AN PHÚ THÀNH

Chuyên cung cấp van & phụ kiện Cấp thoát nước – PCCC

THÔNG TIN LIÊN HỆ

- Tên: **CÔNG TY TNHH TM DV AN PHÚ THÀNH**
- Địa chỉ: 50/15 Đường Tiền Lân 12, Ấp Tiền Lân, Xã Bà Điểm, TP. Hồ Chí Minh
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COMPANY INFORMATION

- Name: **AN PHU THANH DV TM COMPANY LIMITED**
- Address: 50/15 Tien Lan 12, Tien Lan Hamlet, Ba Diem Commune, Ho Chi Minh City, Viet Nam
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CAM KẾT CỦA CHÚNG TÔI

- Sản phẩm đúng tiêu chuẩn – rõ nguồn gốc
- Hỗ trợ kỹ thuật nhanh & chính xác
- Đồng hành lâu dài cùng nhà thầu – chủ đầu tư



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AN PHÚ THÀNH

CHẤT LƯỢNG TẠO NÊN GIÁ TRỊ





华鑫管业
HUAXIN PIPE



企业简介 company introduction

Cangzhou Huaxin pipe manufacturing Co., Ltd. is located in "China pipeline equipment base, China pipe fittings capital" – Mengcun Hui Autonomous County, east of Huanghua port, north of Tianjin port, the geographical position is superior, the traffic is very convenient, is the production of foreign trade of seamless steel tubes and pipe fittings professional manufacturers.

The company was founded in 2001, covers the area of 80 thousand square meters, 200 million CNY in fixed assets, plant about 40 thousand square meters; the existing staff of 180 people, including technical personnel more than 30 people; the company has advanced production equipment and strong technical force.The existing hot punching machine 2 sets, 5 sets of pipe straightening machine, anhydrous annealing furnace and pickling surface, coating and other ancillary production equipment, can produce 1/2 "-24' seamless steel pipe, wall thickness of 2mm--60mm. can be produced according to ASTM, DIN, JIS, BS and other standards, with an annual output of 50000 tons of seamless steel pipe; The products of pipe fittings include: elbow, tee, reducer, cap, flange. Now we have 7 sets of the existing system of machine, 6 sets of tee machine, 10 sets of presses machine, 9 sets of blasting machine.1 set of automatic spraying line.Can produce carbon steel, alloy steel, stainless steel, size of 1/2 "-60", the thickness of the product can be produced with 2mm--60mm, in accordance of ASTM, DIN, JIS, BS and other standards, with an annual output of 30000 tons.

Our company established a lab which can do chemical analysis, metallographic analysis, physical experiment, non-destructive testing etc complete testing procedures.Raw materials into the plant from the review, the intermediate control production engineering, until the finished product factory always adhere to the inspection and non-destructive flaw detection.The products have been passed ISO9001:2000 quality control system certification, manufacturing license for special equipment of the people's Republic, provide a strong foundation for production.

Our products are widely used in the industries such as petroleum, chemical industries, electric power, water conservancy, boiler, shipbuilding and other industries.Products has been exported to Europe, South America, Southeast Asia, the Middle East, Africa and so on more than 30 countries and regions; the company always insists on : "to the quality strives for the survival, to the credibility of development", with first-class products, reasonable price, to meet customer requirements, to win customers trust and praise.

CQM
China Quality Mark

Quality Management System Certificate

Certificate Number:00223Q26073R2M

CQM hereby certifies that

Cangzhou Huaxin Pipe Manufacturing Co., Ltd

Unified Social Credit Identifier: 91130930601302186L

Domicile:New Hope District, Hui Autonomous County, Meng Village, Cangzhou City, Hebei, P.R. China
Certification Add: New Hope District, Hui Autonomous County, Meng Village, Cangzhou City, Hebei, P.R. China

the management system conform to:

GB/T 19001-2016/ISO 9001:2015

This certificate is valid to the following scope:

Production of seamless pipe fittings (B2)

* The information of this certificate can be inquired on www.cqm.com.cn or website of CQM. The continued validity of this certificate depends on satisfactory Confirmation of surveillance. *

Issued on: 2023-10-15
Expires on: 2026-11-02

首发人：

IAF CNAS 中国认可 国际互认 管理体系 MANAGEMENT SYSTEM CNAS C003-M CQM Member of IQNET

方圆标志认证集团
China Quality Mark Certification Group

AA 0046940

产品展示
PRODUCT DISPLAY



产品展示
PRODUCT DISPLAY



生产设备
PRODUCTION EQUIPMENT


中频推制机 Medium frequency pushing machine







生产设备
PRODUCTION EQUIPMENT




3000T三通挤压机 / 3000 t Tee extruding machine





生产设备
PRODUCTION EQUIPMENT





▲大立车 Large Vertical lathe





检测设备
DETECTING EQUIPMENT















成品库
FINISHED PRODUCTS AREA











产品包装与运输
PACKAGE AND TRANSPORT







产品包装与运输
PACKAGE AND TRANSPORT





适用标准
Applicable Standards

ASME Standards
B16.9 Factory-Made Wrought Steel Butt welding Fittings
B16.28 Wrought Steel Butt welding Short Radius Elbows and Returns
B16.25 Butt welding Ends
B36.10 Welded and Seamless Wrought Steel Pipe
B36.19 Stainless Steel Pipe
ASTM Standards
A234 Piping Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and high Temperature Service
A403 WroughtAustenitic Stainless Steel Piping Fittings
A420 Piping Fittings of Wrought Car bon Steel and Alloy Steel Low Temperature Service
A815 Wrought Ferritic,Ferritic/Austenitic,and Martensitic Stainless Steel Piping Fittings
MSS Standards
SP-43 Wrought Stainless Steel Butt-Welding Fittings
SP-75 High Test Wrought Butt-Welding Fittings
SP-79 Socket Welding Reducer Inserts
SP-87 Factouy-Made Butt-Welding Fittings for Class I Nuclear Piping Applications
JIS Standards
B2220 Steel Welding Pipe Flanges
B2311 Steel Butt-Welding Pipe Fittings for Ordinary Use
B2312 Steel Butt-Welding Pipe Fittings
B2313 Steel Plate Butt-Welding Pipe Fittings
G3452 Carbon Steel Pipes for Ordinary Piping
G3454 Carbon Steel Pipes for Pressure Service
G3457 Arc Welded Carbon Steel Pipes
DIN Standards
2605-1 Steel Butt-Welding Pipe Fittings;Elbows and Bends with Reduced Pressure Factor
2609 Steel Butt-Welding Pipe Fittings;Technical Delivery Conditions
2615-1 Steel Butt-Welding Pipe Fittings;Tees with Reduced Pressure Factor
2615-2 Steel Butt-Welding Pipe Fittings;Tee For Use at Full Service Pressure
2616-1 Steel Butt-Welding Pipe Fittings:Eccentric Reducers with Reduced Pressure Factor
2616-2 Steel Butt-Welding Pipe Fittings;Reducers for Use at Full Service Pressure
2617 Steel Butt-Welding Pipe Fittings;Caps
1626 Welded Circular Unalloyed Steel Tubes Subject to Special Requirement;Technical Delivery Conditions
1629 Seamless Circular Unalloyed Steel Tubes Subject to Special Requirements; Technical Delivery Conditions
17175 Seamless Tubes of Heat-Resistant Steels; Technical Conditions of Delivery
50049 Materials Testing Certificates
EN(European)Standards
10204 Inspection Documents for Metallic Products
10253-1 Butt-Welding Pipe Fittings; Wrought Carbon Steel for General Use and Without Specific Inspection Requirements

NACE Standards
MR0175 Sulfide Stress Cracking Resistant Metallic Materials for Oilfield Equipment

