



# YOUFA STEEL PIPE GROUP

TOP 500 ENTERPRISES OF CHINA INDUSTRY LEADING BRANDS

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TIANJIN YOUFA INTERNATIONAL TRADE CO., LTD



YOUFA STEEL PIPE GROUP

STOCK CODE: 601686

Listed enterprises on the main board of the Shanghai Stock Exchange

Youfa is the strongest welded steel pipe manufacturing group around China.



Brand "YOUFA" is the leading and outstanding brand in the industry.



Brand ZHENGJINYUAN is the growing champion in the industry.



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友发国贸员工合影及友发文化  
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## Profile of the Group

Tianjin Youfa Steel Pipe Group Co., Ltd. was established on July 1, 2000, and its headquarters is located in Tianjin Daquzhuang Town, the largest steel pipe production base in China. The company is a large scale steel pipe manufacturing enterprise integrating the production of various pipe products such as ERW steel pipe, spiral welded pipe, hot-dip galvanized steel pipe, plastic lining composite pipe, plastic coated steel pipe, square and rectangular steel pipe, hot-dip galvanized square and rectangular steel pipe, stainless Steel Pipe, pipe fitting and scaffolding, etc. Output is over 10 million tons every year.

In addition to its headquarters in Tianjin, the company currently has a number of subsidiaries in Tangshan, Handan, Shaanxi, Liyang and other cities, with more than 9000 employees, 293 production lines of steel pipe and scaffolding, 3 national accreditation laboratories and 2 Tianjin accreditation enterprise technology centers. In 2020, the annual sales of Youfa steel pipes will be nearly 12 million tons. By the end of 2017, the whole group had 88 utility model patents and 4 invention patents. There are 32 patents in the process of application and acceptance. Since 2010, Youfa's steel pipe production and sales have increased by more than one million tons annually for 11 consecutive years.

The "Youfa" was recognized as a well known trademark in China by the Trademark Office of the State Administration for Industry and Commerce in March 2008. Youfa Group products have been awarded the title of "Tianjin Famous-brand Products" by the Tianjin Municipal Government for many consecutive years. The steel pipes of "Youfa" brand and "Zhengjinyuan" brand won the Gold Cup Award, the highest award in China's metallurgical industry. Until 2021, Tianjin Youfa Steel Pipe Group has been among the top 500 Chinese enterprises, the top 500 Chinese manufacturing

enterprises and the top 500 Chinese private enterprises for 16 consecutive years, and has maintained its leading position in the industry in terms of national production and sales volume for 16 consecutive years.

"Youfa" brand steel pipes sell well all over the country and are widely used in key national projects such as Three Gorges Project, Capital International Airport, Shanghai Pudong International Airport, the 2008 Olympic Games venues, and 2010 Shanghai World Expo exhibition hall. They are exported to 100 countries and regions in European Union, North America, South America, Africa, South-east Asia, and the Middle East. They are recognized by the industry as the first brand in the industry, with a domestic comprehensive market share of more than 30%.



## Tianjin Youfa Steel Pipe Factory

Production Base	Factory Name	Products Name	Production Lines
Tianjin Production Base	Tianjin Youfa Steel Pipe Group Co., Ltd.-No.1 Branch Company;	Hot Dipped Galvanized Steel Pipe	16
		ERW Steel Pipe	9
	Tianjin Youfa Steel Pipe Group Co., Ltd.-No.2 Branch Company;	ERW Steel Pipe	7
		Square/Rectangular Steel Pipe	15
	Tianjin Youfa Dezhong Steel Pipe Co., Ltd.;	Galvanized Square/Rectangular steel Pipe	6
		SSAW Steel Pipe	5
	Tianjin Youfa Pipeline Technology Co., Ltd.;	Steel Pipe of Lining Plastic	10
		Plastic Coated Steel Pipe	3
	Tianjin Youfa Ruida Traffic Facilities Co., Ltd.	Highway Materials	9
		Stainless Steel Pipe	10
	Tianjin Youfa Stainless Steel Pipe Co., Ltd.;	Stainless Steel Pipe Fitting	5
		Tewoo & Youfa Industry Development Co., Ltd. Tianjin Youfa Steel Pipe Group Sales Co., Ltd. Tianjin Youfa International Trade Co., Ltd. Tianjin Youfa Hongtuo Steel Pipe Manufacture Co., Ltd. Tianjin Xindesheng Investment Co., Ltd. Tianjin Tuanbo Yifanfengshun Hotel Co., Ltd. Tianjin Youfa Advertising Co., Ltd. Tianjin Jinghai Daquzhuang Yaoshun Hospital	
Tangshan Production Base	Tangshan Zhengyuan Pipeline Industry Co., Ltd.;	Hot Dipped Galvanized Steel Pipe	12
		ERW Steel Pipe	17
		Steel Pipe of Lining Plastic	4
	Tangshan Youfa Steel Pipe Manufacture Co., Ltd.;	ERW Steel Pipe	11
		ERW Steel Pipe	11
		Galvanize	12
Tangshan Youfa New Building Equipment Co., Ltd.	Ringlock Scaffolding System	9	
Handan Production Base	Handan Youfa Steel Pipe Co., Ltd.;	Hot Dipped Galvanized Steel Pipe	8
		ERW Steel Pipe	12
		Square/Rectangular Steel Pipe	13
		Galvanized Square/Rectangular Steel Pipe	4
		SSAW Steel Pipe	4
		Steel Pipe of Lining Plastic	4
Shaanxi Production Base	Shaanxi Youfa Steel Pipe Co., Ltd.;	Hot Dipped Galvanized Steel Pipe	6
		ERW Steel Pipe	12
		Square/Rectangular Steel Pipe	6
		Galvanized Square/Rectangular Steel Pipe	3
		Steel Pipe of Lining Plastic	3
		Plastic Coated Steel Pipe	3
Liyang Production Base	Jiangsu Youfa Steel Pipe Co., Ltd.;	Hot Dipped Galvanized Steel Pipe	6
		ERW Steel Pipe	10
		Square/Rectangular Steel Pipe	9
		Galvanized Square/Rectangular Steel Pipe	4
Huludao City Steel Pipe Industrial Co., Ltd.;	Chengdu Yunganglian Logistics Co., Ltd.;	Welded Steel Oil Pipe	15
		Logistics Centre	
Total			293



TIANJIN YOUFA PRODUCTION BASE



TANGSHAN YOUFA PRODUCTION BASE



HANDAN YOUFA PRODUCTION BASE



SHAANXI YOUFA PRODUCTION BASE



LIYANG YOUFA PRODUCTION BASE



HULUDAO YOUFA PRODUCTION BASE

## Tianjin Youfa Steel Pipe Project

Year	Country	Project	Usage
2014-2015	-	Chevron Corporation Oil Platform	Scaffolding steel pipe
2015	Ethiopia	Adama Industrial Parks	Construction steel pipe
2017	Jordan	Mafrac	Solar mounting systems steel pipe
2017	Mexico	Kaixo	Solar mounting systems steel pipe
2018	Viet Nam	Cong ty TNHH Gain Lucky Textile Factory	Solar mounting systems steel pipe
2019	Kuwait	Kuwait International Airport	Construction steel pipe
2019	Ethiopia	Polaroid Airport	Conduit steel pipe
2019	Egypt	New Cairo Business Center	Fire sprinkler and water delivery steel pipe



Galvanized Steel Pipe used in ADAMA INDUSTRIAL PARK PROJECT in ETHIOPIA



Scaffolding Steel Pipes used in Chevron Corporation Oil Platform

### Core member of national important industry association

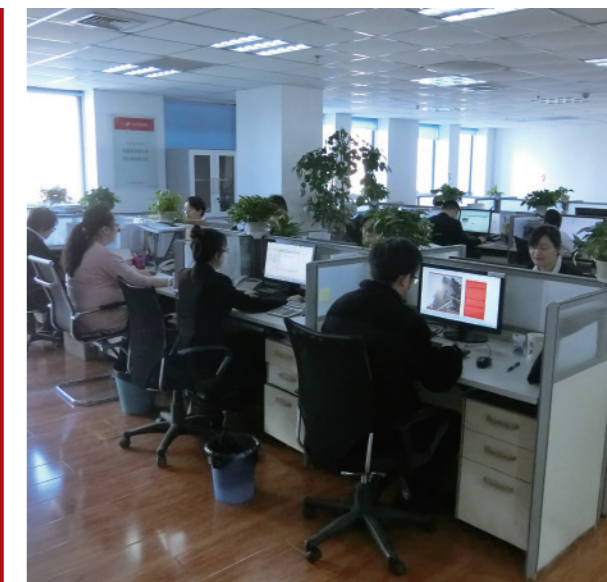


## Tianjin Youfa International Trade Co., Ltd

Tianjin Youfa International Trade Co., Ltd, was founded in March, 2010, as the foreign trade window of Youfa Steel Pipe Group. The company is located in 7-8th Floor, Guotou Building, Dafeng Road, Hongqiao District, Tianjin City. The office covers an area of 1000 m<sup>2</sup>. There are about 80 staffs; among them more than 50 have CET-6 certificates and some even better. Our annual sales of steel products are nearly 280,000.00 tons.

Through several years of hard work, we have established export business relationship with many big Transnational Enterprises. Based on the high quality and the considerate service, our products have set up a prominent brand image at home and abroad. Our sales markets mainly are: Middle & South America, the Southeast Asia, Middle East and Africa and so on, nearly covering 125 countries and regions, obtaining a well-deserved reputation. We have built a long-term cooperation with many clients, and have received word of praise from customers all over the world.

