



# Shanghai Metal Corporation

[www.shanghaimetal.com](http://www.shanghaimetal.com)

## SHANGHAI METAL CORPORATION

SMC is the leading manufacturer and supplier of metals, building materials, and machinery for building projects throughout the world. From the acquisition of raw materials, packaging and exportation, Shanghai Metal Corporation ensures only the best quality of products by assigning professional experts at every stage of production. In addition to continuous support, the SMC professional team can plan, coordinate, and oversee the engineering of your project regulation, site and terrain.

Since the establishment of our export office in Shanghai in 1998, Shanghai Metal Corporation's professional team has been working diligently to satisfy the needs of an increasing global market demand. As the only company with a trading license, SMC provides "one-stop shopping" and has been exporting globally since 2000.

## The Business of Carbon Steel



Try out our services,  
by contacting us for a free consultation today.



20 floor Yuan Mansion, 738 Dongfang Road, Shanghai, China 200122  
| p: +86-21-5830-9368; +86-21-6876-0737 | f: +86-21-5081-9492  
email: [sales@shanghaimetal.com](mailto:sales@shanghaimetal.com); [carbonsteel@shanghaimetal.com](mailto:carbonsteel@shanghaimetal.com)  
[WWW.SHANGHAIMETAL.COM](http://WWW.SHANGHAIMETAL.COM)



Accelerate your business potential with **Shanghai Metal Corporation**

# 02

## SHANGHAI METAL CORPORATION

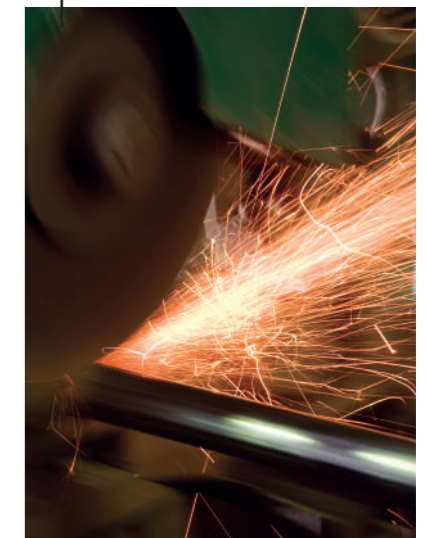
- COMPANY OVERVIEW
- Overview
- Purpose
- Vision
- Mission Statement
- Core Values
- Goals



# 06

## PRODUCT RANGE

- Hot Rolled Steel
- Cold Rolled Steel
- Silicon Steel
- High Speed Steel
- Spring Steel Bar
- Steel Pipes
- Steel Bar
- Steel Wire
- Steel Structure



- Factory Production
- CARBON STEEL
- FACTORY**

# 04



# Shanghai Metal Corporation

[www.shanghaimetal.com](http://www.shanghaimetal.com)

Shanghai Metal Corporation is an integrated manufacturer, exporter and supplier of value added Metal Products, Building systems, Shipping containers, and Machinery

**OVERVIEW**

**MISSION STATEMENT**

To maintain Long Lasting Relationships with our clients, and always dedicate our efforts to create Quality Products and Reliable Service, while building Global Value through our belief in Environmental Stewardship and Sustainability

To lead the market in both material manufacturing and process innovation

**PURPOSE**

**CORE VALUES**

Fair and Transparent Management – Provide clients with only the highest quality products – Continuous Innovation – Environmental Stewardship and Sustainability

To be world class through

**VISION**

**GOALS**

Maintain customer relationships through our belief in a customer driven culture – Lead the Market through Constant Innovation of our Operation Methods – To provide clients with only the Highest Quality Products through using the Latest developments in Technology and Processes



Hot Rolled Steel Coil, mm 1.2 ~ 15.0 X 800 ~ 2130 X C	Hot Rolled Steel Plate, mm 1.2 ~ 130 X 800 ~ 3400 X 2000 ~ 16000
--	---

**NORMAL HOT ROLLED STEEL**

GRADE	STANDARD	EQUIVALENT STANDARD & GRADE	APPLICATION
Q195, Q215A, Q215B	GB 912 GB/T3274	JIS G3101 SS330, SPHC, SPHD	Structural components and stamping parts for engineering machinery, transportation machinery, construction machinery, hoisting machinery, agricultural machinery, and light industry.
Q235A		JIS 3101 SS400 EN10025 S235JR	
Q235B		JIS G3101 SS400 EN10025 S235J0	
Q235C		JIS G3106 SM400A SM400B EN10025 S235J0	
Q235D	JIS G3106 SM400A EN10025 S235J2		
SS330, SS400	JIS G3101	-	
S235JR+AR, S235J0+AR S275JR+AR, S275J0+AR	EN10025-2	-	

GRADE	STANDARD	EQUIVALENT STANDARD & GRADE	APPLICATION
Q345A	GB 912 GB/T3274	ASTM A275 Gr.50 EN10025 E335	Structural parts and welding parts for machinery manufacturing, transportation vehicles, chemical equipment, rotating casing.
Q345B		ASTM A572 Gr.50 EN10025 S335JR	
Q345C		EN10025 S335J0	
Q345D		ASTM A572M Gr.50 EN10025 S335J2	
Q345E		ASTM A572M Gr.50	