无缝钢管 Seamless Steel Pipe				
合金管 Alloy pipe	Cr5Mo（P5、STFA25、T5）15CrMo(P11 P12、STFA22)13CrMo44 12Cr1MoV P22(10CrMo 910)T91 P91 P9、T9 Wh36	GB5310-95 GB9948-88 ASTMA335/A335M ASTMA213/213M DIN17175-79 JISG3467-88 JISG3458-88	φ16-824*2-100	石油、化工、电力、锅炉行业的耐高压、耐高温、耐低温、耐腐蚀用无缝钢管 The seamless steel pipe features resistance to high pressure, high/low temperature and corrosion and is used in the industries of petroleum chemical engineering and electric power as well as boiler
高压锅炉管 High-pressure boiler pipe	20G、A106、ST45.8/III	GB5310-95 ASTMA106-99 DIN17175-79	φ14-630*2-80	高压锅炉用耐热无缝钢管 Temperature-resistant seamless steel pipe for high-pressure boiler
石油裂化管，化肥设备用高压无缝管 High-pressure seamless pipe for petroleum cracking and fertilizer making equipments	20、12CrMo、15CrMo	GB9948-88	φ10-530*1 5-36	石油精炼厂的炉管 热交换管、管道用无缝钢管 Boiler pipe for refinery, heat-exchanging pipe, seamless steel pipe for pipeline
	20、16Mn、Q345	GB6479-2000	φ18-530*3-40	化肥设备 管道 Fertilizer making equipment and pipe line
低中压锅炉管 Low-and medium-pressure boiler pipes	10、20	GB3087-1999	φ10-530*2-40	低中压锅炉过热用管 沸水管 机车大小烟管 Over-heat pipe for low- and medium-pressure boiler, boiling water pipe, locomotive smoke pipe (big and small)
流体管 Fluid pipe	20、Q345	GB/T8163-1999	φ8-630*1.0-40	
结构管 Structural pipe	10、20、35、45、16Mn、Q345B	GB/T8162-1999	φ6-1020*1 5-100	
管线管 Line pipe	B 级	API	φ60-630*1 5-40	石油、天然气、工业输送气、水、油 Carrying gas, water or oil in the industries of petroleum and natural gas
液压支柱管 Hydraulic prop pipe	27SiMn	GB/T17396-1998	φ70-377*9-40	
船用管 Ship pipe	410	GB/T5312-1999	φ14-426*1 5-45	制造船舶用耐压管 锅炉及过热器用管 Pipes for ship, boiler and over-heater

Wall Thickness Schedules(ASME)

ASME-ASTM A234 WBP B16.9

Nominal Pipe Size(NPS)		Outside Diameter		Nominal Wall Thickness									
				Sch5s		Sch10s		Sch40s		Sch80s		Sch5	
A	B	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN
8	1/4	13.7	0.540	-	-	-	-	2.24	0.088	3.02	0.119	-	-
10	3/8	17.1	0.675	-	-	-	-	2.31	0.091	3.20	0.126	-	-
15	1/2	21.3	0.840	-	-	-	-	2.77	0.109	3.73	0.147	1.65	0.065
20	3/4	26.7	1.05	-	-	-	-	2.87	0.113	3.91	0.154	1.65	0.065
25	1	33.4	1.32	-	-	-	-	3.38	0.133	4.55	0.179	1.65	0.065
32	1 1/4	42.2	1.66	-	-	-	-	3.56	0.140	4.85	0.191	1.65	0.065
40	1 1/2	48.3	1.9	-	-	-	-	3.68	0.145	5.08	0.200	1.65	0.065
50	2	60.3	2.38	-	-	-	-	3.91	0.154	5.54	0.218	1.65	0.065
65	2 1/2	73.0	2.88	-	-	-	-	5.16	0.203	7.01	0.276	2.11	0.083
80	3	88.9	3.5	-	-	-	-	5.49	0.216	7.62	0.300	2.11	0.083
90	3 1/2	101.6	4	-	-	-	-	5.74	0.226	8.08	0.318	2.11	0.083
100	4	114.3	4.5	-	-	-	-	6.02	0.237	8.56	0.337	2.11	0.083
125	5	141.3	5.56	-	-	-	-	6.55	0.258	9.53	0.375	2.77	0.109
150	6	168.3	6.62	-	-	-	-	7.11	0.280	10.97	0.432	2.77	0.109
200	8	219.1	8.62	-	-	-	-	8.18	0.322	12.70	0.500	2.77	0.109
250	10	273.0	10.75	-	-	-	-	9.27	0.365	12.70	0.500	3.40	0.134
300	12	323.8	12.75	-	-	-	-	9.53	0.375	12.70	0.500	3.96	0.156
350	14	355.6	14	-	-	-	-	9.53	0.375	12.70	0.500	3.96	0.156
400	16	406.4	16	-	-	-	-	9.53	0.375	12.70	0.500	4.19	0.165
450	18	457	18	-	-	-	-	9.53	0.375	12.70	0.500	4.19	0.165
500	20	508	20	-	-	-	-	9.53	0.375	12.70	0.500	4.78	0.188
550	22	559	22	-	-	-	-	9.53	0.375	12.70	0.500	4.78	0.188
600	24	610	24	-	-	-	-	9.53	0.375	12.70	0.500	5.54	0.218
650	26	660	26	-	-	-	-	-	-	-	-	-	-
700	28	711	28	-	-	-	-	-	-	-	-	-	-
750	30	762	30	-	-	-	-	9.53	0.375	12.70	0.500	6.35	0.250
800	32	813	32	-	-	-	-	-	-	-	-	-	-
850	34	864	34	-	-	-	-	-	-	-	-	-	-
900	36	914	36	-	-	-	-	-	-	-	-	-	-
950	38	965	38	-	-	-	-	-	-	-	-	-	-
1000	40	1016	40	-	-	-	-	-	-	-	-	-	-
1050	42	1067	42	-	-	-	-	-	-	-	-	-	-
1100	44	1118	44	-	-	-	-	-	-	-	-	-	-
1150	46	1168	46	-	-	-	-	-	-	-	-	-	-
1200	48	1219	48	-	-	-	-	-	-	-	-	-	-

Nominal Pipe Size(NPS)		Outside Diameter		Nominal wall Thickness							
				Sch20		Sch30		STD		Sch40	
A	B	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN
8	1/4	13.7	0.540	-	-	1.85	0.073	2.24	0.088	2.24	0.088
10	3/8	17.1	0.675	-	-	1.85	0.073	2.31	0.091	2.31	0.091
15	1/2	21.3	0.840	-	-	2.41	0.095	2.77	0.109	2.77	0.109
20	3/4	26.7	1.05	-	-	2.41	0.095	2.87	0.113	2.87	0.113
25	1	33.4	1.32	2.1	-	2.90	0.114	3.38	0.133	3.38	0.133
32	1 1/4	42.2	1.66	2.1	-	2.97	0.117	3.56	0.140	3.56	0.140
40	1 1/2	48.3	1.9	2.5	-	3.18	0.125	3.68	0.145	3.68	0.145
50	2	60.3	2.38	2.5	-	3.18	0.125	3.91	0.154	3.91	0.154
65	2 1/2	73.0	2.88	2.6	-	4.78	0.188	5.16	0.203	5.16	0.203
80	3	88.9	3.5	2.9	-	4.78	0.188	5.49	0.216	5.49	0.216
90	3 1/2	101.6	4	-	-	4.78	0.188	5.74	0.226	5.74	0.226
100	4	114.3	4.5	3.2	-	4.78	0.188	6.02	0.237	6.02	0.237
125	5	141.3	5.56	3.5	-	-	-	6.55	0.258	6.55	0.258
150	6	168.3	6.62	3.5	-	-	-	7.11	0.280	7.11	0.280
200	8	219.1	8.62	4.87	-	7.04	0.277	8.18	0.322	8.18	0.322
250	10	273.0	10.75	5.53	-	7.80	0.307	9.27	0.365	9.27	0.365
300	12	323.8	12.75	5.53	-	8.38	0.330	9.53	0.375	10.31	0.406
350	14	355.6	14	7.22	-	9.53	0.375	9.53	0.375	11.13	0.438
400	16	406.4	16	7.22	-	9.53	0.375	9.53	0.375	12.70	0.500
450	18	457	18	7.22	-	11.13	0.438	9.53	0.375	14.27	0.562
500	20	508	20	9.11	-	12.70	0.500	9.53	0.375	15.09	0.594
550	22	559	22	9.11	-	12.70	0.500	9.53	0.375	-	-
600	24	610	24	9.11	-	14.27	0.562	9.53	0.375	17.48	0.688
650	26	660	26	12.00	-	-	-	9.53	0.375	-	-
700	28	711	28	12.00	-	15.88	0.625	9.53	0.375	-	-
750	30	762	30	12.00	-	15.88	0.625	9.53	0.375	-	-
800	32	813	32	12.00	-	15.88	0.625	9.53	0.375	17.48	0.688
850	34	864	34	12.00	-	15.88	0.625	9.53	0.375	17.48	0.688
900	36	914	36	12.00	-	15.88	0.625	9.53	0.375	19.05	0.750
950	38	965	38	-	-	-	-	9.53	0.375	-	-
1000	40	1016	40	-	-	-	-	9.53	0.375	-	-
1050	42	1067	42	-	-	-	-	9.53	0.375	-	-
1100	44	1118	44	-	-	-	-	9.53	0.375	-	-
1150	46	1168	46	-	-	-	-	9.53	0.375	-	-
1200	48	1219	48	-	-	-	-	9.53	0.375	-	-