Carbon steel pipes meet the following standards: API 5L, ASTM A53/A500, ASTM A795, EN10219/10255, BS1387, BS1139, EN39, ISO65, DIN2440, JIS G3444/3466, etc. and are approved by the Third Party. They are widely used in oil and natural gas, low pressure liquid and mineral powder delivery, and for industrial and civil construction fields and for piles field. Paying attention to the quality of products and services,



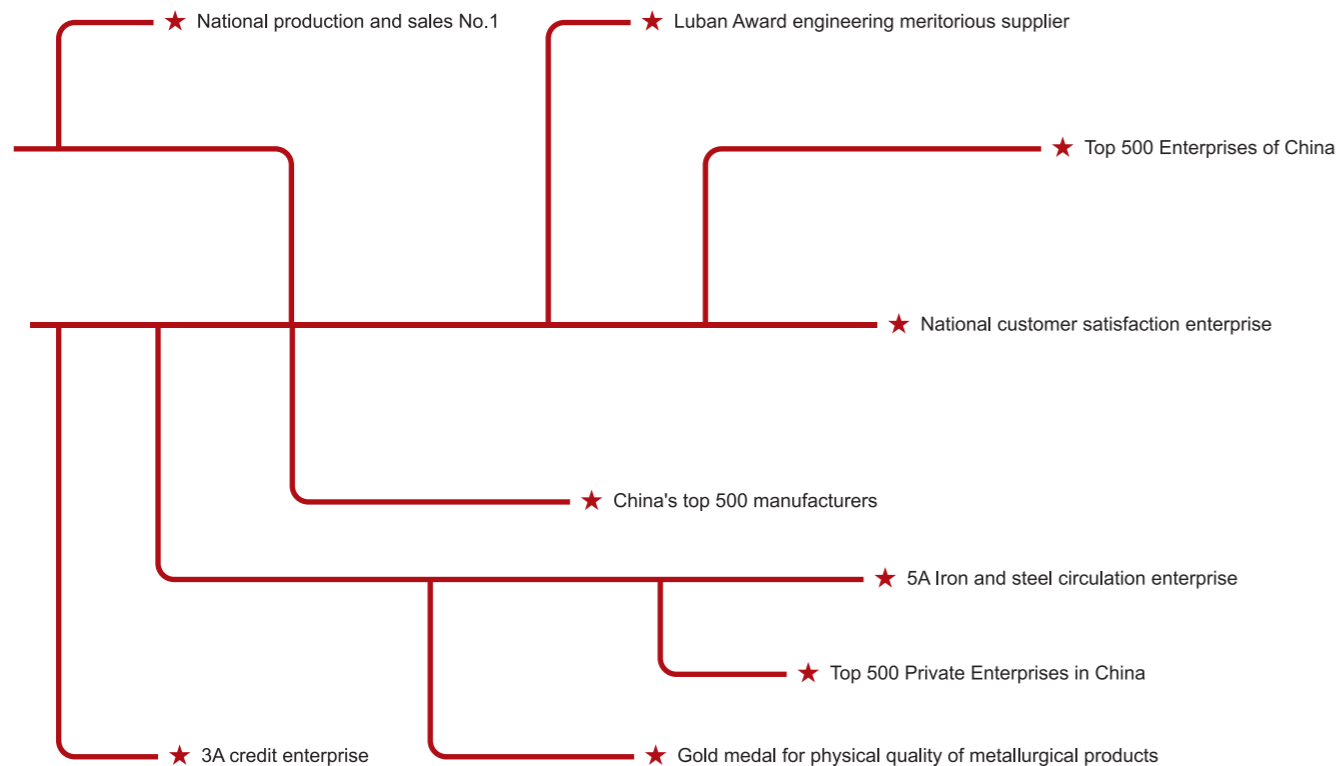
possessing normative QAS, we have acquired certificates of API5L, ISO9001, ISO14000, ISO18000, FPC, BSI and UL/FM quality system.

In order to provide customers a more personalized service, we founded Tianjin Youfa Hongtuo Steel Pipe Manufacture Co., Ltd as processing factory, specially designed for foreign trade service. It covers an area of 20000 square meters. There are about 200 employees, 10 lathes, 7 cutting machines, 2 sets of grooving machine, 2 sets of automatic paint or oil production line. We are committed to meet customer's various after-processing requirements.

Pursuing the "Customer first, Integrity first" principle, we are sincerely expecting to cooperate with you!



## GROUP HONOR















## Seamless Steel Pipe

STANDARD: API 5L API 5CT, ASTM A106, ISO3183, GB/T 9711  
 GRADE:GR.B,X42~X70 PSL1 PSL2  
 APPLICATION:  
 It is used for conveying gas, water, and petroleum for oil and natural gas industries.



Outside Diameter		Wall Thickness(mm)					
INCH	MM	SCH20	SCH40	STD	XS	SCH80	SCH160
1/4			2.24	2.24	3.02	3.02	
3/8			2.31	2.31	3.2	3.2	
1/2	21.3		2.77	2.77	3.73	3.73	4.78
3/4	26.7		2.87	2.87	3.91	3.91	5.56
1	33.4		3.38	3.38	4.55	4.55	6.35
1 1/4	42.2		3.56	3.56	4.85	4.85	6.35
1 1/2	48.3		3.68	3.68	5.08	5.08	7.14
2	60.3		3.91	3.91	5.54	5.54	8.74
2 1/2	73.0		5.16	5.16	7.01	7.01	9.53
3	88.9		5.49	5.49	7.62	7.62	11.13
3 1/2	101.6		5.74	5.74	8.08	8.08	
4	114.3		6.02	6.02	8.56	8.56	13.49
5	141.3		6.55	6.55	9.53	9.53	15.88
6	168.3		7.11	7.11	10.97	10.97	18.26
8	219.1	6.35	8.18	8.18	12.7	12.7	23.01
10	273.1	6.35	9.27	9.27	12.7	15.09	28.38
12	323.9	6.35	9.53	10.31	12.7	17.48	33.32
14	355.6	7.92	9.53	11.13	12.7	19.05	35.71
16	406.4	7.92	9.53	12.7	12.7	21.44	40.49
18	457.2	7.92	9.53	14.27	12.7	23.88	45.24
20	508	9.53	9.53	15.09	12.7	26.19	50.01
22	558.8	9.53	9.53		12.7	28.58	53.98
24	609.6	9.53	9.53	17.48	12.7	30.96	59.54
26	660.4	12.7	9.53		12.7		

## Carbon Steel Fitting

 Reducing Tee	 Straight Tee	 Ecc Reducer	 Con Reducer
 L/R 180° Elbow	 S/R 180° Elbow	 L/R 90° Elbow	 S/R 90° Elbow
 L/R 45° Elbow	 S/R 45° Elbow	 Bend pipe	 Cap

45°, 90° AND 180° CARBON STEEL ELBOW  
STANDARD: ASME/ANSI B16.9  
GRADE: WPB

Outside Diameter		Wall THICKNESS(mm) SCH40	Outside Diameter		
INCH	MM		45° KG	90° KG	180° KG
1/2	21.3	2.77	0.04	0.08	0.16
3/4	26.7	2.87	0.05	0.1	0.21
1	33.4	3.38	0.08	0.16	0.3
1 1/4	42.2	3.56	0.13	0.25	0.5
1 1/2	48.3	3.68	0.18	0.38	0.72
2	60.3	3.91	0.38	0.65	1.3
2 1/2	73.0	5.16	0.65	1.29	2.58
3	88.9	5.49	1.02	2.03	4.06
3 1/2	101.6	5.74	1.22	2.45	4.87
4	114.3	6.02	1.93	3.85	7.1
5	141.3	6.55	3.26	6.51	13.6
6	168.3	7.11	6.06	10.1	20.2
8	219.1	8.18	7.96	18.9	21.8
10	273.1	9.27	12.5	25	50
12	323.9	9.53	38.6	66.1	108
14	355.6	9.53	34.1	68.1	136
16	406.4	9.53	44.7	39.3	179
18	457.2	9.53	56.5	113	226
20	508	9.53	70	140	230
22	558.8	9.53	77	170	340
24	609.6	9.53	101	202	404
26	660.4	9.53	119	238	476



45° Elbow



90° Elbow



180° Elbow

**STRAIGHT AND REDUCER TEE**

STANDARD: ASME/ANSI B16.9  
GRADE:WPB



Straight Tee



Reducer Tee

Outside Diameter		Outside Diameter	
INCH	MM	INCH	INCH
3/4x3/4	26.7x26.7	6x6	168.3x168.3
3/4x1/2	26.7x21.3	6x5	168.3x141.3
1x1	33.4x33.4	8x8	219.1x219.1
1x3/4	33.4x26.7	8x6	219.1x168.3
1 1/4x1 1/4	42.2x42.2	10x8	273x219.1
1 1/4x1	42.2x33.4	10x10	273.1x273.1
1 1/2x1 1/2	48.3x48.3	12x12	323.8x323.8
1 1/2x1 1/4	48.3x42.2	12x10	323.8x273.1
2x2	60.3x60.3	14x14	355.6x355.6
2x1 1/2	60.3x48.3	14x12	355.6x323.8
3x3	88.9x88.9	18x18	457x457
3x2 1/2	88.9x73	18x16	457x406.4
4x4	114.3x114.3	20x20	508x508
4x3	114.3x88.9	24x18	508x457
5x5	141.3x141.3	24x24	610x610
5x4	141.3x114.3	24x20	610x508

**CONCENTRIC AND ECCENTRIC REDUCER**

STANDARD ASME/ANSI B16.9  
GRADE:WPB



CON Reducer



EOC Reducer

Outside Diameter		Outside Diameter	
INCH	MM	INCH	INCH
3/4x1/2	26.7x21.3	5x3	141.3x88.9
1x3/4	33.4x26.7	6x5	168.3x141.3
1x1/2	33.4x21.3	6x4	168.3x114.3
1 1/4x1	42.2x33.4	8x6	219.1x168.3
1 1/4x3/4	42.2x26.7	8x4	219.1x114.3
1 1/2x1 1/4	48.3x42.2	10x8	273.1x219.1
1 1/2x1	48.3x33.4	10x6	273.1x168.3
2x1 1/2	60.3x48.3	12x10	323.9x273.1
2x1	60.3x33.4	12x8	323.9x219.1
2 1/2x2	73x60.3	14x12	355.6x323.8
2 1/2x1 1/2	73x48.3	14x10	355.6x273.1
3x2 1/2	88.9x73	18x16	457x406.4
3x2	88.9x60.3	18x14	457x355.6
4x3	114.3x88.9	20x18	508x457
4x2 1/2	114.3x73	24x20	610x508
5x4	141.3x114.3	24x18	610x457

