



JGT GROUP

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No.1 Shuangchen Road, Beichen District, Tianjin

Steel
Pipe

钢管



Steel Pipe

钢管



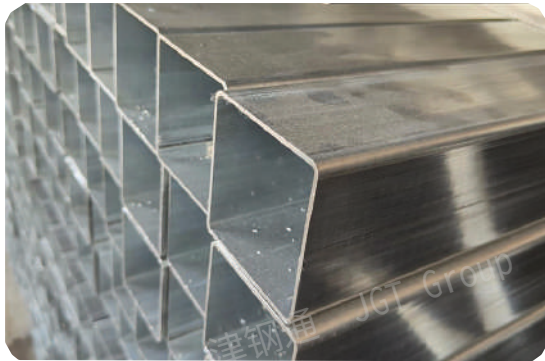
Seamless Steel Pipe



Welded Steel Pipe



Square and Rectangular Pipe



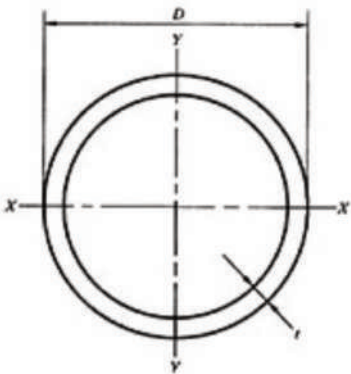
Galvanized Pipe

Classification Table of Carbon Steel Types

Category	% C	Key Characteristics	Common Grade Examples	Typical Applications
Low Carbon Steel	0.05% - 0.25%	- Low strength and hardness - Excellent ductility and toughness - Easy to form and weld	AISI 1018, AISI 1008, AISI 1020, ASTM A36	- Automotive body panels - Structural steel (I-beams, sheets) - Pipes, pipe materials - Wires, nails, rivets
Medium Carbon Steel	0.25% - 0.60%	- It has higher strength and hardness than low-carbon steel. - It maintains good toughness. - Its performance can be enhanced through heat treatment.	AISI 1040, AISI 1045, AISI 4140, ASTM A529	- Automotive components - Rails, train wheels - Machine parts, forging pieces - High-strength structural components
High Carbon Steel	0.60% - 1.00%	- Extremely high strength and hardness - Good wear resistance - Low ductility and toughness - Difficult to weld and cold process	AISI 1060, AISI 1075, AISI 1095, C60	- Spring - Cutting tools (drills, taps) - High-strength steel wire - Blades, axes
Ultra-High Carbon Steel	1.00% - 2.00%	- Extremely high hardness and wear resistance - Extremely brittle with poor toughness - Difficult to process.	AISI 1095 , CPM 10V	- Professional cutting tools - Pressing molds - Wear-resistant parts - Special blades



Seamless steel pipe



Core Specifications	
Outer Diameter (OD)	Hot rolling: 21.3mm (1/2") - 660mm (26") Cold drawing: 6mm - 200mm
Wall Thickness	SCH20, SCH40, SCH80, SCH160, STD, XS, XXS 2mm - 80mm
Length	6-12m/ (20ft, 40ft)