Steel Coil



Steel Plate

**BOILER PLATE**

GRADE	STANDARD	APPLICATION
Q245R, Q345R	GB 713	Boiler and pressure vessel

**CORTEN STEEL**

GRADE	STANDARD	APPLICATION
09CuPTiRE-A	Q/WG (RZ) 04-2008	Structural parts, stamping parts and decorating parts for railway carriage, dining car, refrigerator car; manufacturing of building structure and other transportation vehicles and parts
09CuPCrNi-A		
Q355GNH (A/B/C/D/E)	GB/T4171	

**SAPH AUTOMOBILE STEEL**

GRADE	STANDARD	APPLICATION
SAPH310, SAPH370	WJX (RZ) 77-2007	Good stamping formability, used for manufacturing structure parts of automotive frame, vehicle, etc.
SAPH400, SAPH440		

**MARINE and OFFSHORE STEEL**

GRADE	STANDARD	SHEETS	COILS
A, B	GB/T712	2.0-25.4*900-1200*2000-16000	2.5-12.7*900-1200*C
D, A32, D32, A36, D36		2.0-19.0*900-1200*2000-16000	2.0-12.7*900-1200*C

In BV, LR certificate standards, A32, D32, A36, D36 are equivalent to AH32, DH32, AH36, DH36



Steel Plate



Hot rolled steel plate - production

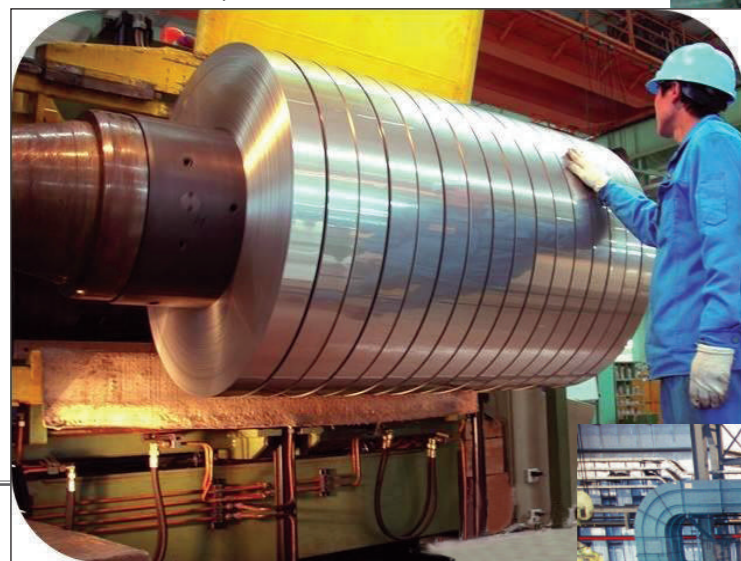
GRADE	STANDARD	DIMENSION, MM			APPLICATIONS
		Thickness	Width	Length	
DC01, DC03, DC04, DC05, DC06, DC07, SPCCT-SD, SPCD-SD, SPCE-SD, SPCF-SD, SPCG-SD	Q/WG(LZ)20-2008 EN 10130:1998 JIS G 3141:2005	0.2 ~ 3.0	600 ~ 2050	Customized	General and deep drawing forming components and parts

GRADE	YIELD STRENGTH Mpa	TENSILE STRENGTH Mpa	ELONGATION %	PLASTICITY INDEX	HARDEN INDEX
DC01	140 ~ 280	270 ~ 410	≥28	-	-
DC03	140 ~ 240	270 ~ 370	≥34	≥1.4	-
DC04	120 ~ 210	270 ~ 350	≥38	≥1.8	≥0.18
DC05	120 ~ 180	270 ~ 330	≥40	≥2.0	≥0.20
DC06	120 ~ 170	270 ~ 330	≥42	≥2.1	≥0.22
DC07	100 ~ 150	250 ~ 310	≥44	≥2.5	≥0.23



Cold rolled steel coil

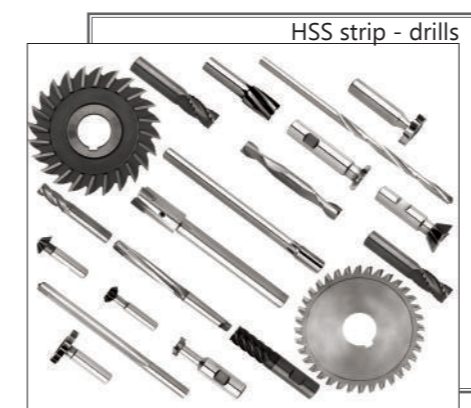
Cold rolled steel strip - minimum width 4mm