**FLANGES**

**WELDING NECK FLANGES**

STANDARD ASME/ANSI B16.9  
GRADE:WPB

NPS	OD	ID	Thickness	Unit Weight	NPS	OD	ID	Thickness	Unit Weight
INCH	MM	MM	MM	KGS	INCH	MM	MM	MM	KGS
1/2	89	21.3	11.5	0.5	5	254	141.3	24	9.2
3/4	99	26.9	13	0.7	6	279	168.3	25.5	11
1	108	33.7	14.5	1.1	8	343	219.1	29	18.3
1 1/4	117	42.4	16	1.5	10	406	273	30.5	25
1 1/2	127	48.3	17.5	1.8	12	483	323.9	32	39
2	152	60.3	19.5	2.7	14	533	355.6	35	51
2 1/2	178	73	22.5	4.4	16	597	406.4	37	60
3	190	88.9	24	5.2	18	635	457	40	71
3 1/2	216	101.6	24	6.4	20	698	508	43	88
4	229	114.3	24	7.5	24	813	610	48	119

**BLIND FLANGES**

STANDARD ASME/ANSI B16.9  
GRADE:WPB

NPS	OD	ID	Thickness	Unit Weight	NPS	OD	ID	Thickness	Unit Weight
INCH	MM	MM	MM	KGS	INCH	MM	MM	MM	KGS
1/2	89	21.3	11.5	0.4	5	254	141.3	24	9
3/4	99	26.9	13	0.7	6	279	168.3	25.5	12
1	108	33.7	16	0.9	8	343	219.1	29	21
1 1/4	117	42.4	16	1.3	10	406	273	30.5	30
1 1/2	127	48.3	17.5	1.6	12	483	323.9	32	45
2	152	60.3	19.5	2.6	14	533	355.6	35	59
2 1/2	178	73	22.5	4.1	16	597	406.4	37	79
3	190	88.9	24	5	18	635	457	40	97
3 1/2	216	101.6	24	6.4	20	698	508	43	124
4	229	114.3	24	7.1	24	813	610	48	188

**SLIP ON FLANGES**

STANDARD ASME/ANSI B16.9  
GRADE:WPB

NPS	OD	ID	Thickness	Unit Weight	NPS	OD	ID	Thickness	Unit Weight
INCH	MM	MM	MM	KGS	INCH	MM	MM	MM	KGS
1/2	89	22.5	11.5	0.4	5	254	144	24	6.3
3/4	99	28	13	0.7	6	279	170.5	25.5	7.5
1	108	34.5	14	0.8	8	343	221.5	29	12.6
1 1/4	117	43.5	16	1.1	10	406	276.5	30.5	18.5
1 1/2	127	49.5	17.5	1.4	12	483	327	32	28
2	152	65	19.5	2.2	14	533	359	35	36
2 1/2	178	73	22.5	3.6	16	597	410.5	37	46
3	190	90.5	24	4.1	18	635	462	40	50
3 1/2	216	106.5	24	5.2	20	698	513	43	64
4	229	116	24	5.6	24	813	616	48	89

**THREADED FLANGE**

STANDARD ASME/ANSI B16.9  
GRADE:WPB

NPS	OD	ID	Thickness	Unit Weight	NPS	OD	ID	Thickness	Unit Weight
INCH	MM	MM	MM	KGS	INCH	MM	MM	MM	KGS
1/2	89	21.3	11.5	0.4	5	254	141.3	24	7
3/4	99	26.9	13	0.7	6	279	168.3	25.5	8.4
1	108	33.7	14.5	0.9	8	343	219.1	29	13
1 1/4	117	42.4	16	1.2	10	406	273	30.5	17.8
1 1/2	127	48.3	17.5	1.5	12	483	323.9	32	29.5
2	152	60.3	19.5	2.3	14	533	355.6	35	39
2 1/2	178	76.1	22.5	3.7	16	597	406.4	37	47
3	190	88.9	24	4.2	18	635	457	40	50
3 1/2	216	101.6	24	5.3	20	698	508	43	68
4	229	114.3	24	5.9	24	813	610	48	93



Welding Neck Flange



Blind Flange



Slip on Flange



Threaded Flange

**Malleable Iron Fitting**

			
90° Elbow	Straight Tee	Coupling	Reducing Tee
			
Union	Reducer	Bushing	Nipple
			
Reducing Tee	Cap	Plug	45° Elbow



STANDARD: ENGB/T-3287 ;BS EN-10242;KHT300-6 etc.  
GRADE:Malleable Iron

**Bushing**

SIZE	IN	3/8*1/4	1/2*1/4	1/2*3/8	3/4*3/8	3/4*1/2	1*1/2
	MM	10×8	18×8	15×10	20×10	20×15	
L		18.5	22.5	22.5	24.5	24.5	28
H		6	6	6	6	6	6
S		18.4	22	22	29.6	29.6	37.4



**Union**

SIZE	IN	1/2	3/4	1	1 1/4	1 1/2	2
	MM	15	20	25	32	40	50
L		46	50	56	63	68	76
SIZE	IN	2 1/2	3	4			
	MM	65	80	100			
L		83	93	113.5			



**Straight Tee**

SIZE	IN	1/4	3/8	1/2	3/4	1	1 1/4
	MM	8	10	15	20	25	32
A		20	24	27	32	37	44.5
SIZE	IN	1 1/2	2	2 1/2	3	4	6
	MM	40	50	65	80	100	150
A		48.5	57	68.5	77.5	96.5	129



**Coupling**

SIZE	IN	1/4	3/8	1/2	3/4	1	1 1/4
	MM	8	10	15	20	25	32
L		26	29	35	38	44	49
SIZE	IN	1 1/2	2	2 1/2	3	4	6
	MM	40	50	65	80	100	150
L		53	63	72	77	91	118



**Octagonal Cap**

SIZE	IN	3/8	1/2	3/4	1	1 1/4	1 1/2
	MM	10	15	20	25	32	40
A		17	19	22	24	27	28
S		20.6	24.6	30.4	37.2	47	53
SIZE	IN	2					
	MM	50					
A		32					
S		65					



**Reducing Socket**

SIZE	MM	10×8	15×8	15×10	20×15	25×10	25×15
	IN	3/8×1/4	1/2×1/4	1/2×3/8	3/4×1/2	1×3/8	1×1/2
A		29	35	36	38	44	44
SIZE	MM	32×15	32×20	32×25	40×15	40×20	40×25
	IN	1 1/4×1/2	1 1/4×3/4	1 1/4×1	1 1/2×1/2	1 1/2×3/4	1 1/2×1
A		49	49	49	53	53	53
SIZE	MM	40×32	50×15	50×20	50×25	50×32	50×40
	IN	1 1/2×1 1/4	2×1/2	2×3/4	2×1	2×1 1/4	2×1 1/2
A		53	63	63	63	63	63
SIZE	MM	65×15	65×20	65×25	65×32	65×40	65×50
	IN	2 1/2×1/2	2 1/2×3/4	2 1/2×2	2 1/2×1 1/4	2 1/2×1 1/2	2 1/2×2
A		72	72	72	72	72	72
SIZE	MM	80×15	80×20	80×25	80×32	80×40	80×50
	IN	3×1/2	3×3/4	3×1	3×1 1/4	3×1 1/2	3×2
A		71	71	71	71	71	71
SIZE	MM	80×65	100×15	100×20	100×25	100×32	100×40
	IN	3×2 1/2	4×1/2	4×3/4	4×1	4×1 1/4	4×1 1/2
A		71	84	84	84	84	84
SIZE	MM	100×50	100×65	100×80	25×20		
	IN	4×2	4×2 1/2	4×3	1×3/4		
A		84	84	84	44		



**Plain Plug**

SIZE	IN	1/4	3/8	1/2	3/4	1	1 1/4
	MM	8	10	15	20	25	32
L		15.5	17	22.5	24	27	30
B		10	10	13	14	16.5	20
S		6	7	10	12	15	18
SIZE	IN	1 1/2	2	2 1/2	3	4	
	MM	40	50	65	80	100	
L		31	36	40.5	45.5	51	
B		21	25	26.5	29.5		
S		22	26	30	34	44	



Nipple

SIZE	IN	1/4	3/8	1/2	3/4	1	1 1/4
	MM	8	10	15	20	25	32
L		36	36	44	47	53	56
	S	16.7	19.2	23.6	29.2	36	45
SIZE	IN	1 1/2	2	2 1/2	3	4	
	MM	40	50	65	80	100	
L		58	68	73	81	95	
	S	63	63	79.4	91.6	117	



90 Elbow

SIZE	IN	1/4	3/8	1/2	3/4	1	1 1/4
	MM	8	10	15	20	25	32
A		20	24	27	32	37	44.5
	S						
SIZE	IN	1 1/2	2	2 1/2	3	4	6
	MM	40	50	65	80	100	150
A		48.5	57	68.5	77.5	96.5	129



45 Elbow

SIZE	IN	1/2	3/4	1	1 1/4	1 1/2	2
	MM	15	20	25	32	40	50
A		22	25	28	33	36	43
	S						
SIZE	IN	2 1/2	3	4	6		
	MM	65	80	100	150		
A		48.5	53.5	64.5	129		



Reducing Elbow

SIZE	IN	1/4	3/8	1/2	3/4	1	1 1/4
	MM	8	10	15	20	25	32
A		20	25	28	33	38	45
	B	28	33	38	44	52	60
SIZE	IN	1 1/2	2	2 1/2	3	4	
	MM	40	50	65	80	100	
A		50	58	69	77.5	96.5	
	B	65	74	90	100	120	
























