

**CAT MINH**  
TECHNOLOGY EQUIPMENT CO., LTD  
SINCE 2000



***STEEL PRODUCTS***



# OUR BUSINESS

Since 2000, with more than 18 years experience operating in onshore and offshore industrial. We are leading to provide:

- Scaffolding Tube
- ERW PIPE
- Seamless Steel Pipe
- Shipbuilding Steel Plate
- High Strength Steel Plate
- Low Alloy Steel Plate
- Carbon Steel Plate
- LSAW PIPE
- SSAW PIPE
- Hot Deep Galvanized Pipe
- Weather Resistant Steel Plate
- Boiler Steel Plate
- Pressure Vessel Steel Plate

# AUTHORIZED DEALER

At present, we are the Sole agent of famous manufacturer in the world.

PRODUCT	MANUFACTURER	LOGO	COUNTRY
All Kinds Of Steel	POSCO		
	YUSHENG		
	BEBON		



# SCRAFFOLDING TUBE

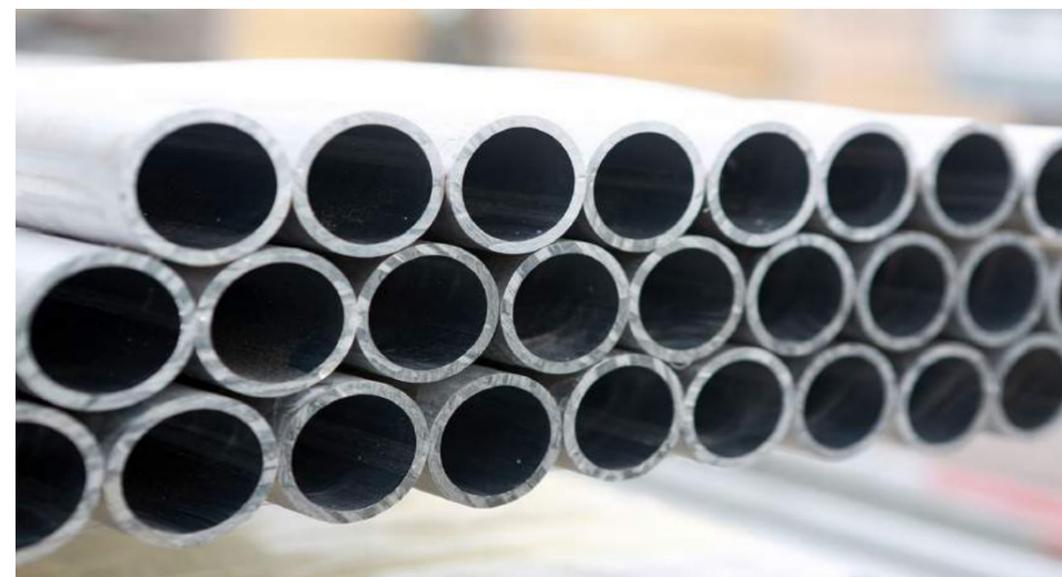


## • SCRAFFOLDING TUBE

- Outer Diameter: 48.3 mm, 48.6 mm, 38.1 mm, 42.3 mm, 60.3 mm
- Thickness: 1.8 mm - 4.0 mm
- Steel Grade: Q235B, Q345B, S235JR, STK400, STK500
- Standard: BS1139-1990, EN39-2001; JIS G3444:2004
- Surface Finish: Hot dipped galvanized, Electro galvanized, Black, Painted, Engraved.

Outer Diameter (mm)	Wall Thickness (mm)	Length (m)
48.3 mm - 48.6 mm	1.8 mm - 2.5 mm	0.3 m - 12 m
48.3 mm - 48.6 mm	2.75 mm	0.3 m - 12 m
48.3 mm - 48.6 mm	3.0 mm	0.3 m - 12 m
48.3 mm - 48.6 mm	3.2 mm	0.3 m - 12 m
48.3 mm - 48.6 mm	3.6 mm	0.3 m - 12 m
48.3 mm - 48.6 mm	3.8 mm	0.3 m - 12 m
48.3 mm - 48.6 mm	4.0 mm	0.3 m - 12 m
38.1 mm	4.0 mm	0.3 m - 12 m
42.3 mm	4.0 mm	0.3 m - 12 m
60.3 mm	2.0 mm - 4.0 mm	0.3 m - 12 m

## • MORE INFORMATION



## LSAW PIPE

LSAW steel Structural Pipes and low - pressure liquid transportation pipes.