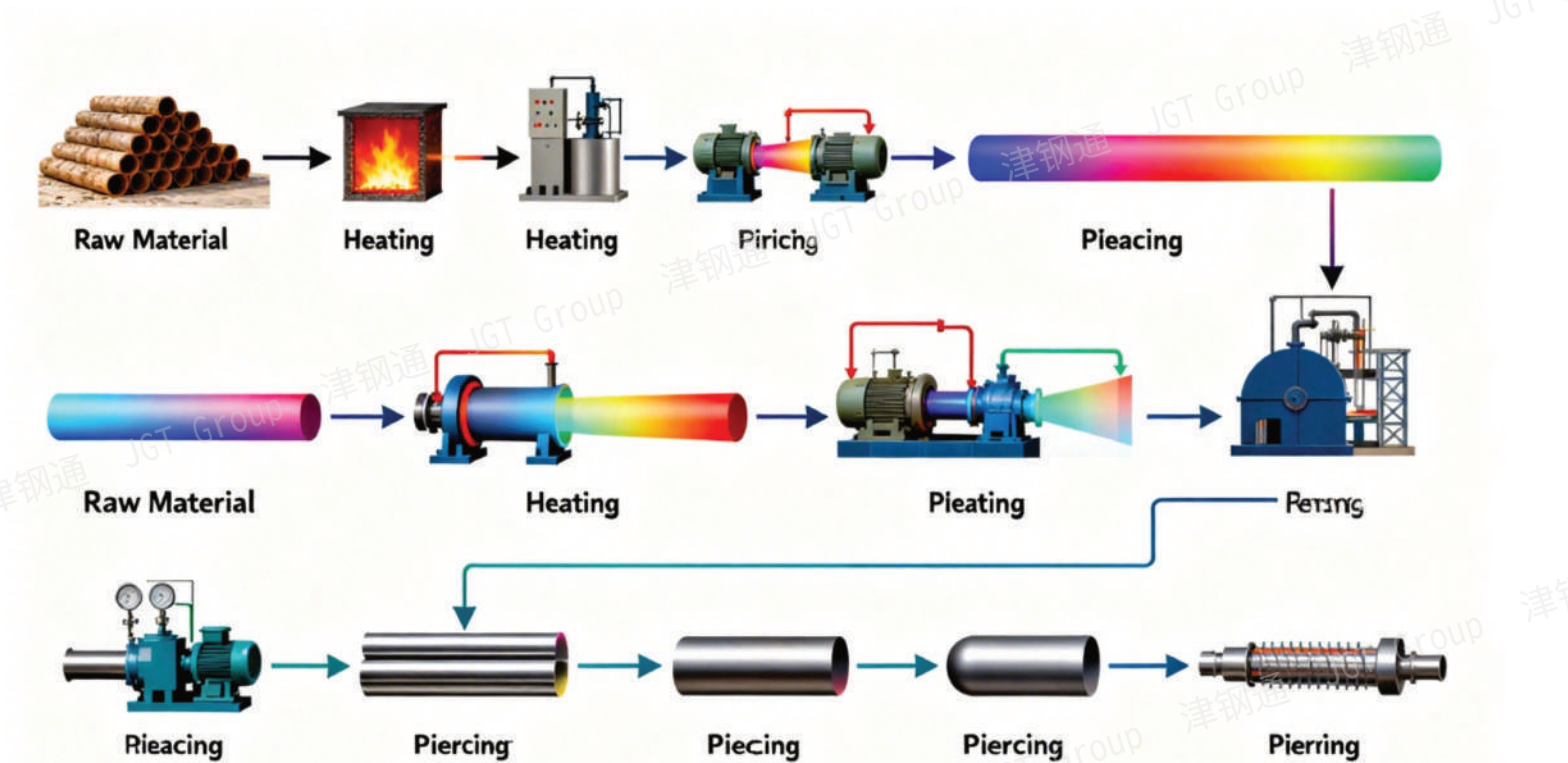


Cold draw

Hot Rolled

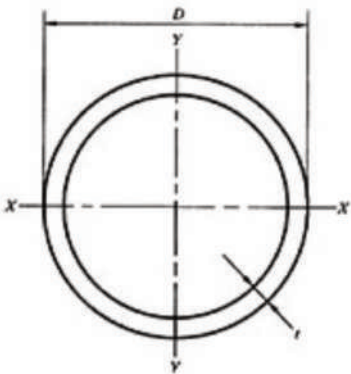
Honed

Material & Grade	
Process	Hot Rolled / Cold Drawn/Cold Rolled/Honed
Steel Grade	20#, 45#, Q235B ASTM A106 Gr.B, API 5L Gr.B, ST37, ST52, S355 42CrMo, 16Mn, ASTM A335 P11/P22/P91
Standard	GB/T 8163, GB/T 5310 ASTM A106, ASTM A53, API 5L EN 10210, EN 10216
Heat Treatment	Normalized / Annealed / Q&T
Surface	Black / Varnished/ Galvanized



