, 310S, 316, 316L, 317, 321, 330, 347, 429, 430, 430-Ti.

### *Size*

Square Hollow Section - 20 x 20 - 300 x 300

Rectangular Hollow Section - 30 x 20 - 400 x 200

### *Services*

Cut to Length, Multiple Length, Laser Cutting, Polishing, Special Materials.

### *Delivery Condition*

**The Tubes shall be Furnished in any of the following conditions as specified :**

As welded, Welded and Annealed, Cold Reduced, Cold Reduced and Annealed, Seamless

**The inside diameter bead shall be furnished in any of the following conditions as specified :**

Bead not removed

Bead controlled to 0.005 in (0.13 mm) or 15% of the specified wall thickness, whichever is greater,

Bead Removed

### *Speciality*

As Rolled, Normalized, Thermomechanical Rolled / Formed, Normalized & Tempered, Quenched & Tempered, Annealed, Stress Relieved.

## Plates

We carry the widest range of Sizes and Specifications in Steel Plate available within India.

### EN10025

#### High Strength Low Alloy Steel Plates

A36

A572 Grade 42, 50, 60, 65

CSA G40.21 Grade 44W, 50W, 50A

A709 Grade 36, 50, 50W

A709 Grade HPS 50W, 70W

A ASHTO M270 Grade 50, 50W

A588 & A606

A 871 - 65

A656 Grade 50, 60, 70, 80

A 573 Grade 58, 65, 70

A283

#### Alloy Quenched & Tempered Steel Plate

A514 Grade B, E, F, H, Q, S

130 ksi/890 MPa Yield Strength

140 ksi/960 MPa Yield Strength

TMCP 100 ksi/690 MPa

A710

ASTM A829-4140

#### Abrasion Resistant Steel Plate

A R Medium : AR200/AR235

A R 400/400F

A R 450/450F

A R 500/500F

A R 600

#### Pressure Vessel Steel Plate

A516 Grade 55, 60, 65, 70

TC 128

A 612

A 537

A 285

#### Offshore & Marine Steel Plant

ABS Grade A, B, AH36, DH36, EH36

API 2H Grade 50

A633

#### Armor & Ballistic Steel Plate

MILA 46100

MILA 12560

MILA 46177

#### Low/High Carbon Non-Structural Steel Plate

A 830-1045

C1020

#### Caterpillar Spec Steel

#### EN Standard Steel Plate

S235

S275

S355

S420

S690

S890

#### Offshore & Structural Plate

#### Boiler, Pressure Vessel & Chrome Moly Steel

#### Pressure Vessel Steel

ASME SA516/ASTM 516-Gr70

EN 10028:3 P355 NL1 & P355 NL2

BS 1501 224 490B LT50

BS 1501 223 490B LT30

BS 1501 225 490B LT50

EN 10028:3 P355NH

ASME SA537/ASTM A537-Class 1

ASME SA516/ASTM A516-Gr-65

ASME SA516/ASTM A516-Gr-60

EN 10028:3 P460NL1

EN 10028:3 P460NL2

EN 10028:3 P460NH

#### Boiler Plate Steel

#### ASME SA516/ASTM A516 Gr 60

EN 10028:3 P275NH

BS 1501 161 430 A/B

EN 10028:2 P265 GH

EN 10207 P2655

#### HIC Steel Plate

ASME SA516 HIC & ASTM A516HIC

CarElso HIC Premium+

#### Quenched & Tempered

EN 10025 S690QC

RQT 701

EN 10025 S 890QC

#### Abrasion Resistant Steel

Abrazo 400

#### High Yield Steel Plate

#### 460 Yield Steel Plate

EN 10028:3 P460NL1

EN 10028:3 P460NL2

EN 10028:3 P460NH

EN 10025:3 S460N

EN 10025:3 S460NL

#### Armour Plate

#### Chrome Moly Plate

#### ASME SA 387 & ASTM A387

SA 387 / A387 Gr 11

SA 387 / A387 Gr 12

SA 387 / A387 Gr 22

#### Offshore & Structural Steel Plate

#### Services

Stockholding, Mill Supplies, Finishing, Profiling, Cut pieces (Water Jet, Plasma, Sawing, Laser), Testing etc.