## ERW PIPE

Electric Resistance Welded steel tube used in oil drilling and machinery manufacturing, etc.



### LSAW PIPE

- Standard: ASTM A 139 ( Grade A-E ), ASTM A252 ( Grade 1-3), JIS G3444 ( STK 290 -540 ), GB/T3091 ( Q215 - 345 )
- Outer Diameter: 508 mm - 1422 mm
- Wall Thickness: 6 mm - 40 mm
- Length: 6 m - 12 m
- Uses: as low - pressure liquid transportation pipes and different types of load bearing structure units as well as other purposes. We can also supply with other sizes according to your requirements.



### ERW PIPE

- Steel Grade: Q235, Q345, S235JR, S355JR, S355J2H, GR. A, GR. B, GR. D, STK400, STK 500, A, B, X42, X52, X56, X60, X65, X70.
- Standard: GB/T3091:2001, BS1387:1985, DIN EN10025, EN10219, JIS G3444:2004, ASTM A53, API 5L.

BS1387:1985 ERW PIPE (mm)

DN	A			B			C		
	Outer Diameter		Wall Thickness	Outer Diameter		Wall Thickness	Outer Diameter		Wall Thickness
	Max	Min		Max	Min		Max	Min	
15	21.4	21.0	2.0	21.7	21.1	2.6	21.7	21.1	3.2
20	26.9	26.4	2.3	27.2	26.6	2.6	27.2	21.1	3.2
25	33.8	33.2	2.6	34.2	33.4	3.2	34.2	33.4	4.0
32	42.5	41.9	2.6	42.9	42.1	3.2	42.9	42.1	4.0
40	48.4	47.8	2.9	48.8	48.0	3.2	48.8	48.0	4.0
50	60.2	59.6	2.9	60.8	59.8	3.6	60.8	59.8	4.5
65	76.0	75.2	3.2	76.6	75.4	3.6	76.6	75.4	4.5
80	88.7	87.9	3.2	89.5	88.1	4.0	89.5	88.1	5.0
100	113.9	113.0	3.6	114.9	113.1	4.5	114.9	113.3	5.4
125				140.6	138.7	5.0	140.6	138.7	5.4
150				166.1	164.1	5.0	166.1	164.1	5.4

JIS G3444:2004, STK 400/500, STRUCTURAL CARBON STEEL PIPE (mm)

Outer Diameter	Wall Thickness	Outer Diameter	Wall Thickness	Outer Diameter	Wall Thickness
21.7	2.0	60.5	2.3 - 4.0	139.8	3.6 - 6.0
27.2	2.0 - 2.3	76.3	2.8 - 4.0	165.2	4.5 - 7.1
34.0	2.3	89.1	2.8 - 3.2	190.7	4.5 - 8.2
42.7	2.3 - 2.5	101.6	3.2 - 5.0		
48.6	2.3 - 3.2	114.3	3.2 - 4.5		

## SSAW PIPE

Spiral Submerge Arc Welded Pipe is widely applied to the transportation for various of liquid and powdery solid, such as petroleum, natural gas, chemical, heat supply, gas supply, pulp, coal powder and etc.



## SEAMLESS STEEL PIPE



### SSAW PIPE

Standard	Grade
GB/T9711.1	L175, L210, L245, L290, L320, L360, L390, L415, L450, L485, L555
GB/T9711.2	L245NB, L245MB, L129NB, L290NB, L290MB, L360NB, L360MB, L360QB, L415NB, L415MB, L415QB, L450MB, L450QB, L485QB, L555MB, L555QB
SY/T5037	Q235B, Q345B
SY/T5040	Q235B, Q345B
API5L	A, B, X42, X46, X52, X56, X60, X65, X70, X80