Outside Diameter			Thickness					
			SCH10	SCH40	XS	SCH80	SCH160	XXS
DN15	1/2"	21.3mm	2.11mm	2.77mm	3.73mm	3.73mm	4.78mm	7.47mm
DN20	3/4"	26.7mm	2.11mm	2.87mm	3.91mm	3.91mm	5.56mm	7.82mm
DN25	1"	33.4mm	2.77mm	3.38mm	4.55mm	4.55mm	6.35mm	9.09mm
DN32	1-1/4"	42.2mm	2.77mm	3.56mm	4.85mm	4.85mm	6.35mm	9.7mm
DN40	1-1/2"	48.3mm	2.77mm	3.68mm	5.08mm	5.08mm	7.14mm	10.15mm
DN50	2"	60.3mm	2.77mm	3.91mm	5.54mm	5.54mm	8.74mm	11.07mm
DN65	2-1/2"	73mm 76mm	3.05mm	5.16mm	7.01mm	7.01mm	9.53mm	14.02mm
DN80	3"	88.9mm	3.05mm	5.49mm	7.62mm	7.62mm	11.13mm	15.25mm
DN90	3-1/2"	101.6mm	3.05mm	5.74mm	8.08mm	8.08mm		
DN100	4"	114.3mm	3.05mm	6.02mm	8.56mm	8.56mm	13.49mm	17.12mm
DN125	5"	141.3mm	3.4mm	6.55mm	9.53mm	9.53mm	15.88mm	19.05mm
DN150	6"	168.3mm 165mm	3.4mm	7.11mm	10.97mm	10.97mm	18.26mm	21.95mm
DN200	8"	219.1mm	3.76mm	8.18mm	12.7mm	12.7mm	23.01mm	22.23mm
DN250	10"	273.1mm	4.19mm	9.27mm	12.7mm	15.09mm	28.58mm	25.4mm

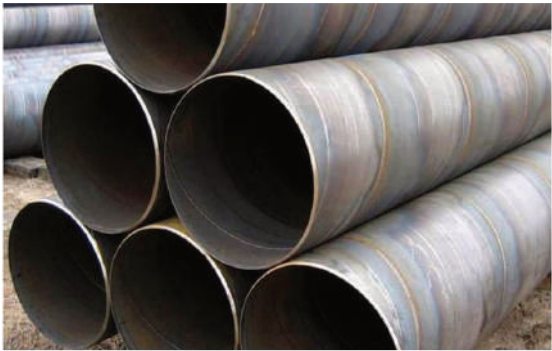
Welded steel pipe



Core Specifications	
Outer Diameter (OD)	Small: 21.3mm (1/2") - 114.3mm (4") Big:219mm (8") - 3500mm (138")
Wall Thickness	SCH20, SCH40, SCH80, STD, XS 1.0mm - 25.0mm
Length	6m, 12m (20ft, 40ft) 5.8m - 11.8m

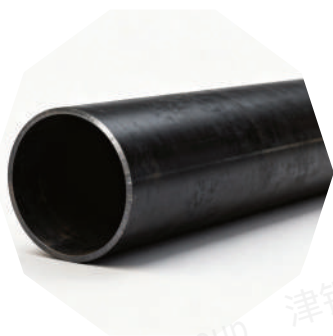


Straight seam steel pipe



Spiral welded pipe

Material & Grade	
Process	ERW (Electric Resistance Welding) SSAW(Spiral Submerged Arc Welded)
Standard	GB/T 3091, GB/T 9711, GB/T13793 ASTM A53, ASTM A500, ASTM A795, API 5L BS1387, BS1139 EN39, EN10219, EN10255, JIS G3444, etc.
Weld Seam Treatment	As Welded/ Inside & Outside Bead Removed
Surface Treatment	1. Black/Bare 2. Galvanized 3. Painted 4. Varnished