Cold rolled steel - facility



	GRADE			SIZE RANGE
	DIN	AISI	JIS	
<b>HSS ROUND BAR</b>	1.3343	DINM2	-	2.5-205mm
	1.3243	M35	SKH51	2.5-160mm
	1.3247	M42	SKH2	15-65mm
	1.3346	M1	-	2.5-205mm
	1.3392	M52	-	2.5-205mm
	-	M4	-	15-80mm
	-	M7	SKH58	15-80mm
<b>HSS SQUARE BAR</b>	-	W9	-	3.6-160mm
	1.3343	DINM2	-	15-40mm
	1.3244	M35	SKH59	15-40mm
	1.2344	H13	SKD62	120-250mm
<b>HSS FLAT BAR</b>	1.2367	-	-	120-180mm
	1.3343	M2	SKH51	Width:100-510mm Thickness:14-65mm

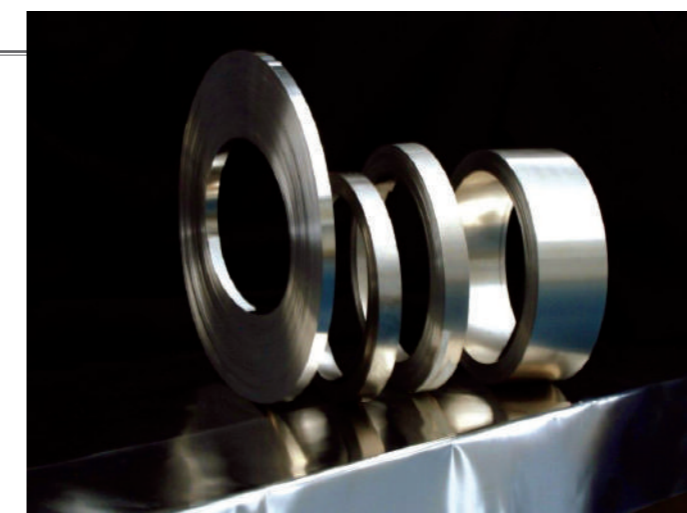


HSS strip - drills

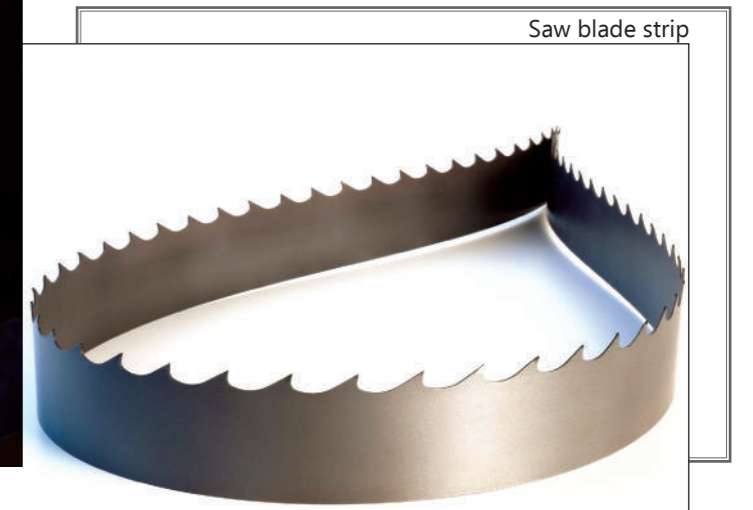


High speed steel bar

<b>HSS STRIP</b>	Cold Rolled Strip	Thickness: 0.60 - 1.80 mm
		Hot rolled Strip
		Width: 25 - 3.0 mm
		Width: 36 - 65 mm