Outer Diameter (mm)	Wall Thickness (mm)	Length (m)	Outer Diameter (mm)	Wall Thickness (mm)	Length (m)
219	6 - 8	1 - 12	1016	8 - 23	1 - 12
273	6 - 10	1 - 12	1020	8 - 23	1 - 12
325	6 - 14	1 - 12	1220	8 - 23	1 - 12
377	6 - 14	1 - 12	1420	10 - 23	1 - 12
426	6 - 16	1 - 12	1620	10 - 23	1 - 12
478	6 - 16	1 - 12	1820	10 - 25.4	1 - 12
508	6 - 18	1 - 12	2020	10 - 25.4	1 - 12
529	6 - 18	1 - 12	2200	10 - 25.4	1 - 12
610	6 - 19	1 - 12	2420	10 - 25.4	1 - 12
630	6 - 19	1 - 12	2620	10 - 25.4	1 - 12
720	6 - 19	1 - 12	2820	10 - 25.4	1 - 12
820	6 - 22	1 - 12	3000	10 - 25.4	1 - 12
820	7 - 22	1 - 12			

### SEAMLESS STEEL PIPE

- Seamless steel pipe is widely used for transmission of petroleum, natural gas, drilling, pumping and other fields.
- We can produce all kinds of specifications according to customer's detailed requirement.
- Seamless pipe can be bevel ends, varnishing and protected by plastic caps.

Standard	Grade
API5L / PSL1	A, B, X42, X52, X56, X60, X65, X70, X80
ASTM A53, ASTM SA53	A, B
ASTM A106, ASTM SA106	A, B, C
DIN 1629	ST37, ST44, ST52



# HOT DIPPED GALVANIZED PIPE



## HOT DIPPED GALVANIZED PIPE

- Steel Grade: Q195, Q235, S235JR, S275JR, S355JR, GR.A, GR.B, GR.C, GR.D, STK 400, STK 500.
- Standard: GB/T3091-2001, BS1387-1985, DIN EN10025, JIS G3444:2004, ASTM A53, BS-EN10255-2004.
- Surface finish: Hot dipped galvanized, electro galvanized, black, painted, thread, socket, engraved, Groove.
- Pre-galvanized pipe: Outer diameter: 19mm - 100mm; thickness 1mm - 2.3mm; zinc coating: 80-120g/m<sup>2</sup>

Outer Diameter		Wall Thickness	Length
<i>Inch</i>	<i>mm</i>	<i>mm</i>	<i>m</i>
1/2"	21.3	0.6 - 3.0	0.3 - 12
3/4"	26.9	0.6 - 3.0	0.3 - 12
1"	33.4	1.0 - 3.0	0.3 - 12
1-1/4"	42.3	1.0 - 4.0	0.3 - 12
1-1/2"	48.3	1.0 - 4.0	0.3 - 12
2"	60.3	1.5 - 4.0	0.3 - 12
2-1/2"	76.1	1.5 - 4.0	0.3 - 12
3"	88.9	1.5 - 9.5	0.3 - 12
4"	114.3	2.0 - 9.5	0.3 - 12
5"	141.3	3.0 - 9.5	0.3 - 12
6"	168.3	3.0 - 12.0	1.0 - 12
8"	219.1	3.2 - 12.0	1.0 - 12
10"	273	3.2 - 12.0	1.0 - 12
12"	323.8	6.0 - 15.0	1.0 - 12
14"	355.6	8.0 - 15.0	1.0 - 12
16"	406.4	8.0 - 20.0	1.0 - 12

## MORE INFORMATION



# Shipbuilding Steel Plate



## SHIPBUILDING AND OFFSHORE PLATFORM STEEL PLATE

- Steel plates are used in manufacturing the hull, marine extraction platform, the platform tube contact and other structural elements.
- Rolling Range: T\*W\*L 3 - 300 mm \* 1500 - 3200 mm \* 3000 - 18000mm

ABS, CCS Ship Class	Grade EQ70	Grade FQ70	Grade AQ70	Grade DQ70	Grade EQ63
	Grade FQ63	Grade AQ63	Grade DQ63	Grade EQ56	Grade FQ56
	Grade AQ56	Grade DQ56	Grade EQ51	Grade FQ51	Grade AQ51
	Grade DQ51	Grade EQ47	Grade FQ47	Grade AQ47	Grade DQ47
	Grade EH40	Grade FH40	Grade AH40	Grade DH40	Grade EH36
	Grade FH36	Grade AH36	Grade DH36	Grade EH32	Grade FH32
	Grade AH32	Grade DH32	Grade D	Grade E	Grade A
	Grade B				