Reducing Tee

SIZE	IN	1 1/4x1/2x1	1 1/4x3/4x1	1 1/4x1x1	1 1/2x1/2x1 1/4	1 1/2x3/4x1 1/4	1 1/2x1x1
	MM	32x15x25	32x20x25	32x25x25	40x15x32	40x20x32	40x25x25
A		34	36	39	35	37	40
	B	37	40	40	41	43	44
	C	31	34	36	34	36	36
SIZE	IN	1 1/2x1x1 1/4	1 1/2x1 1/4x1	1 1/2x1 1/4x1 1/4	2x1/2x1 1/2	2x3/4x1 1/2	2x1x1 1/4
	MM	40x25x32	4x32x25	40x32x32	50x15x40	50x20x40	50x25x32
A		41	45	45	37	40	43
	B	45	47	47	47	49	51
	C	40	41	44.5	35	37	40
SIZE	IN	2x1x1 1/2	2x1 1/4x1 1/4	2x1 1/4x1 1/2	2x1/2x1	2x1 1/2x1 1/2	2 1/2x3/4x2
	MM	50x25x40	50x32x32	50x32x40	50x40x25	5x40/40	65x20/50
A		42	47	47	51	51	43.5
	B	49	53	53	54	54	57
	C	40	44.5	45	45	48.5	40
SIZE	IN	2 1/2x1x2	2 1/2x1 1/4x1 1/2	2 1/2x1 1/4x2	2 1/2x1 1/2x2	2 1/2x2x2	3x1x2 1/2
	MM	65x25x50	65x32x40	65x32x50	65x40x50	65x50x50	80x25x65
A		45	51.5	51.5	54.5	59.5	49.5
	B	58	61	61	61	64	67
	C	42	45	47	51	57	47.5
SIZE	IN	3x1 1/4x3 1/2	3x1 1/2x2 1/2	3x2x2 1/2	3x2 1/2x2 1/2		
	MM	80x32x65	80x40x65	80x50/65	80x40x65		
A		54.5	57.5	61.5	61.5		
	B	69	71	71	71		
	C	51.5	54.5	59.5	59.5		



## Grooved Fitting

Standard: ANSI B36.10, JIS B2302, ASME/ANSI/BS1560/-DIN2616 etc.  
Steel grade: GR.A GR.B

 11.25° Elbow (grooved)	 22.5° Elbow (grooved)	 45° Elbow	 90° Elbow	 Flange Adapter (grooved)	 Reducer (grooved)
 Mechanical Tee (grooved)	 Mechanical Cross (grooved)	 Reducing Tee (grooved)	 Reducing Cross (grooved)	 Blind Flange	 Flexible Coupling
 Reducer (threaded)	 Treaded Flange	 Mechanical Tee (threaded)	 Mechanical Cross (threaded)	 Reducing Tee (threaded)	 Tee (grooved)
 Cross (grooved)	 Heavy Duty Flange (grooved)	 Heavy Duty Coupling			

## FLEXIBLE COUPLING

挠卡

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)
50(2)	60.3
65(2-1/2×1)	76.1
80(3)	88.9
100(4)	108
100(4)	114.3
125(5)	133
125(5)	139.7
150(6)	159
150(6)	165.1
150(6)	168.3
200(8)	216.3
200(8)	219.1
250A(10)	267.4
250(10)	273
300A(12)	318.5

## HEAVY DUTY COUPLING

重卡

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)
65(2-1/2×1)	76.1
80(3)	88.9
100(4)	114.3
150(6)	165.1

## RIGID COUPLING

刚卡 (A)

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)
50(2)	60.3
65(2-1/2×1)	76.1
80(3)	88.9
100(4)	108
100(4)	114.3
125(5)	133
125(5)	139.7
150(6)	159
150(6)	165.1
200(8)	219.1
250(10)	273
300(12)	323.9

## RIGID COUPLING

刚卡 (B)

NORMAL SIZE (in)	OUTSIDE DIAMETER (mm)
1"	33.7
1-1/4"	42.4
1-1/2"	48.3
2-1/2"	73
3"	88.9
4"	114.3
6"	168.3
8"	216.3
8"	219.1
10"	267.4
12"	318.5



FLEXIBLE COUPLING  
挠卡



HEAVY DUTY COUPLING  
重卡



RIGID COUPLING  
刚卡

90° Elbow  
90度弯头 (A)

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)
50(2)	60.3
65(2-1/2x1)	76.1
65(3)	88.9
100(4)	108
100(4)	114.3
125(5)	133
125(5)	139.7
150(6)	165.1
200(8)	219.1
250(10)	273
300(12)	323.9

90° Elbow  
90度弯头 (B)

NORMAL SIZE (in)	OUTSIDE DIAMETER (mm)
2-1/2"	73
3"	88.9
4"	114.3
5"	141.3
6"	168.3
8"	219.1

90° Elbow  
90度弯头 (C)

NORMAL SIZE (in)	OUTSIDE DIAMETER (mm)
2"	60.3
30"	76.1
3"	88.9
4"	114.3
5-1/2"	139.7
6-1/2"	165.1
216	216.3
267	267.4
318	318



90° Elbow  
90度弯头

MECHANICAL CROSS (GROOVED)  
沟槽机械四通 (A)

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)
100x50(4x2)	114.3x60.3
100x65(4x2-1/2)	114.3x73
100x65(4x2-1/2)	114.3x76.1
100x80(4x3)	114.3x88.9
125x65(5x2-1/2)	139.7x76.1
125x80(5x3)	139.7x88.9
150x65(6x2-1/2)	165.1x76.1
150x80(6x3)	165.1x88.9
150x100(6x4)	165.1x114.3
200x65(8x2-1/2)	219.1x76.1
200x80(8x3)	219.1x88.9
200x100(8x4)	219.1x114.3
250x65(10x2-1/2)	273x76.1
250x80(10x3)	273x88.9
250x100(10x4)	273x114.3

MECHANICAL CROSS (GROOVED)  
沟槽机械四通 (B)

NORMAL SIZE (in)	OUTSIDE DIAMETER (mm)
2-1/2"x1"	73x33
2-1/2"x21-1/4"	73x42
2-1/2"x1-1/2"	73x48
3"x1"	89x33
3"x1-1/4"	89x42
3"x1-1/2"	89x48
3"x2"	89x60
4"x1"	114x33
4"x1-1/4"	114x42
4"x1-1/2"	114x48
4"x2"	114x60
4"x2-1/2"	114x73
4"x3"	114x89
6"x1"	168x33
6"x1-1/4"	168x42
6"x1-1/2"	168x48
6"x2"	168x60
6"x2-1/2"	168x73
6"x3"	168x89
8"x2"	219x60

MECHANICAL CROSS (THREADED)  
丝接机械四通 (A)

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)	NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)
50x25(2x1)	60.3xRc1	125x25(5x1)	139.7xRc1
65x25(2-1/2x1)	76.1xRc1	125x32(5x1-1/4)	139.7xRc1-1/4
65x32(2-1/2x1-1/4)	76.1xRc1-1/4	125x40(5x1-1/2)	139.7xRc1-1/2
65x40(2-1/2x1-1/2)	76.1xRc1-1/2	125x50(5x2)	139.7xRc2
80x25(3x1)	88.9xRc1	125x65(5x2-1/2)	139.7xRc2-1/2
80x32(3x1-1/4)	88.9xRc1-1/4	125x80(5x3)	139.7xRc3
80x40(3x1-1/2)	88.9xRc1-1/2	150x25(6x1)	159xRc1
80x50(3x2)	88.9xRc2	150x32(6x1-1/4)	159xRc1-1/4
100x25(4x1)	108xRc1	150x40(6x1-1/2)	159xRc1-1/2
100x32(4x1-1/4)	108xRc1-1/4	150x50(6x2)	159xRc2
100x40(4x1-1/2)	108xRc1-1/2	150x50(6x2-1/2)	159xRc2-1/2
100x50(4x2)	108xRc2	150x50(6x3)	159xRc3
100x65(4x2-1/2)	108xRc2-1/2	150x25(6x1)	165.1xRc1
100x25(4x1)	114.3xRc1	150x32(6x1-1/4)	165.1xRc1-1/4
100x32(4x1-1/4)	114.3xRc1-1/4	150x40(6x1-1/2)	165.1xRc1-1/2
100x40(4x1-1/2)	114.3xRc1-1/2	150x50(6x2)	165.1xRc2
100x50(4x2)	114.3xRc2	150x65(6x2-1/2)	165.1xRc2-1/2
100x65(4x2-1/2)	114.3xRc2-1/2	150x80(6x3)	165.1xRc3
125x25(5x1)	133xRc1	200x25(8x1)	219.1xRc1
125x32(5x1-1/4)	133xRc1-1/4	200x32(8x1-1/4)	219.1xRc1-1/4
125x40(5x1-1/2)	133xRc1-1/2	200x40(8x1-1/2)	219.1xRc1-1/2
125x50(5x2)	133xRc2	200x50(8x2)	219.1xRc2
125x65(5x2-1/2)	133xRc2-1/2	200x65(8x2-1/2)	219.1xRc2-1/2
125x80(5x3)	133xRc3	200x80(8x3)	219.1xRc3



MECHANICAL CROSS (GROOVED)  
沟槽机械四通



MECHANICAL CROSS (THREADED)  
丝接机械四通

**MECHANICAL CROSS (THREADED)**  
丝接机械四通 (B)

NORMAL SIZE (in)	OUTSIDE DIAMETER (mm)
2-1/2"×1"	73×Rc1
2-1/2"×1-1/4"	73×Rc1-1/4
2-1/2"×1-1/2"	73×Rc1-1/2
3"×1"	88.9×Rc1
3"×1-1/4"	88.9×Rc1-1/4
3"×1-1/2"	88.9×Rc1-1/2
3"×2"	88.9×Rc2
4"×1"	114.3×Rc1
4"×1-1/4"	114.3×Rc1-1/4
4"×1-1/2"	114.3×Rc1-1/2
4"×2"	114.3×Rc2
6"×1"	168.3×Rc1
6"×1-1/2"	168.3×Rc1-1/2
6"×2"	168.3×Rc2

**MECHANICAL TEE (GROOVED)**  
沟槽机械三通 (B)

NORMAL SIZE (in)	OUTSIDE DIAMETER (mm)
2-1/2"×1"	73×33
2-1/2"×1-1/4"	73×42
2-1/2"×1-1/2"	73×48
3"×1"	89×33
3"×1-1/4"	89×42
3"×1-1/2"	89×48
3"×2"	89×60
4"×1"	114×33
4"×1-1/4"	114×42
4"×1-1/2"	114×48
4"×2"	114×60
4"×2-1/2"	114×73
4"×3"	114×89
6"×1"	168×33
6"×1-1/4"	168×42
6"×1-1/2"	168×48
6"×2"	168×60
6"×2-1/2"	168×73
6"×3"	168×89
8"×2"	219×60