Polished cold rolled HSS strip



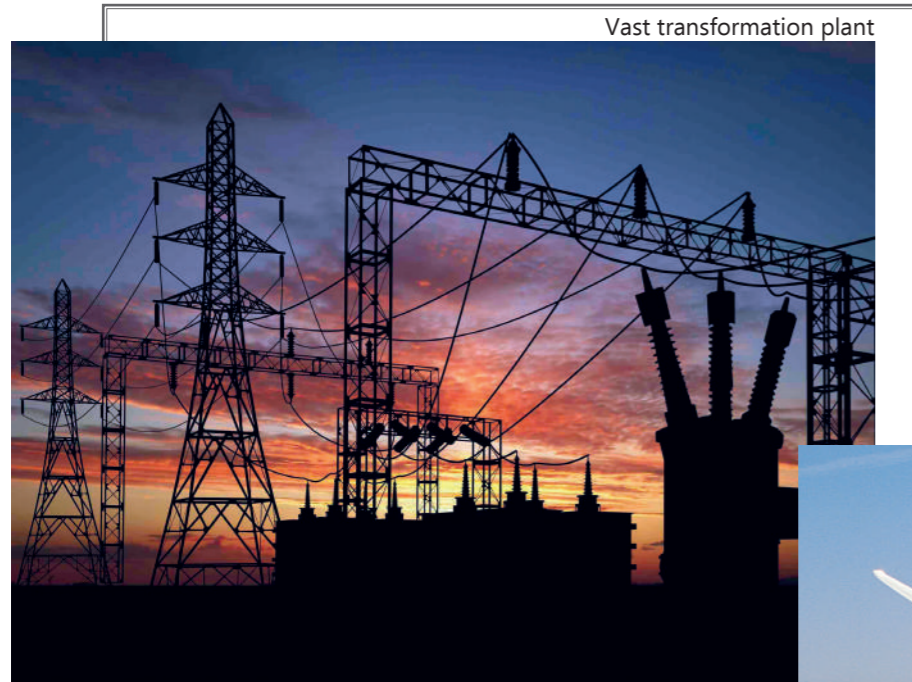
Saw blade strip

# GRAIN-ORIENTED ELECTRICAL STEEL

THICKNESS, mm	WIDTH, mm	INNER DIAMETER, mm
0.23 0.27 0.30 0.35	700 ~ 1200	508, 610

GRADE	THICKNESS mm	THEORETICAL DENSITY kg/dm <sup>3</sup>	Max. Iron loss P <sub>14/50</sub> w/kg	Min. Induction T
23G110	0.23	7.65	1.10	1.80
23G120			1.20	1.80
27G110	0.27	7.65	1.10	1.80
27G120			1.20	1.80
27G130			1.30	1.80
30G120	0.30	7.65	1.20	1.80
30G130			1.30	1.80
30G140			1.40	1.80
35G135	0.35	7.65	1.35	1.80
35G145			1.45	1.80
35G155			1.55	1.80

P17/50 means maximum magnetic flux density is 1.7T and frequency is 50Hz  
 B8 means magnetic field strength is 800A/m



Vast transformation plant



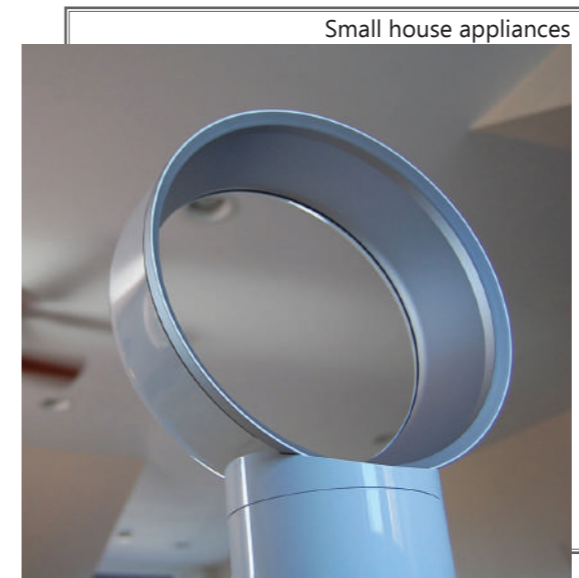
Wind driven generator

# NON-ORIENTED ELECTRICAL STEEL

THICKNESS, mm	WIDTH, mm	INNER DIAMETER, mm
0.20 0.35 0.50	800 ~ 1250	508, 610

GRADE	THICKNESS mm	THEORETICAL DENSITY kg/dm <sup>3</sup>	Max. Iron loss P <sub>15/50</sub> w/kg	Min. Induction T
35W210	0.35	7.60	2.10	1.62
35W230		7.60	2.30	1.62
35W250		7.60	2.50	1.62
35W270		7.65	2.70	1.62
35W300		7.65	3.00	1.62
35W360		7.65	3.60	1.63
35W440	0.50	7.70	4.40	1.64
35W550		7.75	5.50	1.64
50W230		7.60	2.30	1.62
50W250		7.60	2.50	1.62
50W270		7.60	2.70	1.62
50W290		7.60	2.90	1.62
50W310		7.65	3.10	1.62
50W350		7.65	3.50	1.62
50W400		7.65	4.00	1.63
50W470		7.70	4.70	1.64
50W540		7.70	5.40	1.65
50W600		7.75	6.00	1.66
50W700		7.80	7.00	1.70
50W800	7.80	8.00	1.70	
50W1000	7.85	10.00	1.70	
50W1300	7.85	13.00	1.70	

P15/50 means maximum magnetic flux density is 1.5T and frequency is 50Hz  
 B8 means magnetic field strength is 5000A/m