Wall Thickness Schedules(ASME)

ASME-ASTM A234 WBP B16.9

Nominal pipe size(NPS)		Outside Diameter		Nominal wall Thickness							
				Sch60		XS		Sch80		Sch100	
A	B	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN
8	1/4	13.7	0.540	-	-	3.02	0.119	3.02	0.119	-	-
10	3/8	17.1	0.675	-	-	3.20	0.126	3.20	0.126	-	-
15	1/2	21.3	0.840	-	-	3.73	0.147	3.73	0.147	-	-
20	3/4	26.7	1.05	-	-	3.91	0.154	3.91	0.154	-	-
25	1	33.4	1.32	-	-	4.55	0.179	4.55	0.179	-	-
32	1 1/4	42.2	1.66	-	-	4.85	0.191	4.85	0.191	-	-
40	1 1/2	48.3	1.9	-	-	5.08	0.200	5.08	0.200	-	-
50	2	60.3	2.38	-	-	5.54	0.218	5.54	0.218	-	-
65	2 1/2	73.0	2.88	-	-	7.01	0.276	7.01	0.276	-	-
80	3	88.9	3.5	-	-	7.62	0.300	7.92	0.300	-	-
90	3 1/2	101.6	4	-	-	8.08	0.318	8.08	0.318	-	-
100	4	114.3	4.5	-	-	8.56	0.337	8.56	0.337	-	-
125	5	141.3	5.56	-	-	9.53	0.375	9.53	0.375	-	-
150	6	168.3	6.62	-	-	10.97	0.432	10.97	0.432	-	-
200	8	219.1	8.62	10.31	0.406	12.70	0.500	12.70	0.500	15.09	0.594
250	10	273.0	10.75	12.70	0.500	12.70	0.500	15.09	0.594	18.26	0.719
300	12	323.8	12.75	14.27	0.562	12.70	0.500	17.48	0.688	21.44	0.844
350	14	355.6	14	15.09	0.594	12.70	0.500	19.05	0.750	23.83	0.938
400	16	406.4	16	16.66	0.656	12.70	0.500	21.44	0.844	26.19	1.031
450	18	457	18	19.05	0.750	12.70	0.500	23.83	0.938	29.36	1.156
500	20	508	20	20.62	0.812	12.70	0.500	26.19	1.031	32.54	1.281
550	22	559	22	22.23	0.875	12.70	0.500	28.58	1.125	34.93	1.375
600	24	610	24	24.61	0.969	12.70	0.500	30.96	1.219	38.89	1.531
650	26	660	26	-	-	12.70	0.500	-	-	-	-
700	28	711	28	-	-	12.70	0.500	-	-	-	-
750	30	762	30	-	-	12.70	0.500	-	-	-	-
800	32	813	32	-	-	12.70	0.500	-	-	-	-
850	34	864	34	-	-	12.70	0.500	-	-	-	-
900	36	914	36	-	-	12.70	0.500	-	-	-	-
950	38	965	38	-	-	12.70	0.500	-	-	-	-
1000	40	1016	40	-	-	12.70	0.500	-	-	-	-
1050	42	1067	42	-	-	12.70	0.500	-	-	-	-
1100	44	1118	44	-	-	12.70	0.500	-	-	-	-
1150	46	1168	46	-	-	12.70	0.500	-	-	-	-
1200	48	1219	48	-	-	12.70	0.500	-	-	-	-

Nominal pipe size(NPS)		Outside Diameter		Nominal wall Thickness							
				Sch120		Sch140		Sch160		XXS	
A	B	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN
8	1/4	13.7	0.540	-	-	-	-	-	-	-	-
10	3/8	17.1	0.675	-	-	-	-	-	-	-	-
15	1/2	21.3	0.840	-	-	-	-	4.78	0.188	7.47	0.294
20	3/4	26.7	1.05	-	-	-	-	5.56	0.219	7.82	0.308
25	1	33.4	1.32	-	-	-	-	6.35	0.250	9.09	0.358
32	1 1/4	42.2	1.66	-	-	-	-	6.35	0.250	9.70	0.382
40	1 1/2	48.3	1.9	-	-	-	-	7.14	0.281	10.15	0.400
50	2	60.3	2.38	-	-	-	-	8.74	0.344	11.07	0.436
65	2 1/2	73.0	2.88	-	-	-	-	9.53	0.375	14.02	0.552
80	3	88.9	3.5	-	-	-	-	11.13	0.438	15.24	0.600
90	3 1/2	101.6	4	-	-	-	-	-	-	-	-
100	4	114.3	4.5	11.13	0.438	-	-	13.49	0.531	17.12	0.674
125	5	141.3	5.56	12.70	0.500	-	-	15.88	0.625	19.05	0.750
150	6	168.3	6.62	14.27	0.562	-	-	18.26	0.719	21.95	0.864
200	8	219.1	8.62	18.26	0.719	20.62	0.812	23.01	0.906	22.23	0.875
250	10	273.0	10.75	21.44	0.844	25.40	1.000	28.58	1.125	25.40	1.000
300	12	323.8	12.75	25.40	1.000	28.58	1.125	33.32	1.312	25.40	1.000
350	14	355.6	14	27.79	1.094	31.75	1.250	35.71	1.406	-	-
400	16	406.4	16	30.96	1.219	36.53	1.438	40.49	1.594	-	-
450	18	457	18	34.93	1.375	39.67	1.562	45.24	1.781	-	-
500	20	508	20	38.10	1.500	44.45	1.750	50.01	1.969	-	-
550	22	559	22	41.28	1.625	47.63	1.875	53.98	2.125	-	-
600	24	610	24	46.02	1.812	52.37	2.062	59.54	2.344	-	-
650	26	660	26	-	-	-	-	-	-	-	-
700	28	711	28	-	-	-	-	-	-	-	-
750	30	762	30	-	-	-	-	-	-	-	-
800	32	813	32	-	-	-	-	-	-	-	-
850	34	864	34	-	-	-	-	-	-	-	-
900	36	914	36	-	-	-	-	-	-	-	-
950	38	965	38	-	-	-	-	-	-	-	-
1000	40	1016	40	-	-	-	-	-	-	-	-
1050	42	1067	42	-	-	-	-	-	-	-	-
1100	44	1118	44	-	-	-	-	-	-	-	-
1150	46	1168	46	-	-	-	-	-	-	-	-
1200	48	1219	48	-	-	-	-	-	-	-	-

Wall Thickness Schedules(JIS and DIN)