LR Ship Class	Grade EH69	Grade FH69	Grade AH69	Grade DH69	Grade EH62
	Grade FH62	Grade AH62	Grade DH62	Grade EH55	Grade FH55
	Grade AH55	Grade DH55	Grade EH50	Grade FH50	Grade AH50
	Grade DH50	Grade EH46	Grade FH46	Grade AH46	Grade DH46
	Grade EH42	Grade FH42	Grade AH42	Grade DH42	Grade EH40
	Grade FH40	Grade AH40	Grade DH40	Grade EH36	Grade FH36
	Grade AH36	Grade DH36	Grade EH32	Grade FH32	Grade AH32
	Grade DH32	Grade D	Grade E	Grade B	Grade A

BV, GL, DNV, RINA Ship Class	Grade E690	Grade F690	Grade A690	Grade D690	Grade E620
	Grade F620	Grade A620	Grade D620	Grade E550	Grade F550
	Grade A550	Grade D550	Grade E500	Grade F500	Grade A500
	Grade D500	Grade E460	Grade F460	Grade A460	Grade D460
	Grade E420	Grade F420	Grade A420	Grade D420	Grade E40
	Grade F40	Grade A40	Grade D40	Grade E36	Grade F36
	Grade A36	Grade D36	Grade E32	Grade F32	Grade A32
	Grade D32	Grade D	Grade E	Grade B	Grade A

KR, NK Ship Class	Grade E70	Grade F70	Grade A70	Grade D70	Grade E63
	Grade F63	Grade A63	Grade D63	Grade E56	Grade F56
	Grade A56	Grade D56	Grade E51	Grade FQ1	Grade A51
	Grade D51	Grade E47	Grade F47	Grade A47	Grade D47
	Grade E40	Grade F40	Grade A40	Grade D40	Grade E36
	Grade F36	Grade A36	Grade D36	Grade E32	Grade F32
	Grade A32	Grade D32	Grade D	Grade E	Grade A
	Grade B				

ASTM 131 Grade	EN 10225 Grade	API Spec Grade
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# Weather Resistant Steel Plate



## WEATHER RESISTANT STEEL PLATE

- Weather Resistant Steel Plate( Weathering Steel Plate) is a kind of low alloy series steel falling in between common steel and stainless steel. Weathering steel plate is made by adding little Cu, Ni and other anti- corrosion elements to common steel, which make this kind steel be with better toughness, forming property, weldability and cutting, anti- fatigue ability, etc.

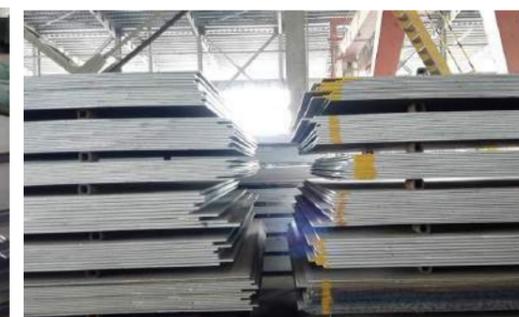
- Weathering steel plate's weather ability is common carbon steel plate's twice to 8 times, coating performance is common carbon steel plate's 1.5 to 10 times. Meanwhile, weather resistant steel plate owns anti- rusty ability, which can expand the service life for steels.

CORTEN	Grade A	Grade B			
ASTM A588 A588M	Grade A	Grade B	Grade C	Grade K	
EN 10025-5	Grade S235J0W	Grade S235J2W	Grade S355J0WP	Grade S355J0W	Grade S355J2WP
	Grade S355J2W	Grade S355K2W			
EN 10155	Grade S235J0W	Grade S235J2W	Grade S355J0WP	Grade S355J0W	Grade S355J2WP
	Grade S355J2G1W	Grade S355J2G2W	Grade S355K2G1W	Grade S355K2G2W	
JIS G3114	Grade SMA570P	Grade SMA570W	Grade SMA490CP	Grade SMA490BP	Grade SMA490AP
	Grade SMA490CW	Grade SMA490BW	Grade SMA400AW	Grade SMA400CP	Grade SMA400BP
	Grade SMA400AP	Grade SMA400CW	Grade SMA400BW	Grade SMA400AW	