MECHANICAL TEE (GROOVED)  
沟槽机械三通

**MECHANICAL TEE (GROOVED)**  
沟槽机械三通 (A)

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)
100×50(4×2)	114.3×60.3
100×65(4×2-1/2)	114.3×73
100×65(4×2-1/2)	114.3×76.1
100×80(4×3)	114.3×88.9
125×65(5×2-1/2)	139.7×76.1
125×80(5×3)	139.7×88.9
150×65(6×2-1/2)	165.1×76.1
150×80(6×3)	165.1×88.9
150×100(6×4)	165.1×114.3
200×65(8×2-1/2)	219.1×76.1
200×80(8×3)	219.1×88.9
200×100(8×4)	219.1×114.3
250×65(10×2-1/2)	273×76.1
250×80(10×3)	273×88.9
250×100(10×4)	273×114.3

**MECHANICAL TEE (THREADED)**  
丝接机械三通 (A)

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)	NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)
50×25(2×1)	60.3×Rc1	125×25(5×1)	139.7×Rc1
65×25(2-1/2×1)	76.1×Rc1	125×32(5×1-1/4)	139.7×Rc1-1/4
65×32(2-1/2×1-1/4)	76.1×Rc1-1/4	125×40(5×1-1/2)	139.7×Rc1-1/2
65×40(2-1/2×1-1/2)	76.1×Rc1-1/2	125×50(5×2)	139.7×Rc2
80×25(3×1)	88.9×Rc1	125×65(5×2-1/2)	139.7×Rc2-1/2
80×32(3×1-1/4)	88.9×Rc1-1/4	125×80(5×3)	139.7×Rc3
80×40(3×1-1/2)	88.9×Rc1-1/2	150×25(6×1)	159×Rc1
80×50(3×2)	88.9×Rc2	150×32(6×1-1/4)	159×Rc1-1/4
100×25(4×1)	108×Rc1	150×40(6×1-1/2)	159×Rc1-1/2
100×32(4×1-1/4)	108×Rc1-1/4	150×50(6×2)	159×Rc2
100×40(4×1-1/2)	108×Rc1-1/2	150×50(6×2-1/2)	159×Rc2-1/2
100×50(4×2)	108×Rc2	150×50(6×3)	159×Rc3
100×65(4×2-1/2)	108×Rc2-1/2	150×25(6×1)	165.1×Rc1
100×25(4×1)	114.3×Rc1	150×32(6×1-1/4)	165.1×Rc1-1/4
100×32(4×1-1/4)	114.3×Rc1-1/4	150×40(6×1-1/2)	165.1×Rc1-1/2
100×40(4×1-1/2)	114.3×Rc1-1/2	150×50(6×2)	165.1×Rc2
100×50(4×2)	114.3×Rc2	150×50(6×2-1/2)	165.1×Rc2-1/2
100×65(4×2-1/2)	114.3×Rc2-1/2	150×50(6×3)	165.1×Rc3
125×25(5×1)	133×Rc1	200×25(8×1)	219.1×Rc1
125×32(5×1-1/4)	133×Rc1-1/4	200×32(8×1-1/4)	219.1×Rc1-1/4
125×40(5×1-1/2)	133×Rc1-1/2	200×40(8×1-1/2)	219.1×Rc1-1/2
125×50(5×2)	133×Rc2	200×50(8×2)	219.1×Rc2
125×65(5×2-1/2)	133×Rc2-1/2	200×65(8×2-1/2)	219.1×Rc2-1/2
125×80(5×3)	133×Rc3	200×80(8×3)	219.1×Rc3

**MECHANICAL TEE (THREADED)**  
丝接机械三通 (B)

NORMAL SIZE (in)	OUTSIDE DIAMETER (mm)	NORMAL SIZE (in)	OUTSIDE DIAMETER (mm)
2-1/2"×1"	73×Rc1	4"×2"	114.3×Rc2
2-1/2"×1-1/4"	73×Rc1-1/4	6"×1"	168.3×Rc1
2-1/2"×1-1/2"	73×Rc1-1/2	6"×1-1/2"	168.3×Rc1-1/2
3"×1"	88.9×Rc1	6"×2"	168.3×Rc2
3"×1-1/4"	88.9×Rc1-1/4		
3"×1-1/2"	88.9×Rc1-1/2		
3"×2"	88.9×Rc2		
4"×1"	114.3×Rc1		
4"×1-1/4"	114.3×Rc1-1/4		
4"×1-1/2"	114.3×Rc1-1/2		



MECHANICAL TEE (THREADED)  
丝接机械三通

**REDUCING TEE (GROOVED)**

沟槽异径三通

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)
65×50(2/1/2×2)	76.1×60.3
80×50(3×2)	88.9×60.3
80×65(3×2-1/2)	88.9×76.1
100×50(4×2-1/2)	108×76.1
100×80(4×3)	108×88.9
100×50(4×2)	114.3×60.3
100×65(4×2-1/2)	114.3×76.1
100×80(4×3)	114.3×88.9
100×80(4×3)	114.3×88.9
125×100(5×4)	133×108
125×65(5×2-1/2)	139.7×76.1
125×80(5×3)	139.7×88.9
125×100(5×4)	139.7×114.3
150×100(6×4)	159×108
150×100(6×4)	159×114.3
150×125(6×5)	159×133
150×65(6×2-1/2)	165.1×76.1
150×80(6×3)	165.1×88.9
150×100(6×4)	165.1×114.3
150×125(6×5)	165.1×139.7
200×50(8×2)	219.1×60.3
200×65(8×2-1/2)	219.1×76.1
200×80(8×3)	219.1×88.9
200×100(8×4)	219.1×114.3
200×125(8×5)	219.1×139.7
200×150(8×6)	219.1×165.1
250×150(10×4)	273×114.3
250×150(10×6)	273×165.1
250×200(10×8)	273×219.1
300×100(12×4)	323.9×114.3
300×125(12×5)	323.9×139.7
300×150(12×6)	323.9×165.1
300×200(12×8)	323.9×219.1
300×250(12×10)	323.9×273



REDUCING TEE (GROOVED)  
沟槽异径三通

**REDUCING TEE (GROOVED)**

沟槽异径三通 (B)

NORMAL SIZE (in)	OUTSIDE DIAMETER (mm)
2-1/2"×1"	73×60.3
3"×2"	76.1×60.3
3"×2"	88.9×60.3
3"×2-1/2"	89×73
3"×3"	88.9×76.1
4"×2"	114.3×60.3
4"×2-1/2"	114.3×73
4"×3"	114.3×89
5-1/2"×2"	139.7×60.3
5-1/2"×3"	139.7×76.1
5-1/2"×3"	139.7×88.9
5T-1/2"×4"	139.7×114.3
5"×2-1/2"	14L3×73
5"×3"	14L3×88.9
5"×4"	14L3×114.3
6-1/2"×3"	165.1×76.1
6-1/2"×3"	165.1×88.9
6-1/2"×4"	165.1×114.3
6-1/2"×5-1/2"	165.1×139.7
6"×3"	168.3×88.9
6"×4"	168.3×114.3
6"×5"	168.3×141.3
8"×6"	219.1×168.3

**REDUCING TEE (THREADED)**

丝接异径三通 (A)

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)
50×25(2×1)	60.3×Rc1
50×32(2×1-1/4)	60.3×Rc1-1/4
50×40(2×1-1/2)	60.3×Rc1-1/2
65×20(2-1/2×3/4)	76.1×Rc3/4
65×20(2-1/2×3/4)	76.1×Rc3/4
65×25(2-1/2×1)	76.1×Rc1
65×32(2-1/2×1/4)	76.1×Rc1-1/4
65×40(2-1/2×1/2)	76.1×Rc1-1/2
65×20(2-1/2×2)	76.1×Rc2
80×25(3×1)	88.9×Rc1
80×25(3×1)	88.9×Rc1
80×32(3×1-1/4)	88.9×Rc1-1/4
80×40(3×1-1/2)	88.9×Rc1-1/2
80×50(3×2)	88.9×Rc2
80×65(3×2-1/2)	88.9×Rc2-1/2
100×65(4×2-1/2)	108×Rc2-1/2
100×80(4×3)	108×Rc3
100×25(4×1)	114.3×Rc1
100×25(4×1)	114.3×Rc1
100×32(4×1-1/4)	114.3×Rc1-1/4
100×40(4×1-1/2)	114.3×Rc1-1/2
100×50(4×2)	114.3×Rc2
100×65(4×2-1/2)	114.3×Rc2-1/2
100×80(4×3)	114.3×Rc3
125×65(5×2-1/2)	133×Rc2-1/2
125×80(5×3)	133×Rc3
125×25(5×1)	139.7×Rc1
125×32(5×1-1/4)	139.7×Rc1-1/4
125×40(5×1-1/2)	139.7×Rc1-1/2
125×80(5×7/2)	139.7×Rc2
150×25(6×1)	165.1×Rc1
150×50(6×2)	165.1×Rc2
150×50(6×3)	165.1×Rc2
150×65(6×2-1/2)	165.1×Rc2
150×80(6×3)	165.1×Rc3
200×50(8×2)	219.1×Rc2
200×65(8×2-1/2)	219.1×Rc2-1/2
200×80(8×3)	219.1×Rc3

**REDUCING TEE (THREADED)**

丝接异径三通 (B)

NORMAL SIZE (in)	OUTSIDE DIAMETER (mm)
3"×1"	88.9×Rc1
3"×1-1/4"	88.9×Rc1-1/4
3"×1-1/2"	88.9×Rc1-1/2
3"×2"	88.9×Rc2
4"×1"	114.3×Rc1
4"×1-1/4"	114.3×Rc1-1/4
4"×1-1/2"	114.3×Rc1-1/2
4"×2"	114.3×Rc2
5-1/2"×1"	139.7×Rc1
5-1/2"×1-1/4"	139.7×Rc1-1/4
5-1/2"×1-1/2"	139.7×Rc1-1/2
5T-1/2"×2"	139.7×Rc2
6-1/2"×1"	165.1×Rc1
6-1/2"×1-1/4"	165.1×Rc1-1/4
6-1/2"×1-1/2"	165.1×Rc1-1/2
6-1/2"×2"	165.1×Rc2



REDUCING TEE (THREADED)  
丝接异径三通

**TEE (GROOVED)**

正三通 (A)

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)
50(2)	60.3
65(2-1/2)	76.1
80(3)	88.9
100(4)	108
100(4)	114.3
125(5)	133
125(5)	139.7
150(6)	159
150(6)	165.1
150(6)	168.3
200(8)	219.1
250(10)	273
300(10)	323.9