## **Stainless Steel Plates**

### *ASTM Standard*

ASTM A240, EN 10028-7

### **Stainless Steel**

#### **Austenitic Grades**

ASTM A240 304 / 304L - BS EN 10028-7 - 1.4301/1.4307

ASTM A240 316 / 316L - BS EN 10028-7 - 1.4301/1.4304

ASTM A240 321 / 321H - BS EN 10028-7 - 1.4541

ASTM A240 304H - BS EN 10028-7 - 1.4948

#### **Duplex**

ASTM A240 UNS S31803 - BS EN 10028-7 - 1.4462

#### **Super Duplex**

ASTM A240 UNS S32750

#### **Nickel Alloy**

Inconel® 600, 601, 617, 625, 718, X-750 Inco Alloy HX:

Incoloy® 800/800H, Alloy 330, Alloy 188, L-605

### *Supply Condition*

In standard & non standard sizes | Available in other thicknesses, widths and lengths | Thickness tolerance to BS EN 10029 Class B

NACE Hardness to MR 0175 | Annealed and pickled | Inter Granular Corrosion test (IGC) to ASTM A 262 Practice E | Hot rolled Mill Finish No. 1

Polished to meet your requirements - dull or bright polishing

## Nickel Alloy Plates

### *ASTM Standard*

#### **Nickel Alloy**

ASTM B162 (UNS N02200, UNS N02201)

ASTM B127 (UNS N04400)

ASTM B 435 (UNS N06002, UNS N06230, UNS N12160, AND UNS R30556)

ASTM B 582 (ALLOY N06007, ALLOY N06975, ALLOY N06985, ALLOY N06030)

ASTM B 575 (ALLOY N06035, ALLOY N10276, ALLOY N06022, ALLOY N06455,  
ALLOY N06059, ALLOY N06058, ALLOY N06200, ALLOY N06210, ALLOY N06686)

ASTM B168 (UNS N06600, UNS N06601, UNS N06617, UNS N06690,  
UNS N06693, UNS N06025, UNS N06045, UNS N06603, UNS N06696,  
UNS N06617)

ASTM B 443 (UNS N06625, UNS N06219)

ASTM B463 (UNS N08026, UNS N08020, UNS N08024)

ASTM B 625 (UNS N08925, UNS N08031, UNS N08932, UNS N08926,  
UNS N08354, UNS R20033)

ASTM B409 (ALLOY N08120, ALLOY N08890, ALLOY N08800,  
ALLOY N08810, ALLOY N08811)

ASTM B 536 (UNS N08330, UNS N08332)

ASTM B688 (N08366, N08367)

ASTM B424 (UNS N08825, UNS N08821)

ASTM B333 (ALLOY N10001, ALLOY N10665, ALLOY N10675, ALLOY N10629, ALLOY N10624)

ASTM B 434 (UNS N10242, UNS N10003)

### *Supply Condition*

In standard & non standard sizes | Available in other thicknesses, widths and lengths | Thickness tolerance to BS EN 10029 Class B  
NACE Hardness to MR 0175 | Annealed and pickled | Inter Granular Corrosion test (IGC) to ASTM A 262 Practice E | Hot rolled Mill Finish No. 1  
Polished to meet your requirements - dull or bright polishing

## Fabrication

### *Products*

DEAERATOR	DRIERS
HEAT EXCHANGERS	REACTOR VESSELS
PRESSURE VESSELS	INDUSTRIAL FANS & BLOWERS
STORAGE TANKS & BULLETS	POLLUTION CONTROL EQUIPMENT
STEEL CHIMNEY	CONE STRAINERS
SILENCERS	FUEL FIRING EQUIPMENT & FLARE STACK
DAMPERS	DISH ENDS
DUCT & METALLIC EXPANSION BELLOWS	DISHED ENDS
SCREW CONVEYOR	TUBE SHEET
GLASS HANDLING TOOL	BAFFLE PLATE

### *Manufacturing Facilities*

Profile Cutting	Pug Cutting
Welding Machines ARC, TIG, MIG.	Monorail
Grinding M/C.,	Bending
Sanding M/C.	Welding
Plate Bending / Rolling M/C.	Fitment

## Bend Pipes

We are supplier of mandrel bends to the stainless steel fabrication industry. Our products are used in a wide range of markets in India and overseas, also bending to customers specifications we stock a wide range of stainless steel, mild steel and aluminium butt weld bends, safety grab rails and swimming pool ladder rails. With many years of experience and expertise in forming tube & pipe, Rolf is committed to providing top quality, bent tube and box section in Stainless Steel, Mild Steel, CDS, T45, Aluminum.and on time service to our clients .