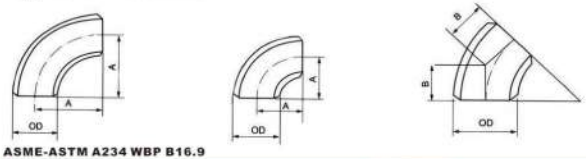
JIS G3452 JIS G3454 JIS G3457

Nominal pipe size(NPS)		Outside Diameter	SGP		LG		STD		XS	
A	B	JIS	W.T	I.D	W.T	I.D	W.T	I.D	W.T	I.D
15	1/2	21.7	2.8	16.1	-	-	-	-	-	-
20	3/4	27.2	2.8	21.6	-	-	-	-	-	-
25	1	34	3.2	27.6	-	-	-	-	-	-
32	1 1/4	42.7	3.5	35.7	-	-	-	-	-	-
40	1 1/2	48.6	3.5	41.6	-	-	-	-	-	-
50	2	60.5	3.8	52.9	-	-	-	-	-	-
65	2 1/2	76.3	4.2	67.9	-	-	-	-	-	-
80	3	89.1	4.2	80.7	-	-	-	-	-	-
90	3 1/2	101.6	4.2	93.2	-	-	-	-	-	-
100	4	114.3	4.5	105.3	-	-	-	-	-	-
125	5	139.8	4.5	130.8	-	-	-	-	-	-
150	6	165.2	5	155.2	5	155.2	-	-	-	-
200	8	216.3	5.8	204.7	5.8	204.7	-	-	-	-
250	10	267.4	6.6	254.2	6.6	254.2	-	-	-	-
300	12	318.5	6.9	304.7	6.9	304.7	-	-	-	-
350	14	355.6	7.9	339.8	7.9	339.8	9.5	336.6	12.7	330.2
400	16	406.4	7.9	390.6	7.9	390.6	9.5	387.4	12.7	381
450	18	457.2	7.9	441.4	7.9	441.4	9.5	438.2	12.7	431.8
500	20	508	7.9	492.2	7.9	492.2	9.5	489	12.7	482.6
550	22	558.8	-	-	7.9	543	9.5	539.8	12.7	533.4
600	24	609.6	-	-	7.9	593.8	9.5	590.6	12.7	584.2
650	26	660.4	-	-	7.9	644.6	9.5	641.4	12.7	635
700	28	711.2	-	-	7.9	695.4	9.5	692.2	12.7	685.8
750	30	762	-	-	7.9	746.2	9.5	743	12.7	736.6
800	32	812.8	-	-	7.9	797	9.5	793.8	12.7	787.4
850	34	863.6	-	-	7.9	847.8	9.5	844.6	12.7	838.2
900	36	914.4	-	-	7.9	898.6	9.5	895.4	12.7	889
950	38	965.2	-	-	7.9	949.4	9.5	946.2	12.7	939.8
1000	40	1016	-	-	7.9	1000.2	9.5	997	12.7	990.6
1050	42	1066.8	-	-	-	-	9.5	1047.8	12.7	1041.4
1100	44	1117.6	-	-	-	-	9.5	1098.6	12.7	1092.2
1150	46	1168.4	-	-	-	-	9.5	1149.4	12.7	1143
1200	48	1219.2	-	-	-	-	9.5	1200.2	12.7	1193.8

DIN 2448 DIN 2458

Nominal pipe size(NPS)		Outside Diameter	Wall thickness, s,for series				
A	B		1	2	3	4	5
1/2	15	21.3	1.6	-	2.0	3.2	4.0
3/4	20	26.9	1.6	-	2.3	3.2	4.0
1	25	33.7	2.0	-	2.6	3.2	4.0
1 1/4	32	42.4	2.0	-	2.6	3.6	4.0
1 1/2	40	48.3	2.0	-	2.6	4.0	5.0
2	50	60.3	2.0	-	2.9	4.5	5.6
2 1/2	65	76.1	2.3	-	2.9	5.0	7.1
3	80	88.9	2.3	-	3.2	5.6	8.0
4	100	114.3	2.6	-	3.6	6.3	8.8
5	125	139.7	2.6	-	4.0	6.3	10.0
6	150	168.3	2.6	4.0	4.5	7.1	11.0
8	200	219.1	2.9	4.5	6.3	8.0	12.5
10	250	273	2.9	5.0	6.3	8.8	-
12	300	323.9	2.9	5.6	7.1	10.0	-
14	350	355.6	3.2	5.6	8.0	11.0	-
16	400	406.4	3.2	6.3	8.8	12.5	-
18	450	457	4.0	6.3	10.0	-	-
20	500	508	4.0	6.3	11.0	-	-
24	600	610	5.0	6.3	12.5	-	-
28	700	711	5.0	7.1	12.5	-	-
32	800	813	5.6	8.0	12.5	-	-
36	900	914	6.3	10.0	12.5	-	-
40	1000	1016	6.3	10.0	12.5	-	-
48	1200	1220	6.3	12.5	-	-	-

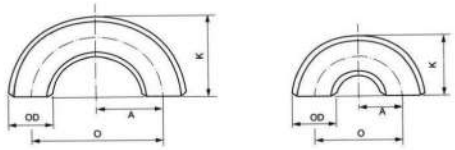
Wrought Steel Buttwelding Fittings(ASME-ASTM)
Long and Short Radius Elbows



ASME-ASTM A234 WBP B16.9

Nominal pipe size(NPS)	Outside Diameter at bevel OD		Center-to-End							
			90° Elbows A				45° Elbows B			
			Long Radius		Short Radius		Long Radius		Short Radius	
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
1/2	0.84	21.3	1.5	38	-	-	0.62	16	-	-
3/4	1.05	26.7	1.12	29	-	-	0.44	11	-	-
1	1.32	33.4	1.5	38	1	25	0.88	22	0.41	10
1 1/4	1.66	42.2	1.88	48	1.25	32	1	25	0.52	13
1 1/2	1.9	48.3	2.25	57	1.5	38	1.12	29	0.62	16
2	2.38	60.3	3	76	2	51	1.38	35	0.83	21
2 1/2	2.88	73.0	3.75	95	2.5	64	1.75	44	1.04	26
3	3.5	88.9	4.5	114	3	76	2	51	1.24	32
3 1/2	4	101.6	5.25	133	3.5	89	2.25	57	1.45	37
4	4.5	114.3	6	152	4	102	2.5	64	1.66	42
5	5.56	141.3	7.5	190	5	127	3.12	79	2.07	53
6	6.62	168.3	9	229	6	152	3.75	95	2.50	63
8	8.62	219.1	12	305	8	203	5	127	3.31	84
10	10.75	273.0	15	381	10	254	6.25	159	4.14	105
12	12.75	323.8	18	457	12	305	7.5	190	4.97	126
14	14	355.6	21	533	14	356	8.75	222	5.80	147
16	16	406.4	24	610	16	406	10	254	6.63	168
18	18	457	27	686	18	457	11.25	286	7.46	189
20	20	508	30	762	20	508	12.5	318	8.28	210
22	22	559	33	838	22	559	13.5	343	9.11	232
24	24	610	36	914	24	610	15	381	9.94	253
26	26	660	39	991	26	660	16	405	10.77	274
28	28	711	42	1067	28	711	17.25	438	11.60	295
30	30	762	45	1143	30	762	18.5	470	12.43	316
32	32	813	48	1219	32	813	19.75	502	14.89	378
34	34	864	51	1295	34	864	21	533	14.08	358
36	36	914	54	1372	36	914	22.25	565	14.91	379
38	38	965	57	1448	38	965	23.62	600	15.74	400
40	40	1016	60	1524	40	1016	24.88	632	16.57	421
42	42	1067	63	1600	42	1067	26	660	17.40	442
44	44	1118	66	1676	44	1118	27.38	695	18.23	463
46	46	1168	69	1753	46	1168	28.62	727	19.05	484
48	48	1219	72	1829	48	1219	29.88	759	19.88	505

