

OUR ACHIEVEMENT WOULD BE A NEW HISTORY OF PIPE FITTINGS

STEEL BUTT-WELDING PIPE FITTINGS



EXPERT COMPANY in PIPE FITTINGS

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We will astonish you with our products.

- 임직원 모두가 한가족처럼 사랑하며 성실히 일하는 기업
- 배관용 관 이음쇠의 새 역사
- 관 이음쇠 시장의 새로운 리더
- The enterprise operated by all staff and members who love the job with close personal relationship each others
- The new history of piping Joints has been started by Hanwool Steel
- We are the marketing leader as concern of pipe fittings
- Công ty chúng tôi hoạt động với đội ngũ thành viên là những nhân viên yêu nghề luôn gắn bó và đoàn kết cùng nhau.
- Một trang sử mới của ngành Ống Nối đã được bắt đầu tại Công ty Hanwool Steel
- Chúng tôi là những người đi tiên phong trong việc tiếp cận thị trường sản phẩm Ống Nối

CEO Message



배관용 관 이음쇠 분야의 새 역사를

안녕하십니까?

변함없이 (주)한울스틸을 아껴주시고 관심을 가져 주시는 고객 여러분께 감사드립니다. 우리는 그동안 치열한 기술 전쟁을 치르면서 초일류 기술이 아니면 살아남을 수 없다는 냉엄한 현실을 겪어 왔습니다.

그러한 초일류 기업으로 나아가는 우리의 앞 길은 매우 험난한 여정이 될 것입니다.

그러나 진정한 일류 기업은 고난 속에서 꽃을 피워야 그 빛이 더욱 빛날 것입니다. 끊임없는 기술개발과 인재 양성으로 어려운 현실을 이겨내고 나아가 세계 관 이음쇠 시장을 리드하는 초일류 기업으로 성장할 수 있도록 저희 임직원 모두는 최선을 다할 것입니다. 또한 어떠한 어려움이 닥쳐도 흔들림 없이 도전하며, 뜨거운 정열과 활력이 넘치는 미래 지향적인 기업으로 만들어 나가겠습니다.

(주)한울스틸은 배관용 관 이음쇠를 전문으로 생산하는 회사입니다.

앞으로도 고객 중심의 고품질 제품을 계속해서 공급해 나갈 것이며 급격하게 변해가는 세계시장 속에서 관 이음쇠 분야의 새로운 역사를 써 나갈 것입니다.

감사합니다.

주식회사 한울스틸
대표이사 **최혁재**

OUR ACHIEVEMENT WOULD BE
A NEW HISTORY OF PIPE FITTINGS

Dear Sirs,

First of all, we would like to express our great thankfulness for your kind attention to our company and products. We have recently recognized that the only firms who have the hi-technology can be survived through the keen of competition in the world. Already we have known how difficult to become the best enterprise by overcoming the hardest situation. From the beginning, we have not only invested all of our material facilities for technical research and development but also human resources to be the best manufacturer of pipe fittings.

We – Hanwool Steel Co., Ltd – have confidence in ourselves to be the top manufacturer of pipe fittings in the world with energized spirit of challenge so that we can satisfy all of the customers.

We shall accommodate you with the high quality of pipe fittings and keep our continuous effort to develop new products and expand the markets in order to meet all of your requirements.

Best regards,

CEO of Hanwool Steel **Choi. Hyuk Jae**

THÀNH TỰU CHÚNG TÔI ĐẠT ĐƯỢC SẼ LÀ 1
BƯỚC MỐI TRONG NGÀNH SẢN XUẤT PHỤ
KIỆN LẮP ỐNG NỐI

Kính thưa Quý khách hàng,

Chúng tôi rất cảm ơn sự quan tâm của Quý vị đến những sản phẩm của Công ty chúng tôi. Chúng tôi nhận thấy rằng chỉ những nhà chế tạo với công nghệ hiện đại mới có thể tồn tại trong bối cảnh kinh tế thế giới cạnh tranh như hiện nay. Chúng tôi cũng nhận thấy những khó khăn và luôn nỗ lực vượt qua để trở thành một công ty tốt nhất.