JIS G3125	Grade SPA-H	Grade SPA-C	
GB 4171-84	Grade 09CuPCrNi-A	Grade 09CuPCrNi-B	Grade 09CuP



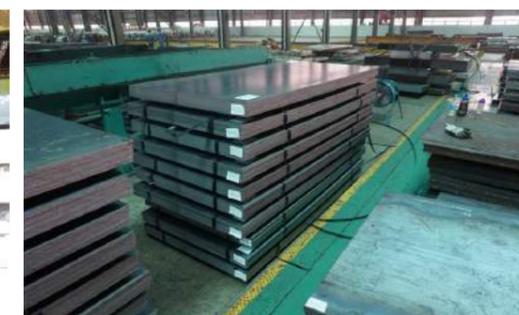
Corten A Weather Resistant Steel Plate



ASME SA588Grade K(SA588GRK) Weather Resistant Steel Plate



ASTM A588Grade K(A588GRK) Weather Resistant Steel Plate



JIS G3114 SMA490BP Weather Resistant Steel Plate

# Boiler and Pressure Vessel Steel Plate



## BOILER AND PRESSURE VESSEL STEEL PLATE

- Boiler and Pressure Vessel Steel Plate is used for many applications where the pressure inside is significantly higher than atmospheric pressure.
- Pressure vessel steel plate covers a range of steel grades that are designed for use in pressure vessel, boilers, heat exchangers and any other vessel that contains a gas or liquid at high pressures.

ASTM	A202GRA	A202GRB	A203GRA	A203GRB	A203GRD	
	A203GRE	A203GRF	A204GRA	A204GRB	A204GRC	
	A285GRA	A285GRB	A285GRC	A299GRA	A299GRB	
	A302GRA	A302GRB	A302GRC	A302GRD	A387GR5CL1	
	A387GR5CL2	A387GR11CL1	A387GR11CL2	A387GR12CL1	A387GR12CL2	
	A387GR22CL1	A387GR22CL2	A515GR60	A515GR65	A515GR70	
	A516GR55	A516GR60	A516GR65	A516GR70	A533GRACL1	
	A533GRACL2	A533GRACL3	A533GRBCL1	A533GRBCL2	A533GRBCL3	
	A533GRCCL1	A533GRCCL2	A533GRCCL3	A533GRDCL1	A533GRDCL2	
	A533GRDCL3	A537CL1	A537CL2	A537CL3	A612M	
	A662GRA	A662GRB	A662GRC			
	DIN 17155	10CrMo910	13CrMo44	15Mo3	19Mn6	17Mn4
		HII Pressure	HI Pressure			
GB713	12Cr1MoVR	12Cr2Mo1R	13MnNiMoR	14Cr1MoR	15CrMoR	
	18MnMoNbR	Q370R Pressure	Q345R Pressure	Q245R Pressure		

JIS G3103	SB480M	SB450M	SB480	SB450	SB410
JIS G3115	SPV490	SPV450	SPV410	SPV355	SPV315
	SPV235				
EN 10028-2	16MO3	P355GH	P265GH	P265GH	P235GH
EN 10028-3	P460N	P275N	P460NL2	P460NL1	P460NH
	P355NL2	P355NL1	P355NH	P355N	P275NL2
	P275NL1	P275NH			
EN 10028-5	P460ML2	P460ML1	P460M	P420ML2	P420ML1
	P420M	P355ML2	P355ML1	P355M	
EN 10028-6	P690QL2	P690QL1	P690QH	P690Q	P690Q
	P500QL1	P500QH	P500Q	P460QL2	P460QL1
	P460QH	P460Q	P355QL2	P355QL1	P355QH
	P355Q				
GB 3531	09MnNiDR	15MnNiDR	16MnDR		

# High Strength, Low alloy and Carbon Steel Plate



## CARBON, LOW-ALLOY AND HIGH-STRENGTH STEEL

- Carbon and Low-alloy High-strength Steel provide greater environmental corrosion resistance and are stronger than convention carbon steel also very ductile, highly formable and easy to weld.