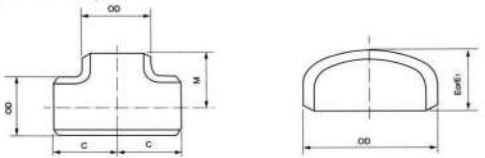
Wrought Steel Buttwelding Fittings(ASME-ASTM)
Long and Short Radius Returns



ASME-ASTM A234 WBP B16.9

Nominal pipe size(NPS)	Outside Diameter at bevel OD		Center-to-End				End-to-End			
			180 Returns O				180 Returns K			
			Long Radius		Short Radius		Long Radius		Short Radius	
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
1/2	0.84	21.3	3	76	-	-	1.88	48	-	-
3/4	1.05	26.7	2.25	57	-	-	1.69	43	-	-
1	1.32	33.4	3	76	2	51	2.19	56	1.62	41
1 1/4	1.66	42.2	3.75	95	2.5	64	2.75	70	2.06	52
1 1/2	1.9	48.3	4.5	114	3	76	3.25	83	2.44	62
2	2.38	60.3	6	152	4	102	4.19	106	3.19	81
2 1/2	2.88	73.0	7.5	190	5	127	5.19	132	3.94	100
3	3.5	88.9	9	229	6	152	6.25	159	4.75	121
3 1/2	4	101.6	10.5	267	7	178	7.25	184	5.5	140
4	4.5	114.3	12	305	8	203	8.25	210	6.25	159
5	5.56	141.3	15	381	10	254	10.31	262	7.75	197
6	6.62	168.3	18	457	12	305	12.31	313	9.31	237
8	8.62	219.1	24	610	16	406	16.31	414	12.31	313
10	10.75	273.0	30	762	20	508	20.38	518	15.38	391
12	12.75	323.8	36	914	24	610	24.38	619	18.38	467
14	14	355.6	42	1067	28	711	28	711	21	533
16	16	406.4	48	1219	32	813	32	813	24	610
18	18	457	54	1372	36	914	36	914	27	686
20	20	508	60	1524	40	1016	40	1016	30	762
22	22	559	66	1676	44	1118	44	1118	33	838
24	24	610	72	1829	48	1219	48	1219	36	914

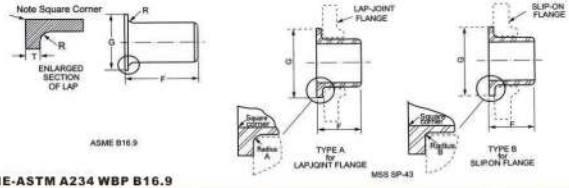
Wrought Steel Buttwelding Fittings(ASME-ASTM)
Straight Tees and Caps



ASME-ASTM A234 WBP B16.9

Nominal pipe size (NPS)	Outside Diameter at bevel OD		Center-to-End				End-to-End					
			Straight Tees				Caps					
			C		M(1)		Length(2) E		Limiting Wall Thickness for Length "E"		Length(3) E_1	
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
1/2	0.84	21.3	1	25	1	25	1	25	0.18	4.57	1	25
3/4	1.05	26.7	1.12	29	1.12	29	1	25	0.15	3.81	1	25
1	1.32	33.4	1.5	38	1.5	38	1.5	38	0.18	4.57	1.5	38
1 1/4	1.66	42.2	1.88	48	1.88	48	1.5	38	0.19	4.83	1.5	38
1 1/2	1.9	48.3	2.25	57	2.25	57	1.5	38	0.2	5.08	1.5	38
2	2.38	60.3	2.5	64	2.5	64	1.5	38	0.22	5.59	1.75	44
2 1/2	2.88	73.0	3	76	3	76	1.5	38	0.28	7.11	2	51
3	3.5	88.9	3.38	86	3.38	86	2	51	0.3	7.62	2.5	64
3 1/2	4	101.6	3.75	95	3.75	95	2.5	64	0.32	8.13	3	76
4	4.5	114.3	4.12	105	4.12	105	2.5	64	0.34	8.64	3	76
5	5.56	141.3	4.88	124	4.88	124	3	76	0.38	9.65	3.5	89
6	6.62	168.3	5.62	143	5.62	143	3.5	89	0.43	10.92	4	102
8	8.62	219.1	7	178	7	178	4	102	0.5	12.7	5	127
10	10.75	273.0	8.5	216	8.5	216	5	127	0.5	12.7	6	152
12	12.75	323.8	10	254	10	254	6	152	0.5	12.7	7	178
14	14	355.6	11	279	11	279	6.5	165	0.5	12.7	7.5	191
16	16	406.4	12	305	12	305	7	178	0.5	12.7	8	203
18	18	457.2	13.5	343	13.5	343	8	203	0.5	12.7	9	229
20	20	508	15	381	15	381	9	229	0.5	12.7	10	254
22	22	558.8	16.5	419	16.5	419	10	254	0.5	12.7	10	254
24	24	609.6	17	432	17	432	10.5	267	0.5	12.7	12	305
26	26	660.4	19.5	495	19.5	495	10.5	267	-	-	-	-
28	28	711.2	20.2	521	20.2	521	10.5	267	-	-	-	-
30	30	762	22	559	22	559	10.5	267	-	-	-	-
32	32	812.8	23.5	597	23.5	597	10.5	267	-	-	-	-
34	34	863.6	25	635	25	635	10.5	267	-	-	-	-
36	36	914.4	26.5	673	26.5	673	10.5	267	-	-	-	-
38	38	965.2	28	711	28	711	12	305	-	-	-	-
40	40	1016	29.5	749	29.5	749	12	305	-	-	-	-
42	42	1066.8	30	762	28	711	12	305	-	-	-	-
44	44	1117.6	32	813	30	762	13.5	343	-	-	-	-
46	46	1168.4	33.5	851	31.5	800	13.5	343	-	-	-	-
48	48	1219.2	35	889	33	838	13.5	343	-	-	-	-

Wrought Steel Buttwelding Fittings(ASME-ASTM)
Lap Joint Stub Ends

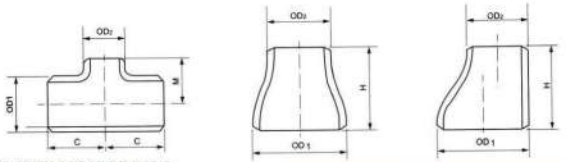


ASME-ASTM A234 WBP B16.9

Nominal pipe size(NPS)	Outside Diameter at bevel OD		Outside Diameter of barrel				Diameter of Lap G (Nominal & Max)	
			Max		Min			
	IN	MM	IN	MM	IN	MM	IN	MM
1/2	0.84	21.3	0.896	22.8	0.809	20.5	1.38	35
3/4	1.05	26.7	1.106	28.1	1.019	25.9	1.69	43
1	1.32	33.4	1.376	35	1.284	32.6	2	51
1 1/4	1.66	42.2	1.716	43.6	1.629	41.4	2.5	64
1 1/2	1.9	48.3	1.965	49.9	1.869	47.5	2.88	73
2	2.38	60.3	2.456	62.4	2.344	59.5	3.62	92
2 1/2	2.88	73.0	2.966	75.3	2.844	72.2	4.12	106
3	3.5	88.9	3.596	91.3	3.469	88.1	5	127
3 1/2	4	101.6	4.096	104	3.969	100.8	5.5	140
4	4.5	114.3	4.593	116.7	4.469	113.5	6.19	157
5	5.56	141.3	5.683	144.3	5.532	140.5	7.31	185
6	6.62	168.3	6.743	171.3	6.594	167.5	8.5	218
8	8.62	219.1	8.743	222.1	8.594	218.3	10.62	270
10	10.75	273.0	10.913	277.2	10.719	272.3	12.75	324
12	12.75	323.8	12.913	328	12.719	323.1	15	381
14	14	355.6	14.17	359.9	13.969	354.8	16.25	413
16	16	406.4	16.18	411	15.969	405.6	18.5	470
18	18	457	18.19	462	17.969	456	21	533
20	20	508	20.24	514	19.969	507	23	584
22	22	559	22.24	565	21.969	558	25.25	641
24	24	610	24.24	616	23.969	609	27.25	692