**TEE (GROOVED)**

1E三通 (B)

NORMAL SIZE (in)	OUTSIDE DIAMETER (mm)
2-1/2"	73
3"	88.9
4"	114.3
5-1/2"	139.7
5"	141.3
6-1/2"	165.1
6"	168.3
8"	219.1

**REDUCING CROSS(GROOVED)**

沟槽异径四通

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)
100×65(4×2-1/2)	114.3×76.1
100×80(4×3)	114.3×88.9
125×65(5×2-1/2)	139.7×76.1
125×80(5×3)	139.7×88.9
125×100(5×4)	139.7×114.3
150×65(6×2-1/2)	165.1×76.1
150×80(6×3)	165.1×88.9
150×100(6×4)	165.1×114.3
150×125(6×5)	165.1×139.7
200×100(8×4)	219.1×114.3
200×125(8×5)	219.1×139.7
200×150(8×6)	219.1×165.1

**CROSS (GROOVED)**

正四通

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)
65(2-1/2)	76.1
80(3)	88.9
100(4)	114.3
125(5)	139.7
150(6)	165.1
200(8)	219.1



TEE (GROOVED)  
正三通



REDUCING CROSS(GROOVED)  
沟槽异径四通



CROSS (GROOVED)  
正四通

**45° Elbow**

45° 弯头 (A)

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)
50(2)	60.3
65(2-1/2)	76.1
80(3)	88.9
100(4)	108
100(4)	114.3
125(5)	133
125(5)	139.7
150(6)	159
150(6)	165.1
200(8)	219.1
250(10)	273
300(10)	323.9

**45° Elbow**

45° 弯头 (B)

NORMAL SIZE (in)	OUTSIDE DIAMETER (mm)
3"	88.9
4"	114.3
6"	168.3



45° Elbow  
45° 弯头

**REDUCER (THREADED)**

丝接大小头 (A)

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)	NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)
50×25(2×3/4)	60.3×Rc3/4	125×50(5×2)	133×Rc2
50×25(2×1)	60.3×Rc1	125×65(5×2-1/2)	133×Rc2-1/2
50×32(2×1-1/4)	60.3×Rc1-1/4	125×80(5×3)	133×Rc3
50×40(2×1-1/2)	60.3×Rc1-1/2	125×25(5×1)	139.7×Rc1
65×25(2-1/2×1)	76.1×Rc1	125×32(5×1-1/4)	139.7×Rc1-1/4
65×32(2-1/2×1-1/2)	76.1×Rc1-1/4	125×40(5×1-1/2)	139.7×Rc1-1/2
65×40(2-1/2×1-1/2)	76.1×Rc1-1/2	125×50(5×2)	139.7×Rc2
65×50(2-1/2×2)	76.1×Rc2	125×65(5×2-1/2)	139.7×Rc2-1/2
80×25(3×1)	88.9×Rc1	125×80(5×3)	139.7×Rc3
80×32(3×1-1/4)	88.9×Rc1-1/4	150×25(6×1)	159×Rc1
80×40(3×1-1/2)	88.9×Rc1-1/2	150×32(6×1-1/4)	159×Rc1-1/4
80×50(3×2)	88.9×Rc2	150×40(6×1-1/2)	159×Rc1-1/2
80×65(3×2-1/2)	88.9×Rc2-1/2	150×50(6×2)	159×Rc2
100×25(4×1)	108×Rc1	150×50(6×2-1/2)	159×Rc2-1/2
100×32(4×1-1/4)	108×Rc1-1/4	150×50(6×3)	159×Rc3
100×40(4×1-1/2)	108×Rc1-1/2	150×25(6×1)	165.1×Rc1
100×50(4×2)	108×Rc2	150×32(6×1-1/4)	165.1×Rc1-1/4
100×65(4×2-1/2)	108×Rc2-1/2	150×40(6×1-1/2)	165.1×Rc1-1/2
100×80(4×3)	108×Rc3	150×50(6×2)	165.1×Rc2
100×25(4×1)	114.3×Rc1	150×50(6×2-1/2)	165.1×Rc2-1/2
100×32(4×1-1/4)	114.3×Rc1-1/4	150×50(6×3)	165.1×Rc3
100×40(4×1-1/2)	114.3×Rc1-1/2	200×25(8×1)	219.1×Rc1
100×50(4×2)	114.3×Rc2	200×32(8×1-1/4)	219.1×Rc1-1/4
100×65(4×2-1/2)	114.3×Rc2-1/2	200×40(8×1-1/2)	219.1×Rc1-1/2
100×80(4×3)	114.3×Rc3	200×50(8×2)	219.1×Rc2
125×25(5×1)	133×Rc1	200×65(8×2-1/2)	219.1×Rc2-1/2
125×32(5×1-1/4)	133×Rc1-1/4	200×80(8×3)	219.1×Rc3
125×40(5×1-1/2)	133×Rc1-1/2		

**REDUCER (THREADED)**

丝接大小头 (B)

NORMAL SIZE (in)	OUTSIDE DIAMETER (mm)	NORMAL SIZE (in)	OUTSIDE DIAMETER (mm)
2"×1-1/4"	60.3×Rc1-1/4	4"×1-1/4"	114.3×Rc1-1/4
2-1/2"×1"	73×Rc1	4"×1-1/2"	114.3×Rc1-1/2
2-1/2"×1-1/4"	73×Rc1-1/4		
2-1/2"×1-1/2"	73×Rc1-1/2		
2-1/2"×2"	73×Rc2		
3"×2"	88.9×Rc2		
4"×2"	114.3×Rc2		



REDUCER (THREADED)  
丝接大小头

**REDUCER (GROOVED)**

沟槽大小头 (A)

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)	NORMAL SIZE (mm/in)	OUTSIDE DIAMETER (mm)
65×50(2-1/2×2)	76.1×60.3	150×125(6×5)	159×133
80×50(3×2)	88.9×60.3	150×125(6×5)	159×139.7
80×65(3×2-1/2)	88.9×76.1	150×50(6×2)	165.1×60.3
100×65(4×2-1/2)	108×76.1	150×65(6×2-1/2)	165.1×76.1
100×80(4×3)	108×88.9	150×80(6×3)	165.1×88.9
100×50(4×2)	114.3×60.3	150×100(6×4)	165.1×114.3
100×65(4×2-1/2)	114.3×76.1	150×125(6×5)	165.1×139.7
100×80(4×3)	114.3×88.9	200×65(8×2)	219.1×60.3
125×65(5×2-1/2)	133×76.1	200×65(8×2-1/2)	219.1×76.1
125×80(5×3)	133×88.9	200×80(8×3)	219.1×88.9
125×100(5×4)	133×108	200×100(8×4)	219.1×114.3
125×100(5×4)	133×114.3	200×125(8×5)	219.1×139.7
125×50(5×2)	139.7×60.3	200×150(8×6)	219.1×159
125×65(5×2-1/2)	139.7×76.1	200×150(8×6)	219.1×165.1
125×80(5×3)	139.7×88.9	250×100(10×4)	273×114.3
125×100(5×4)	139.7×108	250×150(10×6)	273×165.1
125×100(5×4)	139.7×114.3	250×200(10×8)	273×219.1
150×65(6×2-1/2)	159×76.1	300×150(12×6)	323.9×165.1
150×80(6×3)	159×88.9	300×200(12×8)	323.9×219.1
150×100(6×4)	159×108	300×250(12×10)	323.9×273
150×100(6×4)	159×114.3		

**REDUCER (GROOVED)**

沟槽大小头 (B)

NORMAL SIZE (in)	OUTSIDE DIAMETER (mm)
2-1/2"×1"	73×60.3
3"×2"	88.9×60.3
3"×2-1/2"	88.9×76.1
4"×2-1/2"	114.3×60.3
4"×2"	114.3×73
4"×3"	114.3×88.9
5"×3"	141.3×88.9
5"×4"	141.3×114.3
6"×2-1/2"	168.3×73
6"×3"	168.3×88.9
6"×4"	168.3×114.3
6"×5"	168.3×141.3
8"×6"	219.1×168.3



REDUCER (GROOVED)  
沟槽大小头

**HEAVY DUTY FLANGE (GROOVED)**

重型法兰 2.5

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER(mm)	WORKING PRESSURE(MPA)	DIMENSIONS(MM)				NO. OF HOLES
			A	B	C	D	
65(2-1/2×2)	76.1	2.5	63.5	17	185	145	8
65(3)	88.9	2.5	63.5	17	200	160	8
100(4)	108	2.5	67.5	16.5	235	190	8
100(4)	114.3	2.5	68	15	230	190	8
150(6)	159	2.5	68	17	300	250	8
150(6)	165	2.5	68	17	300	250	8
200(8)	219.1	2.5	77	20	360	310	12

**ADAPTOR FLANGE (GROOVED)**

高径法兰 L6 (A)

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER(mm)	WORKING PRESSURE(MPA)	DIMENSIONS(MM)				NO. OF HOLES
			A	B	C	D	
50(2)	60.3	1.6	50	15	160	125	4
65(2-1/2)	76.1	1.6	50	15	178	145	4
80(3)	88.9	1.6	50	15	194	160	8
100(4)	108	1.6	55	15	213	180	8
100(4)	114.3	1.6	55	15	213	180	8
125(5)	133	1.6	58	17	243	210	8
125(5)	139.7	1.6	58	17	243	210	8
150(6)	159	1.6	65	17	280	240	8
150(6)	165.1	1.6	65	17	280	240	8
200(8)	219.1	1.6	78	19	340	295	8\12
250(10)	273	1.6	83	17	404	355	12
300(12)	323.9	1.6	88	17	416	410	12

**ADAPTOR FLANGE (GROOVED)**

高径法兰 L6 (B)

NORMAL SIZE (in)	OUTSIDE DIAMETER(mm)	WORKING PRESSURE(MPA)	DIMENSIONS(MM)				NO. OF HOLES
			A	B	C	D	
2-1/2"	73	1.6	50	15	178	145	4
3"	88.9	1.6	50	15	194	160	8
4"	114.3	1.6	50	15	213	180	8
6"	168.3	1.6	55	17	280	240	8