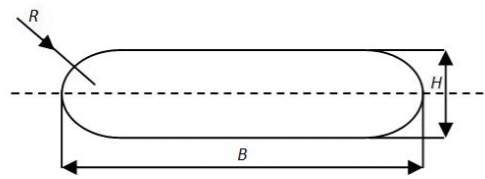
Small house appliances



Transformer Substation

GB	ASTM	JIS	EN	C	Si	Mn	Cr	V	P	S	HB
65Mn	1566	S65C	C60E	0.62-0.70	0.17-0.37	0.90-1.20	≤0.25	-	0.035	0.035	302
60Si2Mn	9260	SUP7	61SiCr7	0.56-0.64	1.50-2.00	0.70-1.0	≤0.35	-	0.025	0.025	321
60Si2MnA	9260	SUP7	61SiCr7	0.56-0.64	1.60-2.00	0.70-1.0	≤0.35	-	0.025	0.025	321
55CrMnA	5155	SUP9	55Cr3	0.52-0.60	0.17-0.35	0.65-0.95	0.65-0.95	-	0.025	0.025	321
60CrMnA	5160	SUP9A	60Cr3	0.56-0.64	0.17-0.37	0.70-1.00	0.70-1.00	-	0.025	0.025	321
50CrVA	6150	SUP10	51CrV4	0.46-0.54	0.17-0.37	0.50-0.80	0.80-1.10	0.10-0.20	0.025	0.025	321
60Si2CrA	-	-	54SiCr6	0.56-0.64	1.40-1.80	0.40-0.70	0.70-1.00	-	0.025	0.025	321
28MnSiB	-	-	-	0.24-0.32	0.60-1.2	1.2-1.6	B (0.0005-0.0035)	-	0.035	0.035	-