Nominal pipe size(NPS)	Length F				Radius R			
	ASME Long		ASME Short & MSS		MSS Type A & ASME (Nominal & Max)		MSS Type B (Max)	
	IN	MM	IN	MM	IN	MM	IN	MM
1/2	3	76	2	51	0.12	3	0.03	0.8
3/4	3	76	2	51	0.12	3	0.03	0.8
1	4	102	2	51	0.12	3	0.03	0.8
1 1/4	4	102	2	51	0.19	5	0.03	0.8
1 1/2	4	102	2	51	0.25	6	0.03	0.8
2	6	152	2.5	64	0.31	8	0.03	0.8
2 1/2	6	152	2.5	64	0.31	8	0.03	0.8
3	6	152	2.5	64	0.38	10	0.03	0.8
3 1/2	6	152	3	76	0.38	10	0.03	0.8
4	6	152	3	76	0.44	11	0.03	0.8
5	8	203	3	76	0.44	11	0.06	1.5
6	8	203	3.5	89	0.5	13	0.06	1.5
8	8	203	4	102	0.5	13	0.06	1.5
10	10	254	5	127	0.5	13	0.06	1.5
12	10	254	6	152	0.5	13	0.06	1.5
14	12	305	6	152	0.5	13	0.06	1.5
16	12	305	6	152	0.5	13	0.06	1.5
18	12	305	6	152	0.5	13	0.06	1.5
20	12	305	6	152	0.5	13	0.06	1.5
22	12	305	6	152	0.5	13	0.06	1.5
24	12	305	6	152	0.5	13	0.06	1.5

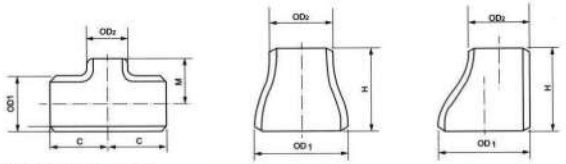
Wrought Steel Buttwelding Fittings (ASME-ASTM)
Reducing Tees and Concentric & Eccentric Reducers



ASME-ASTM A234 WBP B16.9

Nominal pipe size(NPS)	Outside Diameter at Bevel				Center-to-End				End-to-End	
	OD1		OD2		C		M		H	
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
1/2×1/4	1.05	26.7	0.84	21.3	1.12	29	1.12	29	1.5	38
1×1/2	1.32	33.4	1.05	26.7	1.5	38	1.5	38	2	51
1×1/4	1.32	33.4	0.84	21.3	1.5	38	1.5	38	2	51
1 1/4×1	1.66	42.2	1.32	33.4	1.88	48	1.88	48	2	51
1 1/4×1/2	1.66	42.2	1.05	26.7	1.88	48	1.88	48	2	51
1 1/4×1/4	1.66	42.2	0.84	21.3	1.88	48	1.88	48	2	51
1 1/2×1 1/4	1.9	48.3	1.66	42.2	2.25	57	2.25	57	2.5	64
1 1/2×1	1.9	48.3	1.32	33.4	2.25	57	2.25	57	2.5	64
1 1/2×1/2	1.9	48.3	1.05	26.7	2.25	57	2.25	57	2.5	64
1 1/2×1/4	1.9	48.3	0.84	21.3	2.25	57	2.25	57	2.5	64
2×1 1/2	2.38	60.3	1.9	48.3	2.5	64	2.38	60	3	76
2×1 1/4	2.38	60.3	1.66	42.2	2.5	64	2.25	57	3	76
2×1	2.38	60.3	1.32	33.4	2.5	64	2	51	3	76
2×1/2	2.38	60.3	1.05	26.7	2.5	64	1.75	44	3	76
2×1/4	2.38	60.3	0.84	21.3	2.5	64	-	-	3	76
2 1/2×2	2.88	73	2.38	60.3	3	76	2.75	70	3.5	89
2 1/2×1 1/2	2.88	73	1.9	48.3	3	76	2.62	67	3.5	89
2 1/2×1 1/4	2.88	73	1.66	42.2	3	76	2.5	64	3.5	89
2 1/2×1	2.88	73	1.32	33.4	3	76	2.25	57	3.5	89
2 1/2×1/2	2.88	73	1.05	26.7	3	76	-	-	3.5	89
2 1/2×1/4	2.88	73	0.84	21.3	3	76	-	-	3.5	89
3×2 1/2	3.5	88.9	2.88	73	3.38	86	3.25	83	3.5	89
3×2	3.5	88.9	2.38	60.3	3.38	86	3	76	3.5	89
3×1 1/2	3.5	88.9	1.9	48.3	3.38	86	2.88	73	3.5	89
3×1 1/4	3.5	88.9	1.66	42.2	3.38	86	2.75	70	3.5	89
3×1	3.5	88.9	1.32	33.4	3.38	86	-	-	3.5	89
3×1/2	3.5	88.9	1.05	26.7	3.38	86	-	-	3.5	89
3×1/4	3.5	88.9	0.84	21.3	3.38	86	-	-	3.5	89
3 1/2×3	4	101.6	3.5	88.9	3.75	95	3.62	92	4	102
3 1/2×2 1/2	4	101.6	2.88	73	3.75	95	3.5	89	4	102
3 1/2×2	4	101.6	2.38	60.3	3.75	95	3.25	83	4	102
3 1/2×1 1/2	4	101.6	1.9	48.3	3.75	95	3.12	79	4	102
3 1/2×1 1/4	4	101.6	1.66	42.2	3.75	95	-	-	4	102
4×3 1/2	4.5	114.3	4	101.6	4.12	105	4	102	4	102
4×3	4.5	114.3	3.5	88.9	4.12	105	3.88	98	4	102
4×2 1/2	4.5	114.3	2.88	73	4.12	105	3.75	95	4	102
4×2	4.5	114.3	2.38	60.3	4.12	105	3.5	89	4	102
4×1 1/2	4.5	114.3	1.9	48.3	4.12	105	3.38	86	4	102
4×1 1/4	4.5	114.3	1.66	42.2	4.12	105	-	-	4	102
4×1	4.5	114.3	1.32	33.4	4.12	105	-	-	4	102

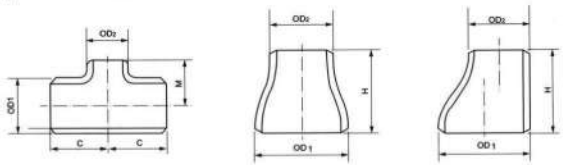
Wrought Steel Buttwelding Fittings(ASME-ASTM)
Reducing Tees and Concentric & Eccentric Reducers