Black



Galvanized



Painted



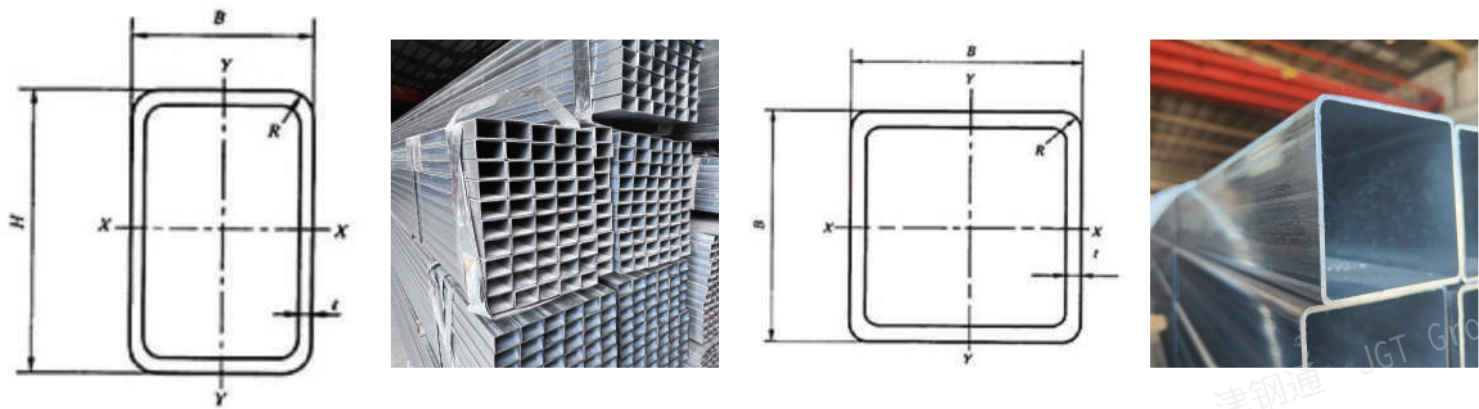
Varnished

According to different application environments, choose the appropriate steel grade.

ASTM	EN	JIS	GB
ASTM A36	S195	SS330	Q195
ASTM A283 GrC	S235JR	SS400	Q215
ASTM A283 GrD	S235JR	SS400	Q235
ASTM A572 Gr50	S355JR	SM490	Q345
ASTM A572 Gr60	S355J2	SM520	Q390
ASTM A572 Gr65	S420ML	SM570	Q420
ASTM A572 Gr70	S460ML	SM570	Q460
ASTM A513 Type5	C22	S20C	20#
ASTM A513 Type6	C45	S45C	45#



Square and Rectangular Pipe



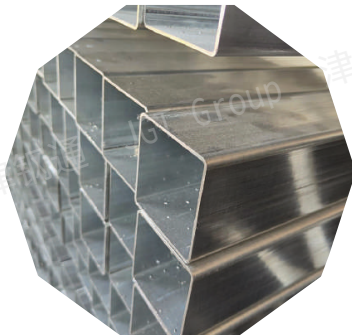
Rectangular

Square

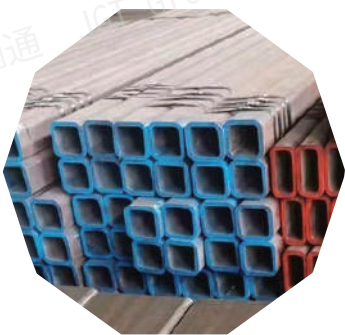
Material & Grade	
Base Pipe Type	Welded Steel Pipe , Seamless Steel Pipe
Common Materials	Q235, Q355, 20#, 304 Stainless, ASTM A500 Gr. B, S235JR
Key Standards	GB/T 6728, ASTM A500, EN 10219, JIS G 3466
Cross-Section Shape	Square, Rectangular
Surface Treatment	Black, Galvanized, Painted, Powder Coated