Mandrel Bending | Rolling | Swaging & Flaring | CNC Capability | One-off Bends to Multiples | Fast & Accurate | Quick turn-around | Stainless, Aluminium, Copper, Brass & Pipe

Tube size from 6mm to 114.3 mm OD can be manipulated on a variety of different centre line radii to accommodate differing wall thicknesses required by fabricators. Various areas of product design and fabrication have recognised the potential in utilising this specialist capability, including architectural designers, where the use of high-performance stainless tube matches many contemporary design visions.

A variety of methods can be used for bending stainless steel tubing. If the bend has a large radius, the tubing can be curved with three-roll benders (also called section benders, profile benders, or angle rolls.) If the bend has a tight radius, the tubing can be bent on a rotary-draw bender through a process called mandrel tube bending.

Both welded and seamless tubing can be curved. When the desired radius is very tight, seamless usually bends better.

Since the application of bent stainless tube often involves products for the pharmaceutical and food industries, care must be taken to avoid carbon contamination of the steel. The machinery and tooling should be cleaned and prepared to avoid such contamination. Furthermore, care should be taken to avoid having metal strapping in contact with the stainless parts. Cardboard, wood or plastic can be used to protect the tubing during transit.

After bending stainless steel tubing, a nut and sleeve can be slid over the ends which then can be flared. Process piping is often supplied this way.

Tubing is also becoming increasingly popular in construction in roof trusses, canopies, balconies, and many other applications Accuracy of 0.1 of a degree is achieved for a variety of applications, automotive, architectural and marine.

## Round Bars

### *ASTM Standard & Grade*

**Round Bars are available in various materials : Stainless Steel | Nickel Alloy | Non Ferrous Metal | Alloy Steel | Carbon Steel**

**Stainless Steel Grades :** 202, 304, 304L, 304H, 316, 316L, 316LN, 316Ti, 309, 310S, 317L, 321, 347, 409, 410, 420,430, 440A, 440B, 440C, 446.

**Carbon Steel Grades :** 202, 304, 304L, 304H, 316, 316L, 316LN, 316Ti, 309, 310S, 317L, 321, 347, 409, 410, 420,430, 440A, 440B, 440C, 446.

**Nickel Alloy Grades :** Cupro Nickel (90/10, 70/30), Hastelloy (C-4, C-22, C276, B-2), Nickel (200 / 201 / 205), Monel (K400 & K500), Inconel (600, 601, 625 & 825), Incolloy (800, 800H), Alloy 20, Titanium, Tungston, Moly, Kanthal, Nimonic Nichrome (80:20), Ferro Nickel Alloy (55/45, 60/40, 70/30), Cobalt, Sanicro (28, SS 904L).

#### **Non Ferrous Metals :**

Copper : 99.99% (Rolled – Hot & Cold, Electrolytic & Commercial)

Brass : Extruded & Drawn Free Cutting, Naval Brass, 60/40 Brass, Forging Brass

Phosphorus Bronze : PB2, 90/10

Gun Metal : 90/10, 70/30

Lead : 99.95 to 99.99%

**Alloy Steel Grades :** A-182 - F5, F9, F11, F12, F21, F22 & F91

### *Finish*

Bright, Polish & Black

### *Supply Condition*

Machining (CNC), Centreless Grinding (CG), Heat Treatment, Annealing, Pickling, Polish, Rolling, Forging, Cutting, Bending, Minor Fabrication, Rolling, Machining (CNC),

We Export...



**Reliable**  
Steel Distributors

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*Manufacturers & Exporters for*

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Carbon Steel | Stainless Steel | Alloy Steel | Titanium | Fabrication | Pipe sleeve

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