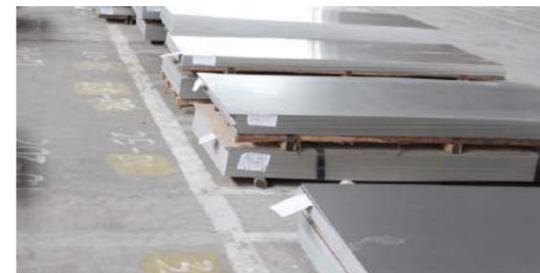
ASTM, ASME	A36	A283GRA	A283GRB	A283GRC	A283GRD
	A514GRA	A514GRB	A514GRC	A514GRE	A514GRF
	A514GRH	A514GRJ	A514GRK	A514GRM	A514GRP
	A514GRQ	A514GRR	A514GRS	A514GRT	A572GR42
	A572GR50	A572GR55	A572GR60	A572GR65	A573GR58
	A572GR65	A572GR70	A588GRA	A588GRB	A588GRC
	A588GRK	A633GRA	A633GRC	A633GRD	A633GRE
	A656GR50	A656GR60	A656GR70	A656GR80	A709GR36
	A709GR50	A709GR50S	A709GR50W	A709GRHPS50W	A709GRHPS70W
	A709GR100	A709GRHPS100W	SA36	SA283GRA	SA283GRB
	SA283GRC	SA283GRD	SA514GRA	SA514GRB	SA514GRC
	SA514GRE	SA514GRM	SA514GRP	SA514GRQ	SA514GRR
	SA514GRT	SA514GRS	SA572GR42	SA572GR55	SA572GR50
	SA572GR60	SA572GR65	SA573GR58	SA573GR65	SA573GR70
	SA588GRA	SA588GRB	SA633GRA	SA633GRB	SA656GR50
	SA656GR70	SA709GR36	SA709GR50S	SA709GRHPS50W	SA709GRHPS70W

EN 10025-2	S420J0	S355J2	S355K2	S355JR	S355J0
	S275J0	S275J2	S235J2	S275JR	S235JR
	S235J0				
EN 10025-3	S460NL	S420NL	S460N	S355NL	S420N
	S275NL	S355N	S275N		
EN 10025-4	S460ML	S460M	S420M	S420ML	S355ML
	S275ML	S355M	S275M		
EN 10025-6	S960QL	S890QL1	S960Q	S690QL1	S890QL
	S690QL	S890Q	S620QL1	S690Q	S620Q
	S620QL	S550QL	S550QL1	S500QL1	S550Q
	S500Q	S500QL	S460QL	S460QL1	S460Q
GB/T700	Q235D	Q275	Q235B	Q235C	Q235A
GB/T1591	Q460C	Q460D	Q460E	Q420A	Q420B
	Q420C	Q420D	Q420E	Q390A	Q390B
	Q390C	Q390D	Q390E	Q345A	Q345B
	Q345C	Q345D	Q345E		

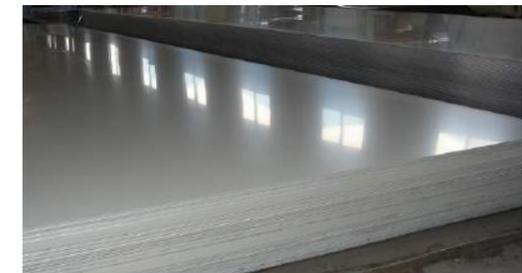


• CARBON, LOW-ALLOY AND HIGH-STRENGTH STEEL

DIN 17100	St52-3	St52-3	St37-3	St37-2	USt37-2
DIN 17102	EStE500	WStE500	TStE500	StE500	EStE460
	WStE460	TStE460	StE460	EStE420	WStE420
	TStE420	EStE380	WStE380	TStE380	StE380
	EStE355	WStE355	TStE355	StE355	EStE315
	WStE315	TStE315	StE315	EStE285	WStE285
	TStE285	StE285	EStE255	WStE255	TStE255
	StE255				
JIS G3101	SS540	SS400	SS490	SS330	
JIS G3106	SM520C	SM570	SM490YB	SM520B	SM490C
	SM490YA	SM490A	SM490B	SM400B	SM400C
	SM400A				
GB/WYJ	WQ690D	Q690D	WH80QD	WQ700D	WQ690E
	Q690E	WQ890D	WH100QD	WQ890E	WH100QE