ASME-ASTM A234 WBP B16.9

Nominal pipe size(NPS)	Outside Diameter at Bevel				Center-to-End				End-to-End	
	OD1		OD2		C		M(1)		H	
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
5×4	5.56	141.3	4.5	114.3	4.88	124	4.62	117	5	127
5×3 1/2	5.56	141.3	4	101.6	4.88	124	4.5	114	5	127
5×3	5.56	141.3	3.5	88.9	4.88	124	4.38	111	5	127
5×2 1/2	5.56	141.3	2.88	73	4.88	124	4.25	108	5	127
5×2	5.56	141.3	2.38	60.3	4.88	124	4.12	105	5	127
5×1 1/2	5.56	141.3	1.9	48.3	4.88	124	*	*	5	127
5×1 1/4	5.56	141.3	1.66	42.2	4.88	124	*	*	5	127
6×5	6.62	168.3	4.56	141.3	5.62	143	5.38	137	5.5	140
6×4	6.62	168.3	4.5	114.3	5.62	143	5.12	130	5.5	140
6×3 1/2	6.62	168.3	4	101.6	5.62	143	5	127	5.5	140
6×3	6.62	168.3	3.5	88.9	5.62	143	4.88	124	5.5	140
6×2 1/2	6.62	168.3	2.88	73	5.62	143	4.75	121	5.5	140
6×2	6.62	168.3	2.38	60.3	5.62	143	*	*	5.5	140
8×6	8.62	219.1	6.62	168.3	7	178	6.62	168	6	152
8×5	8.62	219.1	5.56	141.3	7	178	6.38	162	6	152
8×4	8.62	219.1	4.5	114.3	7	178	6.12	156	6	152
8×3 1/2	8.62	219.1	4	101.6	7	178	6	152	6	152
8×3	8.62	219.1	3.5	88.9	7	178	*	*	6	152
10×8	10.75	273	8.62	219.1	8.5	216	8	203	7	178
10×6	10.75	273	6.62	168.3	8.5	216	7.62	194	7	178
10×5	10.75	273	5.56	141.3	8.5	216	7.5	191	7	178
10×4	10.75	273	4.5	114.3	8.5	216	7.25	184	7	178
10×3	10.75	273	3.5	88.9	8.5	216	*	*	7	178
12×10	12.75	323.8	10.75	273	10	254	9.5	241	8	203
12×8	12.75	323.8	8.62	219.1	10	254	9	229	8	203
12×6	12.75	323.8	6.62	168.3	10	254	8.62	219	8	203
12×5	12.75	323.8	5.56	141.3	10	254	8.5	216	8	203
12×4	12.75	323.8	4.5	114.3	10	254	*	*	8	203
14×12	14	355.6	12.75	323.8	11	279	10.62	270	13	330
14×10	14	355.6	10.75	273	11	279	10.12	257	13	330
14×8	14	355.6	8.62	219.1	11	279	9.75	248	13	330
14×6	14	355.6	6.62	168.3	11	279	9.38	238	13	330
14×5	14	355.6	5.56	141.3	11	279	*	*	13	330
16×14	16	406.4	14	355.6	12	305	12	305	14	356
16×12	16	406.4	12.75	323.8	12	305	11.62	295	14	356
16×10	16	406.4	10.75	273	12	305	11.12	283	14	356
16×8	16	406.4	8.62	219.1	12	305	10.75	273	14	356
16×6	16	406.4	6.62	168.3	12	305	10.38	264	14	356
18×16	18	457	16	406.4	13.5	343	13	330	15	381

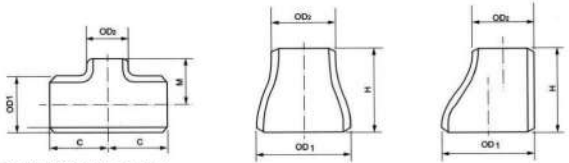
Wrought Steel Buttwelding Fittings(ASME-ASTM)
Reducing Tees and Concentric & Eccentric Reducers



ASME-ASTM A234 WBP B16.9

Nominal pipe size (NPS)	Outside Diameter at Bevel				Center-to-End				End-to-End	
	OD1		OD2		C		M(1)		H	
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
18×14	18	457	14	355.6	13.5	343	13	330	15	381
18×12	18	457	12.75	323.8	13.5	343	12.62	321	15	381
18×10	18	457	10.75	273	13.5	343	12.12	308	15	381
18×8	18	457	8.62	219.1	13.5	343	11.75	298	15	381
20×18	20	508	18	457.2	15	381	14.5	368	20	508
20×16	20	508	16	406.4	15	381	14	356	20	508
20×14	20	508	14	355.6	15	381	14	356	20	508
20×12	20	508	12.75	323.8	15	381	13.62	346	20	508
20×10	20	508	10.75	273	15	381	13.12	333	20	508
20×8	20	508	8.62	219.1	15	381	12.75	324	20	508
22×20	22	559	20	508	16.5	419	16	406	20	508
22×18	22	559	18	457.2	16.5	419	15.5	394	20	508
22×16	22	559	16	406.4	16.5	419	15	381	20	508
22×14	22	559	14	355.6	16.5	419	15	381	20	508
22×12	22	559	12.75	323.8	16.5	419	14.62	371	20	508
22×10	22	559	10.75	273	16.5	419	14.12	359	20	508
24×22	24	610	22	558.8	17	432	17	432	20	508
24×20	24	610	20	508	17	432	17	432	20	508
24×18	24	610	18	457.2	17	432	16.5	419	20	508
24×16	24	610	16	406.4	17	432	16	406	20	508
24×14	24	610	14	355.6	17	432	16	406	20	508
24×12	24	610	12.75	323.8	17	432	15.62	397	20	508
24×10	24	610	10.75	273	17	432	15.12	384	20	508
26×24	26	660	24	609.6	19.5	495	19	483	24	610
26×22	26	660	22	558.6	19.5	495	18.5	470	24	610
26×20	26	660	20	508	19.5	495	18	457	24	610
26×18	26	660	18	457.2	19.5	495	17.5	444	24	610
26×16	26	660	16	406.4	19.5	495	17	432	24	610
26×14	26	660	14	355.6	19.5	495	17	432	24	610
26×12	26	660	12.75	323.8	19.5	495	16.62	422	24	610
28×26	28	711	26	660.4	20.5	52	20.5	521	24	610
28×24	28	711	24	609.6	20.5	152	20	508	24	610
28×22	28	711	22	558.8	20.5	152	19.5	495	24	610
28×20	28	711	20	508	20.5	1521	19	483	24	610
28×18	28	711	18	457.2	20.5	521	18.5	470	24	610
28×16	28	711	16	406.4	20.5	521	18	457	24	610
28×14	28	711	14	355.6	20.5	521	18	457	24	610
28×12	28	711	12.75	323.8	20.5	521	17.62	448	24	610
30×28	30	762	28	711.2	22	559	21.5	546	24	610

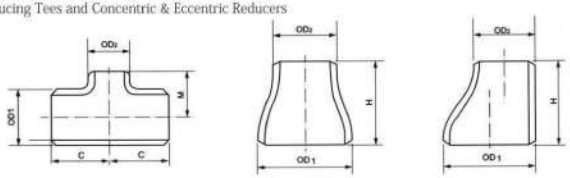
Wrought Steel Buttwelding Fittings(ASME-ASTM)
Reducing Tees and Concentric & Eccentric Reducers



ASME-ASTM A234 WBP B16.9

Nominal pipe size(NPS)	Outside Diameter at Bevel				Center-to-End				End-to-End	
	OD1		OD2		C		M(1)		H	
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
30×26	30	762	26	660.4	22	559	21.5	546	24	610
30×24	30	762	24	609.6	22	559	21	533	24	610
30×22	30	762	22	558.8	22	559	20.5	521	24	610
30×20	30	762	20	508	22	559	20	508	24	610
30×18	30	762	18	457.2	22	559	19.5	495	24	610
30×16	30	762	16	406.4	22	559	19	483	24	610
30×14	30	762	14	355.6	22	559	19	483	24	610
30×12	30	762	12.75	323.8	22	559	18.62	473	24	610
30×10	30	762	10.75	273	22	559	18.12	460	24	610
32×30	32	813	30	762	23.5	597	23	584	24	610
32×28	32	813	28	711.2	23.5	597	22.5	572	24	610
32×26	32	813	26	660.4	23.5	597	22.5	572	24	610
32×24	32	813	24	609.6	23.5	597	22	559	24	610
32×22	32	813	22	558.8	23.5	597	21.5	546	24	610
32×20	32	813	20	508	23.5	597	21	533	24	610
32×18	32	813	18	457.2	23.5	597	20.5	521	24	610
32×16	32	813	16	406.4	23.5	597	20	508	24	610
32×14	32	813	14	355.6	23.5	597	20	508	24	610
34×32	34	864	32	812.8	25	635	24.5	622	24	610
34×30	34	864	30	762	25	635	24	610	24	610
34×28	34	864	28	711.2	25	635	23.5	597	24	610
34×26	34	864	26	660.4	25	635	23.5	597	24	610
34×24	34	864	24	609.6	25	635	23	584	24	610
34×22	34	864	22	558.8	25	635	22.5	572	24	610
34×20	34	864	20	508	25	635	22	559	24	610
34×18	34	864	18	457.2	25	635	21.5	546	24	610
34×16	34	864	16	406.4	25	635	21	533	24	610
36×34	36	914	34	863.6	26.5	673	26	660	24	610
36×32	36	914	32	812.8	26.5	673	25.5	648	24	610
36×30	36	914	30	762	26.5	673	25	635	24	610
36×28	36	914	28	711.2	26.5	673	24.5	622	24	610
36×26	36	914	26	660.4	26.5	673	24.5	622	24	610
36×24	36	914	24	609.6	26.5	673	24	610	24	610
36×22	36	914	22	558.8	26.5	673	23.5	597	24	610
36×20	36	914	20	508	26.5	673	23	584	24	610
36×18	36	914	18	457.2	26.5	673	22.5	572	24	610
36×16	36	914	16	406.4	26.5	673	22	559	24	610
38×36	38	965	36	914.4	28	711	28	711	24	610
38×34	38	965	34	863.6	28	711	27.5	698	24	610