THICKNESS	5-30mm
WIDTH	30-300m
LENGTH	At customer's request

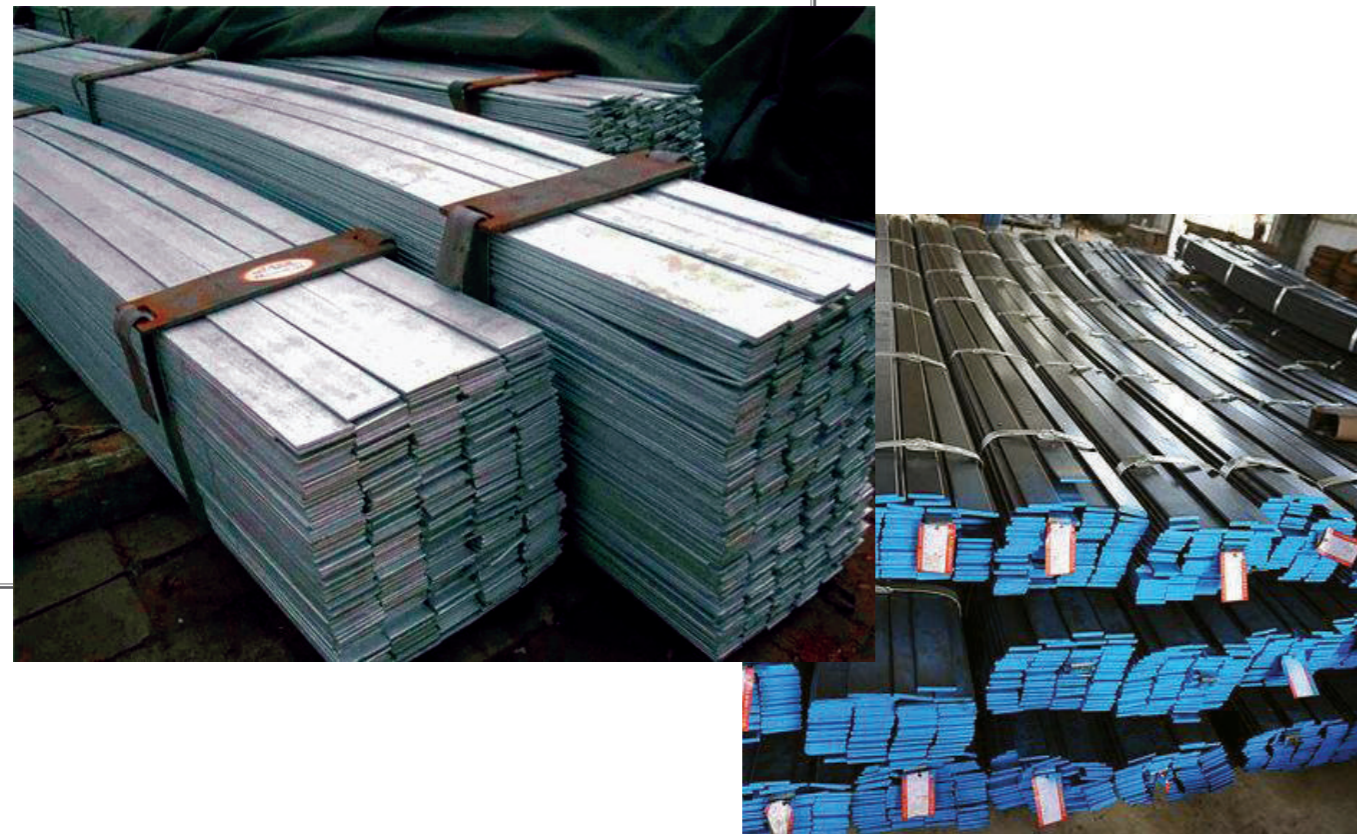


Round Angle Flat Bar



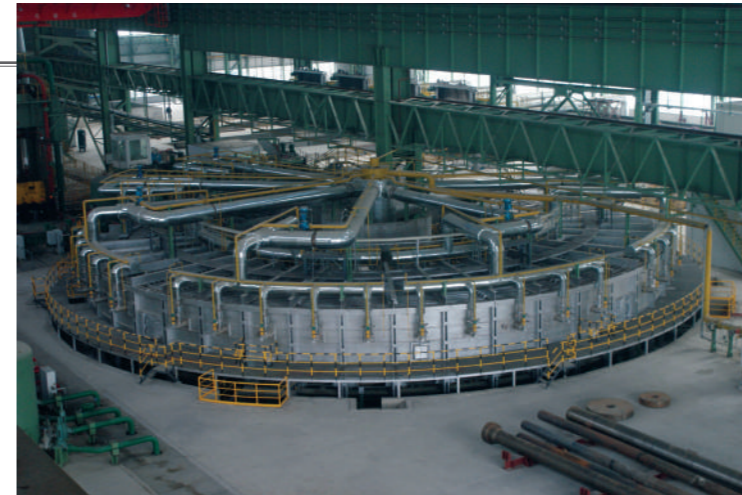
Right Angle Flat Bar

B = Width H = Height R = 1/2H



ASTM A106 Seamless Steel Pipe

STANDARD	GRADE	Chemical Composition (%), ≤									
		C	Mn	Si	Cu	Ni	Cr	Mo	V	P	S
ASTM A106 / ASME SA106	A	0.25	0.27-0.93	≥0.10	0.40	0.40	0.40	0.15	0.08	0.035	0.035
	B	0.30	0.29-1.06	≥0.10	0.40	0.40	0.40	0.15	0.08	0.035	0.035
	C	0.35	0.26-1.06	≥0.10	0.40	0.40	0.40	0.15	0.08	0.035	0.035
MECHANICAL PROPERTIES		Tensile Strength, Mpa					Yield Strength, Mpa				
	A	≥330					≥205				
	B	≥415					≥240				
	C	≥485					≥275				



Rotation Heating Furnace



Diameter Adjustment Mill



Seamless Steel Pipe

ASTM A53 Black and Hot Dip Galvanized Steel Pipe

STANDARD	GRADE	Chemical Composition (%), ≤									
		C	Mn	P	S	Cu	Ni	Cr	Mo	V	
ASTM A53 / ASME SA53	A	0.25	0.95	0.05	0.045	0.40	0.40	0.40	0.15	0.08	
	B	0.30	1.20	0.05	0.045	0.40	0.40	0.40	0.15	0.08	
MECHANICAL PROPERTIES		Tensile Strength, Mpa					Yield Strength, Mpa				
	A	≥330					≥205				
	B	≥415					≥240				

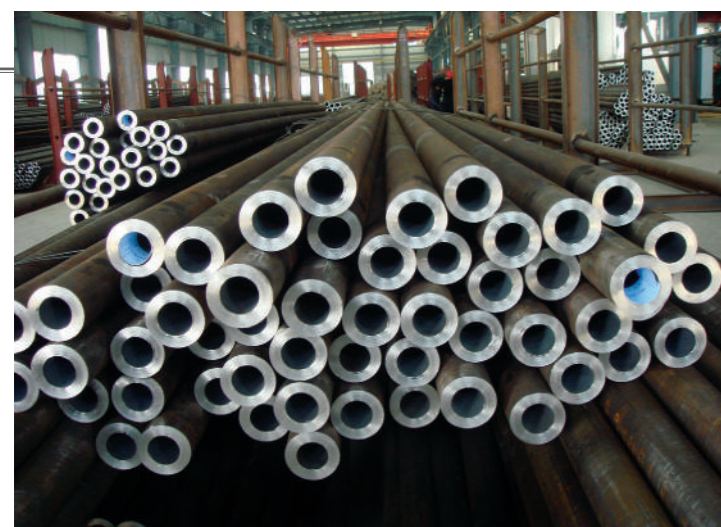


ASTM A179 Heat Exchanger and Condenser Tube

STANDARD	GRADE	Chemical Composition (%), ≤			Mechanical Properties		
		C	Mn	P, S	Tensile Strength, Mpa	Yield Strength, Mpa	Elongation %
ASTM A179	A179	0.06-0.18	0.27-0.63	≤0.035	≥325	≥180	≥35

ASTM A192 High Pressure Boiler Tube

STANDARD	GRADE	Chemical Composition (%), ≤				Mechanical Properties		
		C	Mn	Si	P, S	Tensile Strength, Mpa	Yield Strength, Mpa	Elongation %
ASTM A192	A192	0.06-0.18	0.27-0.63	≤0.25	≤0.035	≥325	≥180	≥35