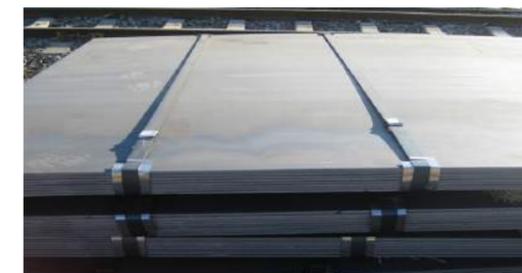
ASTM A514 Grade T (A514GRT) High Strength Steel Plate



ASTM A514 Grade A (A514GRA) High Strength Steel Plate



EN10025-2 S235J2 Carbon Steel Plate



EN10025-4 S420ML Carbon Steel Plate



DIN17100 St37-3 Carbon Steel Plate



DIN17102 EStE285 Low alloy Plate

# STEEL ROUND BAR



## • HOT ROLLED STEEL ROUND BAR

Hot Rolled Steel Round Bar is measured by its diameter. It has many applications across many industries including fabrication, manufacturing and repair. It can be easily welded and fabricated. Hot Rolled Round Bar can be purchased in sizes as small as 1/4" diameter and as large as 12" diameter. It can be used in place of Cold Rolled Round Bar in situations where precise tolerances are not required. Contact with us for more information about metal types, shapes and grades available.

### Available Grades

#### Hot Rolled Steel A36 (44W in Canada)

Typical Applications: Trailers, Walkways, Ramps, Structural support, general fabrication.

#### Hot Rolled Steel C1018/20

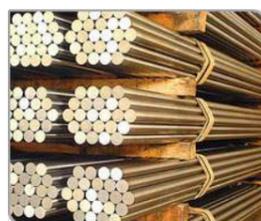
Typical Applications: Gears, pinions, worms, king pins, chain pins, ratchets, dogs, oil tool slips and liners, studs, anchor pins, special bolts, tie rods. Any carburized parts requiring hard surface and soft core.

#### Hot Rolled Steel C1045

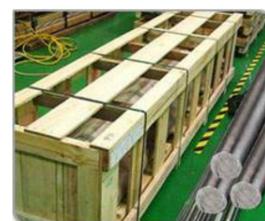
Typical Applications: Axles, machinery parts, stud bolts, ordinary shafts, pinions, gears, rock screens, forming dies, tool shanks.

#### Hot Rolled Steel C1141

Typical Applications: Axles, Pins, Studs, Bolts, Shafts, Tie rods.



Packed



Packed

## • COLD ROLLED STEEL ROUND BAR

Cold Round Steel Round Bar is a cylindrical piece of cold rolled steel that is commonly used in applications such as shafts, spindles, pins, rods and sprockets. It is a common material in many machining and industrial industries. It is measured by its diameter. Cold Rolled Steel Round typically has a smoother finish than hot rolled round bar. Contact with us for more information about metal types, shape and grades available.

### Available Grades

#### Cold Rolled Steel C1018

Typical Applications: Used for parts requiring cold forming, such as crimping, swaging or bending. Also used on carburized parts requiring soft core and high surface hardness such as king pins, gears, dogs, etc.

#### Cold Rolled Steel C1045

Typical Applications: Shafts, machinery parts, bolts, pinions, gears.

#### Cold Rolled Steel C1141

Typical Applications: Axles, Pins, Studs, Bolts, Shafts, Tie rods

#### Cold Rolled Steel C1144

Typical Applications: Arbors, keyed shafts, spindles, gears, pinions, piston rods, sleeves, lead screws, racks, motor shafts, pump shafts, link pins, mandrels, boring bars, collets, bushings, drive shafts, armature shafts, king pins.

#### Cold Rolled Steel C12L14

Typical Applications: Bushings, inserts, couplings, hydraulic hose fittings

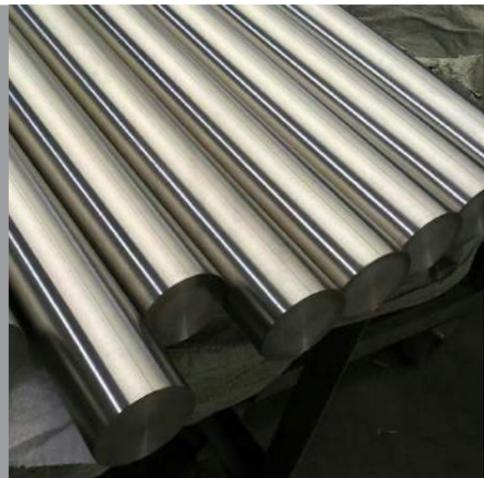


Packed



Packed

# STEEL ROUND BAR



## • STAINLESS STEEL ROUND BAR

Stainless Steel Round Bar is measured by its diameter. Its resistance to corrosion, staining, and rust make it well-suited for many industries and applications including architecture and cookware. Contact with us for more information about this metal type and shape