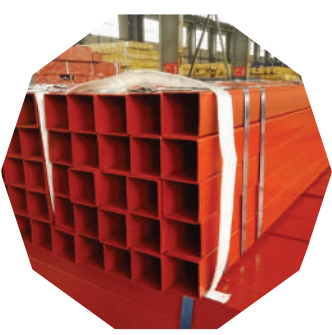
Black



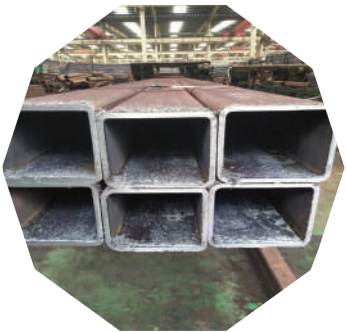
Galvanized



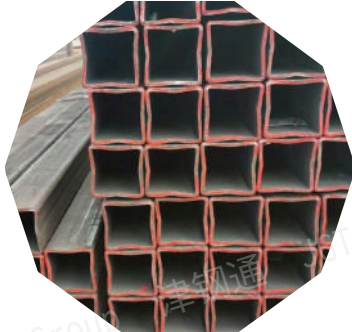
Painted



Powder Coated



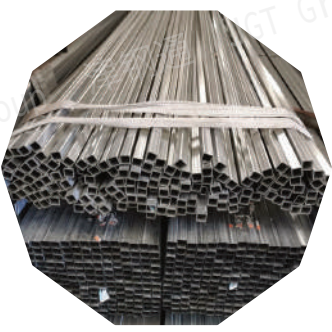
welded



seamless



Thick wall



Small diameter

According to different application environments, choose the appropriate steel grade.

Aspect	ASTM	EN	GB
Main Standards	ASTM A36,A53, A123,A153	EN 10240, EN 10305-4	GB/T 3091, GB/T13793
Grades	Grade A,Grade B	S235,S275,S355	Q195,Q215,Q235,Q345
Coating Thickness	Specified in ASTM A123	50-85 μ m (EN10240)	≥70 μ m (GB/T 3091)
Applications	Plumbing,structural	Water,gas,structural	Water,gas,structural

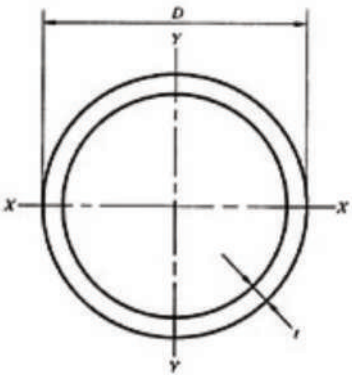
Square Pipe

ASTM	EN	JIS	GB
3/4" * 3/4"	20*20	20*20	20*20
1" * 1"	25*25	25*25	25*25
1-1/4" * 1-1/4"	30*30	30*30	30*30
1-1/2" * 1-1/2"	40*40	40*40	40*40
2" * 2"	50*50	50*50	50*50
2-1" 2 * 2-1" 2	60*60	60*60	60*60
3" * 3"	80*80	80*80	80*80
4" * 4"	100*100	100*100	100*100
5" * 5"	120*120	120*120	120*120
6" * 6"	150*150	150*150	150*150

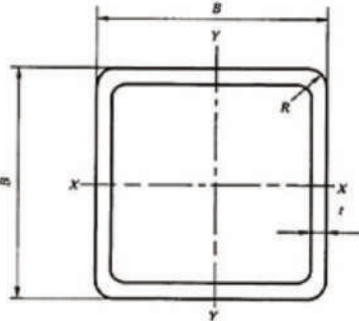
Rectangular Pipe

ASTM	EN	JIS	GB
3/4" * 1/2"	20*10	20*10	20*10
1-1/4" * 1/2"	30*15	30*15	30*15
1-1/2" * 3/4"	40*20	40*20	40*20
2" * 1"	50*25	50*25	50*25
2-1/2" * 1-1/4"	60*30	60*30	60*30
3" * 1-1/2"	80*40	80*40	80*40
4" * 2"	100*50	100*50	100*50
5" * 2-1/2"	120*60	120*60	120*60
6" * 3"	150*75	150*75	150*75
8" * 4"	200*100	200*100	200*100

Galvanized Pipe



round



square

Material & Grade	
Base Pipe Type	Welded Steel Pipe (Most Common), Seamless Steel Pipe
Galvanizing Process	Hot-Dip Galvanizing (HDG), Electro-Galvanizing (EG)



Uncoiling of steel coils



Steel strip welding



Cooling of welded pipes



Pickling for rust removal



Cut to the correct length



Steel pipe straightening



Galvanization



Final product inspection

According to different application environments, choose the appropriate steel grade.

Aspect	ASTM	EN	GB
Main Standards	ASTM A36,A53, A123,A153	EN 10240, EN 10305-4	GB/T 3091, GB/T 13793
Grades	Grade A,Grade B	S235,S275,S355	Q195,Q215,Q235,Q345
Coating Thickness	Specified in ASTM A123	50-85 μ m (EN10240)	$\geq 70 \mu$ m (GB/T 3091)
Applications	Plumbing,structural	Water,gas,structural	Water,gas,structural

Outside Diameter			Thickness					
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