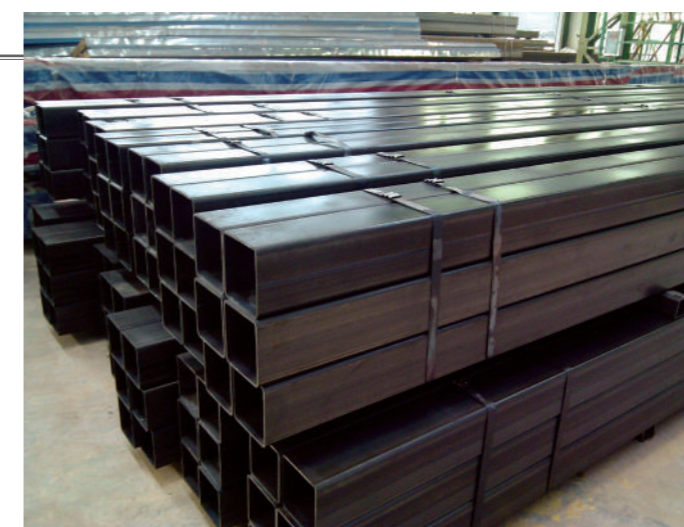
Heat Exchanger and Condenser Tubes



Seamless pipes - cutting

Steel Hollow Sections

STANDARD	GRADE	Chemical Composition (%), ≤							
		C	Mn	P	S	Cu	Ni	Mo	V
ASTM A500	A	0.26	-	0.035	0.045	-	-	-	-
	B	0.26	-	0.035	0.045	-	-	-	-
	C	0.23	1.35	0.035	0.045	-	-	-	-
MECHANICAL PROPERTIES		Tensile Strength, Mpa				Yield Strength, Mpa			
	A	≥310				≥269			
	B	≥400				≥317			
	C	≥427				≥345			



Steel Hollow Sections



Steel Hollow Sections



Welding Machine

Welded Steel Pipes

STANDARD	GRADE	Chemical Composition (%), ≤							
		C	Si	Mn	P	S	Cu	V	
ASTM A36	A36	0.25	0.40	-	0.04	0.05	-	-	
ASTM A572M	Gr. 50	0.23	0.40	1.35	0.04	0.05	≥0.20	-	
MECHANICAL PROPERTIES		Tensile Strength, Mpa				Yield Strength, Mpa			
	ASTM A283M	Gr. D	≥250				400-550		
	ASTM A572M	Gr. 50	≥345				≥450		

ASTM A213 Seamless Ferritic and Austenitic Alloy Steel Boiler, Super Heater and Heat Exchanger Tube

STANDARD	GRADE	Chemical Composition (%), ≤						Mechanical Properties	
		C	Mn	Si	Mo	Cr	P, S	Tensile Strength Mpa	Yield Strength Mpa
ASTM A213 / ASME 213	T11	0.05-0.15	0.30-0.60	0.05-1.0	1.00-1.50	0.50-1.00	≤0.025	≥415	≥205
	T12	0.05-0.15	0.30-0.60	≤0.50	0.44-0.65	0.80-1.25	≤0.025	≥415	≥220
	T22	0.05-0.15	0.30-0.60	≤0.50	0.87-1.13	1.90-2.60	≤0.025	≥415	≥205

We could also arrange the production according to other standard, such as A333, DIN 1629, DIN 2391, DIN 17175, EN10305, EN10216, etc.

Steel Grade	ISO	AISI	JIS	DIN	NF
Q235B	E235B	A36	SS400	S235JR	-
20#	-	1020	S20C	C22	-
45#	-	1045	S45C	C45	-
20Cr	20Cr4	5120	SCr22,SCr120	20Cr4	-
30Cr	34Cr4	5130	SCr2,SCr430	34Cr4	34Cr4
35Cr	34Cr4	5132	SCr3,SCr435	34Cr4	34Cr4
40Cr	37Cr4	5140	SCr4,SCr440	41Cr4	41Cr4
45Cr	41Cr4	5145	SCr5,SCr445	41Cr4	41Cr4
50Cr	-	5150	SCr445	-	-
20CrMo	18CrMo4	-	SCM22,SCM430	-	25CrMo4
30CrMo	25CrMo4	4130	SCM2,SCM430	25CrMo4	25CrMo4
30CrMoA	34CrMo4	4130	SCM430	34CrMo4	34CrMo4
35CrMo	34CrMo4	4137	SCM3,SCM435	34CrMo4	34CrMo4
42CrMo'	42CrMo4	4140	SCM440	42CrMo4	42CrMo4

SPECIFICATION (mm)	
Round Bar	9.5-240
Flat Bar	(6-8) X (75-150) (8-9) X (65-160)
	(10-20) X (60-210) (20-30) X (40-210)
	(30-40) X (35-210) (40-50) X (40-200)
	(50-60) X (50-180) (60-70) X (60-140)
	(70-100) X (70-120) (100-110) X (100-180)
Square Bar	30X30-110X110
Others	Customized according to the requirements.