### Available Grades

#### **Stainless Steel 304/304L**

Typical Applications: Dairy, beverage and food product handling/processing equipment. Used for handling acetic, nitric, and citric acids; organic and inorganic chemicals, dye stuff, crude and refined oils; instruments; hospital equipment; applications requiring welding.

#### **Stainless Steel 303**

Typical Applications: Aircraft parts and parts requiring machining, grinding or polishing with good corrosion resistance. Excellent for moving parts and where low magnetic permeability is required.

#### **Stainless Steel 316/316L**

Typical Applications: Pump shafts and parts in machinery used to process paper, textiles, chemicals and pharmaceuticals. In aircraft applications, used for parts requiring low magnetic permeability and good corrosion resistance.

#### **Stainless Steel 416**

Typical Applications: Pump shafts and parts in machinery used in or around fresh water, food acids, and neutral and basic salts.

#### **Stainless Steel 17-4 PH**

Typical Applications: Aircraft and gas turbines, nuclear reactors, paper mills, oil field industry, and chemical process components.

#### **Stainless Steel 440C**

Typical Applications: Bearings, Nozzles, Pump parts, Mold inserts, Knives, Surgical tools.

## • ALLOY STEEL ROUND BAR

Alloy Steel has alloying elements added to it such as manganese and nickel, which improves the strength, hardness and toughness of the metal, making it ideal for highly-demanding industrial applications. Contact with us for more information about this metal type, shape and available grades.

### Available Grades

#### **Alloy Steel 4130 (Chromoly)**

Typical Applications: Aircraft seating, Roll cages, Motorsport applications.

#### **Alloy Steel 4140**

Typical Applications: Drill collars, high temperature bolts, sprockets, kelly bars, reamer bodies, rotary table shafting, oil well tool joints, spindles, stay bolts, tractor axles, tractor arms, axle shafts, valves, bolts, subs, couplings, trailer axles, winch shafts, piston rods, rams, hydraulic machinery shafts, precision lead screws, chain links, zinc die-casting dies.

#### **Alloy Steel 4340**

Typical Applications: Crank shafts, axle shafts, dies, subs, gear shafts, gears, mine drilling parts, oil well fishing tools and parts, etc.

#### **Alloy Steel 6150**

Typical Applications: Gears, pinions, shafting, axles, machinery parts, springs, heavy duty pins, bolting, hand tools..

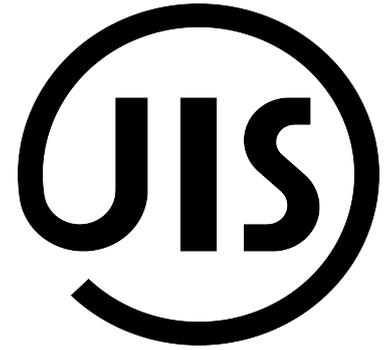
#### **Alloy Steel 8620**

Typical Applications: Because of the fine combination of properties that may be developed, as well as the ease with which it may be processed, this material is ideal for a wide variety of applications. Gears, pinions, oil pump piston rods and liners, spline shafts, piston pins, cams, jigs, plastic molds, oil tool slips, jaws, gauges, etc.

**DIN**



ASTM INTERNATIONAL



## Head Office

 Floor 5<sup>th</sup>, TEDI Building, No.15A, Hoang Hoa Tham Street, Ward 6, Binh Thanh District, Ho Chi Minh City, Viet Nam

 +84 (0) 28 6258 3341 ; +84 (0) 28 6258 3347

+84 (0) 28 6258 3348

 [infor@catminh.com](mailto:infor@catminh.com)

[www.thepoline.com](http://www.thepoline.com) ; [www.catminh.com](http://www.catminh.com) ; [www.catminh.net](http://www.catminh.net)