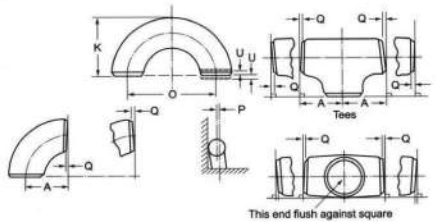
Wrought Steel Buttwelding Fittings(ASME-ASTM)
Reducing Tees and Concentric & Eccentric Reducers



ASME-ASTM A234 WBP B16.9

Nominal pipe size(NPS)	Outside Diameter at Bevel				Center-to-End				End-to-End	
	OD1		OD2		C		M(1)		H	
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
38×32	38	965	32	812.8	28	711	27	686	24	610
38×30	38	965	30	762	28	711	26.5	673	24	610
38×28	38	965	28	711.2	28	711	25.5	648	24	610
38×26	38	965	26	660.4	28	711	25.5	648	24	610
38×24	38	965	24	609.6	28	711	25	635	24	610
38×22	38	965	22	558.8	28	711	24.5	622	24	610
38×20	38	965	20	508	28	711	24	610	24	610
38×18	38	965	18	457.2	28	711	23.5	597	24	610
40×38	40	1016	38	965.2	29.5	749	29.5	749	24	610
40×36	40	1016	36	914.4	29.5	749	29	737	24	610
40×34	40	1016	34	863.6	29.5	749	28.5	724	24	610
40×32	40	1016	32	812.8	29.5	749	28	711	24	610
40×30	40	1016	30	762	29.5	749	27.5	698	24	610
40×28	40	1016	28	711.2	29.5	749	26.5	673	24	610
40×26	40	1016	26	660.4	29.5	749	26.5	673	24	610
40×24	40	1016	24	609.6	29.5	749	26	660	24	610
40×22	40	1016	22	558.8	29.5	749	25.5	648	24	610
40×20	40	1016	20	508	29.5	749	25	635	24	610
40×18	40	1016	18	457.2	29.5	749	24.5	622	24	610
42×40	42	1067	40	1016	30	762	28	711	24	610
42×38	42	1067	38	965.2	30	762	28	711	24	610
42×36	42	1067	36	914.4	30	762	28	711	24	610
42×34	42	1067	34	863.6	30	762	28	711	24	610
42×32	42	1067	32	812.8	30	762	28	711	24	610
42×30	42	1067	30	762	30	762	28	711	24	610
42×28	42	1067	28	711.2	30	762	27.5	698	24	610
42×26	42	1067	26	660.4	30	762	27.5	698	24	610
42×24	42	1067	24	609.6	30	762	26	660	24	610
42×22	42	1067	22	558.8	30	762	26	660	24	610
42×20	42	1067	20	508	30	762	26	660	24	610
42×18	42	1067	18	457.2	30	762	25.5	648	24	610
42×16	42	1067	16	406.4	30	762	25	635	24	610
44×42	44	1118	42	1066.8	32	813	30	762	24	610
44×40	44	1118	40	1016	32	813	29.5	749	24	610
44×38	44	1118	38	965.2	32	813	29	737	24	610
44×36	44	1118	36	914.4	32	813	28.5	724	24	610
44×34	44	1118	34	863.6	32	813	28.5	724	24	610
44×32	44	1118	32	812.8	32	813	28	711	24	610
44×30	44	1118	30	762	32	813	28	711	24	610

Dimensional Tolerances(ASME)



ASME B16.9, B16.28

Pipe Size	All Fittings					90° & 45° Elbows and Tees		Reducers and Lap Joint Stub ends		Caps	
	Outside Diameter at Bevel,D(1)		Inside Diameter at End (1)		Wall Thickness t	Center-to-End Dimensions A,B,C,M		Overall Length, F,H		Overall Length,E	
	IN	MM	IN	MM		IN	MM	IN	MM	IN	MM
1/2-2 1/2	+0.06 -0.03	+1.6 -0.8	±0.03	±0.8	Not Less Than 87.5% of Nominal Thickness	±0.06	±2	±0.06	±2	±0.12	±3
3-3 1/2 4	±0.06	±1.6	±0.06	±1.6						±0.25	±6
5-8	+0.09 -0.06	+2.4 -1.6				±0.09		±0.09			
10-18	+0.16 -0.12	+4.0 -3.2	±0.12	±3.2							
20-24 26-30 32-48	+0.25 -0.19	+6.4 -4.8	±0.19	±4.8		±0.12	±3	±0.19	±5	±0.38	±10
						±0.19	±5				

Pipe Size	Lap Joint Stub Ends (2)						180 Return Bends					
	Outside Diameter of Lap,G		Lap Thickness		Fillet Radius of Lap,R		Center-to-Center Dimension,O		Back-to-Face Dimension,K		Alignment of Ends,U	
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
1/2-2 1/2	+0 -0.03	+0 -1	+0.06 -0	+1.6 -0	+0 -0.03	+0 -1	±0.25	±6	±0.25	±6	0.03	±1
3-3 1/2 4												
5-8					+0 -0.06	+0 -2						
10-18	+0 -0.06	+0 -2	+0.12 -0	+3.2 -0			±0.38	±10			±0.06	±2
20-24												

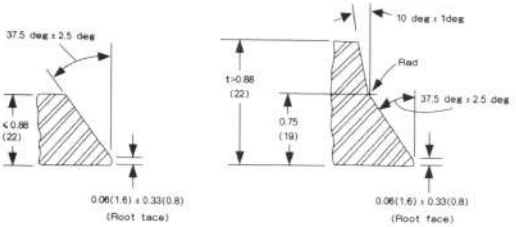
Pipe Size	Off Angle,Q		Off Plane,P	
	IN	MM	IN	MM
1/2-4	±0.03	±1	±0.06	±2
5-8	±0.06	±2	±0.12	±4
10-12	±0.09		±0.19	±5
14-16		±3	±0.25	±6
18-24	±0.12	±4	±0.38	±10
26-30	±0.19	±5		
32-42			±0.50	±13
44-48			±0.75	±19

NOTES:
(1)Out-of-round is the sum of absolute values of plus and minus tolerances.
(2)Outside diameter of barrel see the table on page 14.

美标管件端面坡口

End slope of America standard pipe fittings

ASME B16.9-1993
ASME B16.26-1994



Nominal Wall Thickness t	End Preparation
Less than x [Note(1)]	Cut square or slightly chamfer, at menufacture's option.
x to 0.88 incl. (22) [Note (1)]	Plain bevel as in sketch (a) above.
More than 0.88 (22)	Comgound bevel as in sketch (b) above.

GENERAL NOTES:
(a) See ASME B16.25 for trnsitions from bevel and root face into body of fitting and backing ring preparations.
(b) Dimensions in parentheses are in millimeters.

NOTE:
(1) x =0.19(5) for carbon steel or ferritic alloy steel and 0.12(3) for austenitic alloy steel

FIG. 1 WELDING BEVEL AND ROOT FACE FOR FITTING
(Without Backing Ring, or With Split Backing Ring)