Round Steel Bars

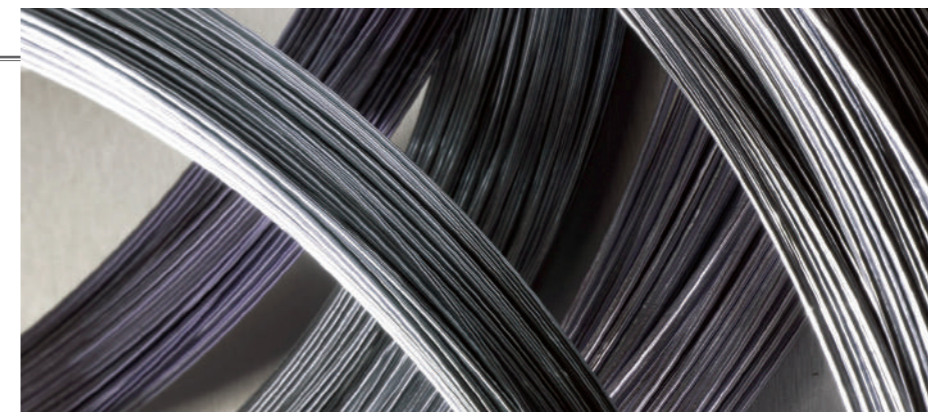


Flat Steel Bars



Square Steel Bars

GB	ASTM	JIS	DIN
#45	1045	S45C S48C	C45
#50	1050	S50C S53C	CK53
#55	1055	S55C	C55E
#60	1060	S58C	CK60
#70	1070	S70C	CK67
65Mn	1066	-	-
55Si2Mn	9255	-	55Si7
60Si2Mn	9260	SUP6	60Si7
60Si2MnA	9260	SUP6	60Si7
55CrMnA	5155	SUP9	55Cr3
60CrMnA	5160	SUP9A	
50CrVA	6150	SUP10A	51CrV4
60CrMnBA	51B60	SUS11	58CrMnB4



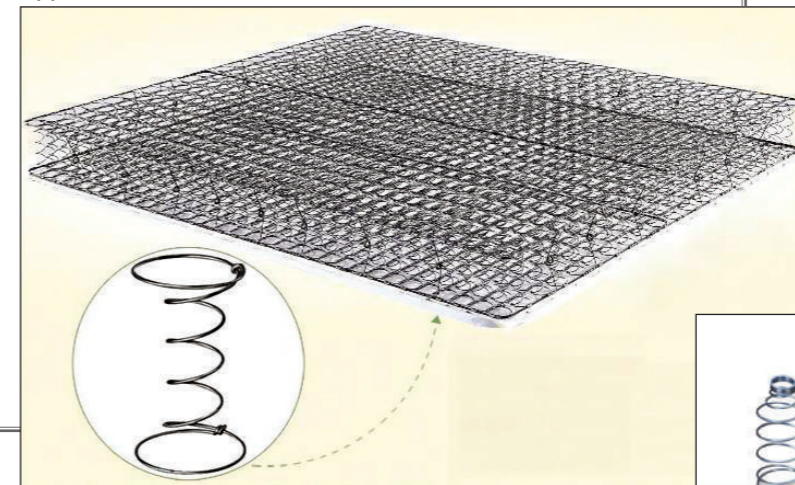
High Tensile Steel Wire

▷ Diameter: 0.1-13mm  
Tensile strength: 300-2500 Mpa



Steel Wire Rope

Application - Mattresses



Application - Springs



# STEEL SECTION and STEEL STRUCTURE

## SPECIFICATIONS

- Grade: Q235, Q345, etc.
- Surface treatment: galvanized or as required.
- Certificate: CCS, ABS, GL, LR, DNV, BV, RINA, NK and KR, etc.
- Standard: GB/T706-2006, JIS, EN, ASTM, etc.



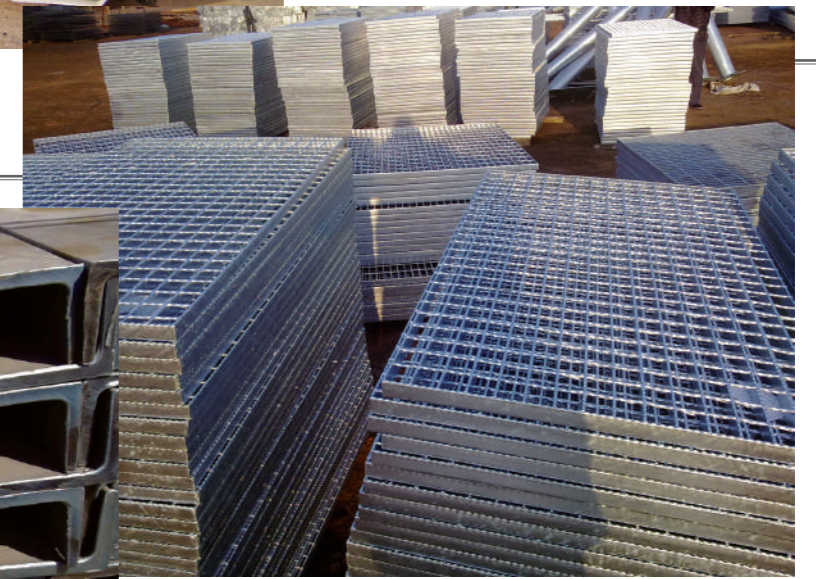
Steel Structure



Steel angle



Steel Sheet Piling



Steel Grating



H-BEAMS



Steel Channel