HEAVY DUTY FLANGE (GROOVED)  
重型法兰2.5



ADAPTOR FLANGE (GROOVED)  
高径法兰L6



**BLIND FLANGE**

盲片 (A)

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER(mm)	WORKING PRESSURE(MPA)	HEIGHT(MM)
50(2)	60.3	2.5	28
65(2-1/2×2)	76.1	2.5	28
80(3)	88.9	2.5	29
100(4)	108	2.5	31
100(4)	114.3	2.5	31
125(5)	133	2.5	31.5
125(4)	139.7	2.5	31.5
150(6)	159	2.5	31.5
150(6)	165.1	2.5	31
200(8)	219.1	2.5	36.5
250(10)	273	2.5	33



BLIND FLANGE  
盲片

**BLIND FLANGE**

盲片 (B)

NORMAL SIZE (in)	OUTSIDE DIAMETER(mm)	WORKING PRESSURE(MPA)	HEIGHT(MM)
2-1/2"	73	2.5	28
3"	88.9	2.5	29
6"	168.3	2.5	31



22.5° Elbow  
22.5°弯头



11.25° Elbow  
11.25°弯头

**22.5° Elbow**

22.5°弯头

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER(mm)
65(2-1/2×2)	76.1
80(3)	88.9
100(4)	114.3
150(6)	165.1
200(8)	219.1

**11.25° Elbow**

11.25°弯头

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER(mm)
65(2-1/2×2)	76.1
80(3)	88.9
100(4)	114.3
150(6)	165.1
200(8)	219.1

**THREADED FLANGE**

丝接法兰

NORMAL SIZE (mm/in)	OUTSIDE DIAMETER(mm)	WORKING PRESSURE(MPA)	DIMENSIONS(MM)				NO. OF HOLES
			A	B	C	D	
25(1)	Rc1	1.6	18	10	85	110	4
32(1-1/4)	Rc1-1/4	1.6	18	11	100	130	4
40(1-1/2)	Rc1-1/2	1.6	19	13	110	145	4
50(2)	Rc2	1.6	20	13	125	15	4
65(2-1/2)	Rc2-1/2	1.6	21	15	144	178	4
80(3)	Rc3	1.6	25.5	15	160	193.5	8
100(4)	Rc4	1.6	25.75	15	180	213.5	8



THREADED FLANGE  
丝接法兰

**BOLTS & NUTS**

螺栓螺母

SIZE	THREADED LENGTH L1	TOTAL LENGTH	FISHTAIL BOLT WIDTH	NUT WIDTH
M10×55	30±3	55±1.2	14.5±0.5	9.6~10
M10×60	30±3	60±1.2	14.5±0.5	9.6~10
M10×65	30±3	65±1.2	14.5±0.5	9.6~10
M12×65	36+4	65±1.2	15.2±0.4	11.6~12
M12×70	36+4	70+1.2	15.2±0.4	11.6~12
M12×75	41+4	70+1.2	15.2±0.4	11.6~12
M16×85	41+4	85+1.2	19.0-19.9	15.3~16
M20×120	50+5	120+2.0	24±0.8	18.9~20

The mechanical properties of bolts shall not be lower than grade 8.8 specified in GB / T 3098.1, and the thread tolerance shall be 6G. The mechanical properties of the nut shall comply with Grade 8 requirements specified for nuts in GB / T 3098.2, thread tolerance 6h.



BOLTS & NUTS  
螺栓螺母

**GASKET RING**

橡胶密封圈

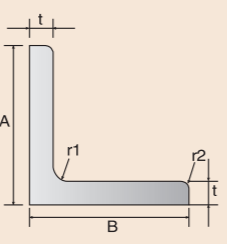
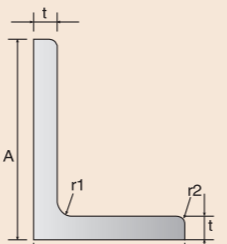
NAME	GASKET	GENERAL SERVICE RECOMMENDATION	TEMPERATURE RANGE
EPDM	E	Water supply, drainage, sewage and normal temperature air, weak acid and weak alkali	-30°C~+130°C
NBR	D	Petroleum based oils	-20°C~+80°C
SILICOMN RUBBER	S	Drinking water, hot dry air and some hot chemicals	-40°C~+180°C



GASKET RING  
橡胶密封圈

## Section Steel

### Equal & Unequal Angle Bar

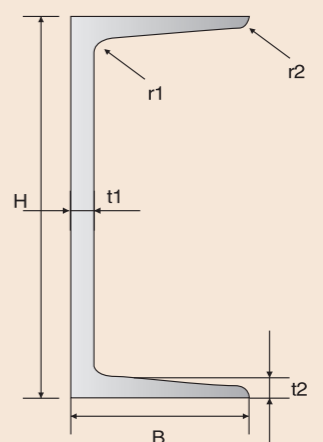
AVAILABLE STEEL GRADE	EQUAL ANGLE BAR	UNEQUAL ANGLE BAR
Q235B, Q345B A36, A572 Gr.50 S235JR, S355JR SS400,		
<b>DIMENSION IN BOLD IN BELOW TABLES FOR EQUAL&amp;UNEQUAL ANGLE ARE RECOMMENDED</b>		

EQUAL ANGLE BAR DIMENSION-I (MM)		
A*B	t	UNIT WEIGHT (KG/M)
20*20	3/4	0.889/1.145
25*25	3/4	1.124/1.459
30*30	3/4	1.373/1.786
36*36	3/4/5	1.656/2.163/2.654
40*40	3/4/5	1.852/2.422/2.976
45*45	3/4/5/6	2.088/2.736/3.369/3.985
50*50	3/4/5/6	2.332/3.059/3.770/4.465
56*56	3/4/5/8	2.624/3.446/4.251/6.568
60*60	4/5	3.68/4.55
63*63	4/5/6/8	3.907/4.822/5.721/7.469
65*65	5/6/8	5.00/5.91/7.66
70*70	4/5/6/7/8	4.372/5.397/6.406/7.398/8.373
75*75	5/6/7/8/10	5.818/6.905/7.976/9.030/11.089
80*80	5/6/7/8/10	6.211/7.376/8.525/9.658/11.874

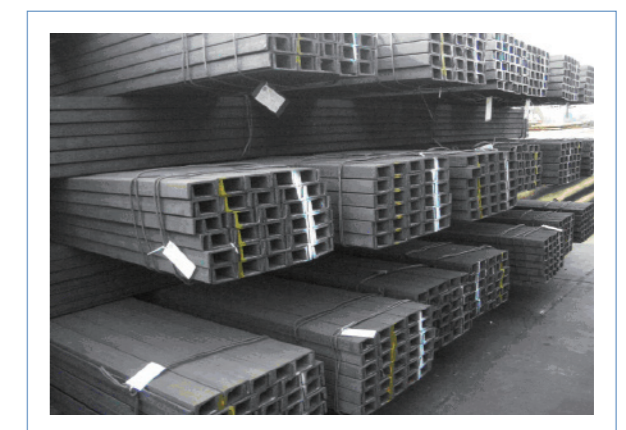
EQUAL ANGLE BAR DIMENSION-II (MM)		
A*B	t	UNIT WEIGHT (KG/M)
90*90	6/7/8/10/12	8.350/9.656/10.946/13.476/15.940
100*100	6/7/8/10/12/14	9.366/10.830/12.276/15.120/17.898/20.611
110*110	7/8/10/12/14	11.928/13.532/16.690/19.782/22.809
120*120	8	14.7
125*125	8/10/12/14	15.504/19.133/22.696/26.193
130*130	9/12/15	17.9/23.4/28.8
140*140	10/12/14/16	21.488/25.522/29.490/33.393
150*150	12/15/19	27.3/33.6/41.9
160*160	10/12/14/16	24.729/29.391/33.987/38.518
180*180	12/14/16/18	33.159/38.383/43.542/48.634
200*200	14/16/18/20/24	42.894/48.680/54.401/60.056/71.168

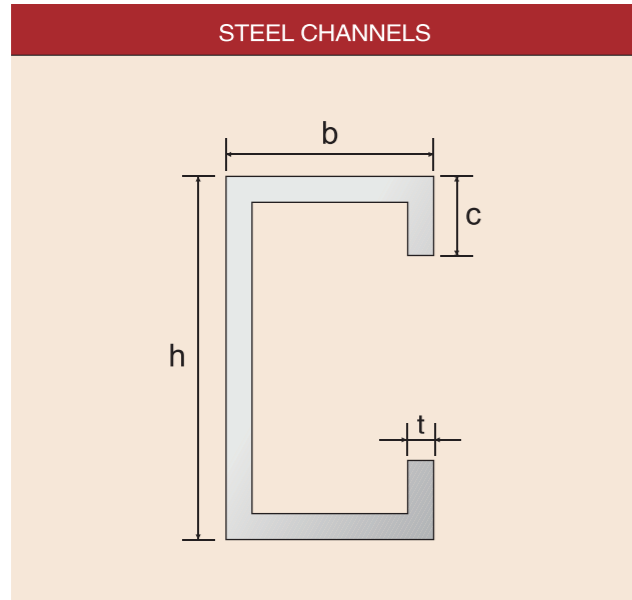
UNEQUAL ANGLE BAR DIMENSION (MM)		
A X B	t	UNIT WEIGHT (KG/M)
100 X 50	6/8	6.85/8.99
100 X 75	7/9/10	9.32/11.8/13
125 X 75	7/10/12	10.7/14.9/17.8
150 X 90	9/10/12	16.5/18.2/21.6
200 X 100	10/12	23/27.3

### Steel Channel

AVAILABLE STEEL GRADE	STEEL CHANNELS
Q235B, Q345B A36, A572 Gr.50 S235JR, S355JR SS400,	
<b>DIMENSION IN BOLD IN BELOW TABLES FOR STEEL CHANNELS ARE RECOMMENDED</b>	

CHANNEL DIMENSION (MM)			UNIT WEIGHT (KG/M)
H * B	t1	t2	
75*40	3.8	7	5.3
75*40	5	7	6.92
100 * 50	3.8	6	7.3
100 * 50	4.5	7.5	8.97
100 * 50	5	7.5	9.36
125 * 65	6	6.8	11.66
125 * 65	5.2	8	13.4
150 * 75	5.5	7.3	14.66
150 * 75	6	10	17.9
150 * 75	6.5	10	18.6



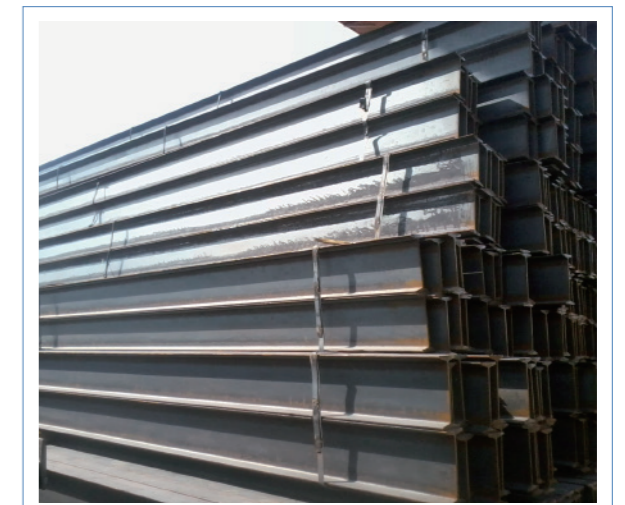


MODLE	THEORETICAL Weight	SURFUCE AREA	CROSS-SECTIONAL AREA
	kg/m	cm <sup>2</sup>	cm <sup>2</sup>
C80×40×15×2.0	2.72	0.368	3.465
C100×50×15×2.5	4.325	0.441	5.51
C120×50×20×2.5	4.7	0.481	5.987
C120×60×20×3.0	6.01	0.513	7.656
C140×60×20×3	6.48	0.582	8.255
C160×70×20×3	7.42	0.633	9.452
C180×70×20×3	7.92	0.673	10.089
C200×70×20×3	8.4	0.713	10.701
C220×70×20×2.5	7.64	0.805	9.732
C250×75×20×2.5	8.23	0.841	10.484
C250×75×20×3	9.808	0.833	12.494
C280×80×20×3	10.75	0.913	13.694
C300×80×20×3	11.221	0.953	14.294

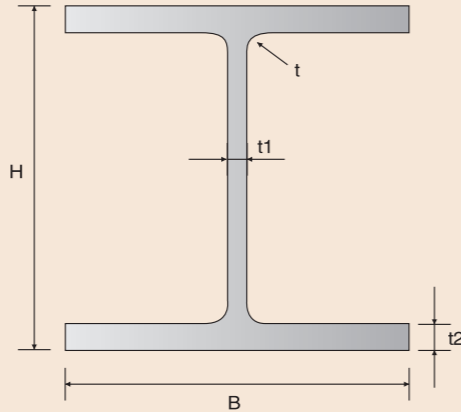
IPE / IPEAA

AVAILABLE STEEL GRADE	IPE/IPEAA
Q235B, Q345B A36, A572 Gr.50 S235JR, S355JR SS400,	
DIMENSION IN BOLD IN BELOW TABLES FOR IPE/IPEAA ARE RECOMMENDED	

NOMINAL SIZE	DIMENSION					UNIT WEIGHT (KG/M)
	h	b	s	t	r	
IPE AA-100	97.6	55	3.6	4.4	7	6.72
IPE-100	100	55	4.1	5.7	7	8.10
IPE AA-120	117	64	3.8	4.8	7	8.36
IPE-120	120	64	4.4	6.3	7	10.4
IPE AA-140	136.6	73	3.8	5.2	7	10.05
IPE-140	140	73	4.7	6.9	7	12.9
IPE AA-160	156.4	82	4	5.6	7	12.31
IPE-160	160	82	5.0	7.4	9	15.8
IPE AA-180	176.4	91	4.3	6.2	9	14.94
IPE-180	180	91	5.3	8.0	9	18.8
IPE AA-200	196.4	100	4.5	6.7	12	17.95
IPE-200	200	100	5.6	8.5	12	22.4



## H Beam

AVAILABLE STEEL GRADE	H BEAM
Q235B, Q345B A36, A572 Gr.50 S235JR, S355JR SS400,	
DIMENSION IN BOLD IN BELOW TABLES FOR H BEAM ARE RECOMMENDED	

ITEM	H*B (mm) NORMINAL SIZE	t1 (mm)	t2 (mm)
HW	100*100, 125*125, 150*150, 175*175, 200*200, 250*250, 300*300, 350*350, 400*400	6 ~ 45	8 ~ 35
HM	150*100, 200*150, 250*175, 300*200, 350*250, 400*300, 450*300, 500*300, 600*300,	6 ~ 14	9 ~ 23
HN	100*50, 125*60, 150*75, 175*90, 200*100, 250*125, 300*150, 350*175, 400*150, 400*200, 450*150, 450*200, 500*150, 500*200, 600*200, 700*300, 800*300, 900*300	5 ~ 18	7 ~ 28
HW, HM, HN STAND FOR H BEAMS WITH WIDE FLANGE, MEDIUM FLANGE, NARROW FLANGE SEPARATELY.			



## Coil and Plate

### Galvanized Steel Coil

SPECIFICATION:

**Thickness:** 0.25–4.0mm; **Width:** 900–1250mm;

**Zinc Coating:** 80–275g/m<sup>2</sup>;

**Internal Diameter:** 508mm or 610mm

**Coil Weight:** 4–8MT

**Quality:** commercial and structural quality

**Surface Treatment:** zero spangle, regular spangle, minimum spangle, oiled & dry, chromated,

**Standard:** JIS G 3302, ASTM A 653M, EN 10327

**Steel Grade:** SGCC, DX51D+Z, S250GD, S280GD, S350GD

**Usage:** widely used in building materials, light industrial, transportation and farming. Such as for making steel profile for wall and roofing, T-bar, studs, fireproof door, air conditioning duct; enclosure of home appliance, kitchen appliance etc.



### Pre-painted Galvanized Steel Coil

SPECIFICATION:

**Thickness:** 0.23–1.2mm (BMT)

**Width:** 900–1250mm

**Zinc Coating:** 80–275g/m<sup>2</sup>

**Color:** according to RAL color fan( PE;PVDF coating)

**Internal Diameter:** 508mm or 610mm

**Coil Weight:** 4–8MT

**Quality:** commercial and structural quality

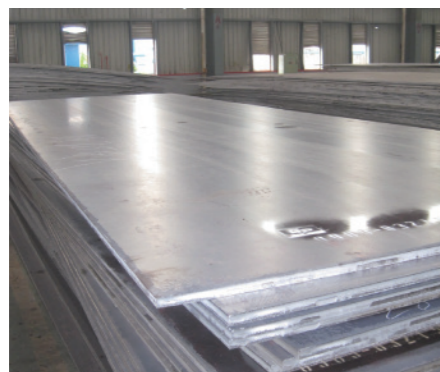
**Standard:** JIS G 3312, ASTM A755M, EN 10169

**Steel Grade:** CGCC, DX51D+Z, S250GD, S280GD, S350GD

**Usage:** widely used in building materials, light industrial, transportation and farming. Such as for making steel profile for wall and roofing, sandwich panel, corrugated sheet, T-bar, home appliance, kitchen appliance etc.



## Hot Rolled Steel Plate



SPECIFICATION:

**Thickness:** 6—200mm;

**Width:** 1524—5000mm; **Length:** 6000—16000mm

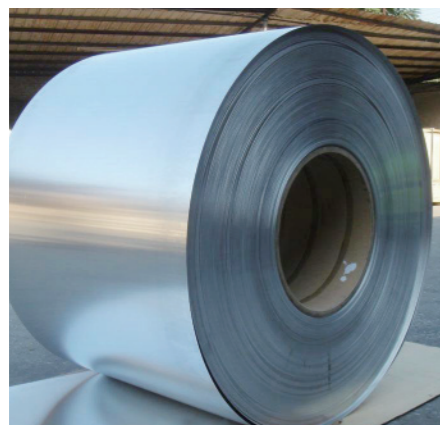
**Steel Grade:** SS400, SM490, A36, A572 GR50, S235/275/355JR, S690QL, A514, A516 GR60/70...

**Thickness:** 6—60mm;

**Width:** 1800—3500mm; **Length:** 6000—16000mm

**Ship Building Plate:** Grade A, B, AH32/36, D, DH32/36, E, EH 32/36

## Hot Rolled Steel Coil



SPECIFICATION:

**Thickness:** 1.8mm—20mm;

**Width:** 940mm—2010mm

**Standard:** Japanese industry standard, Germany industry standard, American standard, American Petroleum Institute standard

**Steel Grade:** SS400, SPHC, SPHT1/T2, SAE1006/1008, S235/275JR, API5L X60/65/70

**Usage:** raw materials for producing cold rolling steel coils; raw materials in industrial, such as making pipe, container, ship, automobile, etc.

## Cold Rolled Steel Coil



SPECIFICATION:

**Thickness:** 0.2—2.0mm; **Width:** 1000—1250mm;

**Standard:** JISG 3141—2005, EN10130/EN10139

**Steel Grade:** SPCC, SPCD, SPCE, SPCEN. DC01(St12), DC03(St13), DC04(St 14, St15)

**Technical Treatment of Cold Rolled Steel Coil:** Bright, annealed, flattening, cold hardness and so on.

**Usage:** widely used in construction, transportation and other industries, such as motorcycles, fitting apparatuses. Door-making, appliance, furniture, pipe, tank, refrigerators, washers, dryers; also materials for producing galvanized steel coils and pre-painted galvanized steel coils.

## All Staff of Tianjin Youfa International Trade Co., Ltd



## Tianjin Youfa Steel Pipe Group Culture

**Mission of Youfa:** 友发的使命  
Personal Mastery; 超越自我  
Supporting Partners; 成就伙伴  
Youfa Centuries; 百年友发  
Harmony Building. 共建和谐

**Vision of Youfa:** 友发的愿景  
Steel pipe industry orientation; 立足钢管行业  
All-round-champion pursuit. 追求全能冠军

**Core value of Youfa:** 核心价值观  
Honesty is the basis, mutually benefited; 共赢互利信为本  
Virtue is the first, forging ahead together. 同心并进德为先

**Spirit of Youfa:** 友发的精神  
Self-disciplined and Altruism; 律己利他  
Cooperation and Progress. 合作进取