Ngay từ khi bắt đầu, chúng tôi không những đầu tư cơ sở vật chất cho việc nghiên cứu phát triển kỹ thuật mà chúng tôi còn đầu tư nguồn nhân lực cho nhà máy chế tạo Ống nối. Chúng tôi - Công ty TNHH Thép Hanwool - tự tin là nhà sản xuất Ống nối hàng đầu thế giới với nghị lực mạnh mẽ vượt qua thử thách để thỏa mãn mọi yêu cầu của khách hàng. Chúng tôi luôn cung ứng các sản phẩm Ống nối chất lượng cao; luôn nỗ lực phát triển các sản phẩm mới và phát triển thị phần nhằm đáp ứng mọi yêu cầu của Quý vị.

Trân trọng kính chào.

Giám Đốc Điều Hành của Hanwool Steel **Choi. Hyuk Jae**

Quality Management

ISO International Organization for Standardization

- **인 증 기 관** : 한국건설품질인증원
- **인 증 범 위** : 일반 배관용 및 배관용 강제 맞대기 용접식 관 이음쇠의 생산 및 서비스
- **인증취득일** : 2008년 8월 25일
- **Official Certificate Authority** : Korea Institute of Construction Materials-Quality Assurance : KICM-QA
- **Certification Scope** : Production and service of steel butt-welding pipe fittings for ordinary and special use
- **Date of Authentication Acquisition** : 25 August 2008
- **Giấy chứng nhận chính thức** : Viện Nghiên Cứu Vật Liệu Xây Dựng Hàn Quốc
- **Chứng nhận hoạt động trong ngành** : Sản xuất và gia công Ống co thép phục vụ cho việc sử dụng thông thường và đặc biệt
- **Ngày chứng nhận** : Ngày 25 tháng 8 năm 2008



STEEL BUTT-WELDING PIPE FITTINGS

KS Korea Industrial Standard

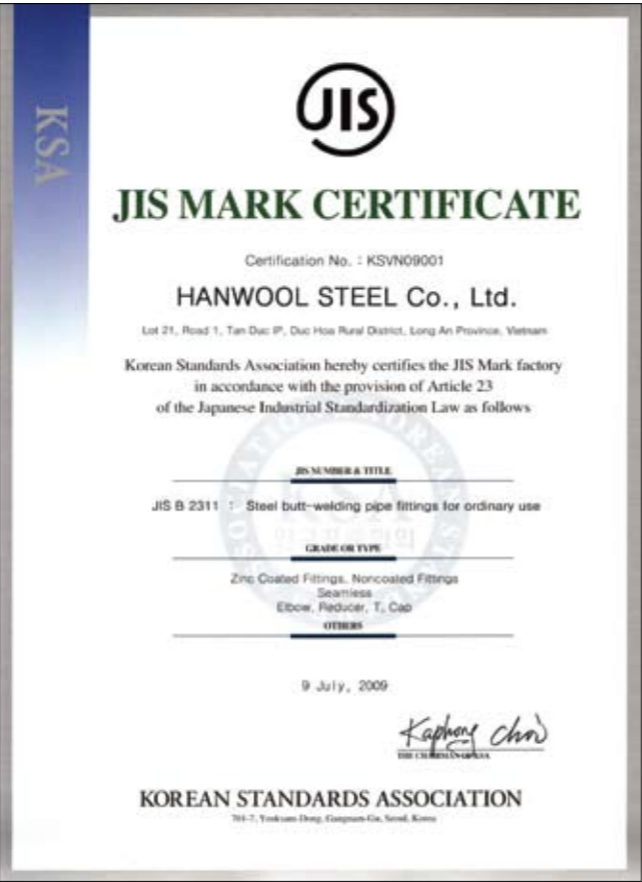
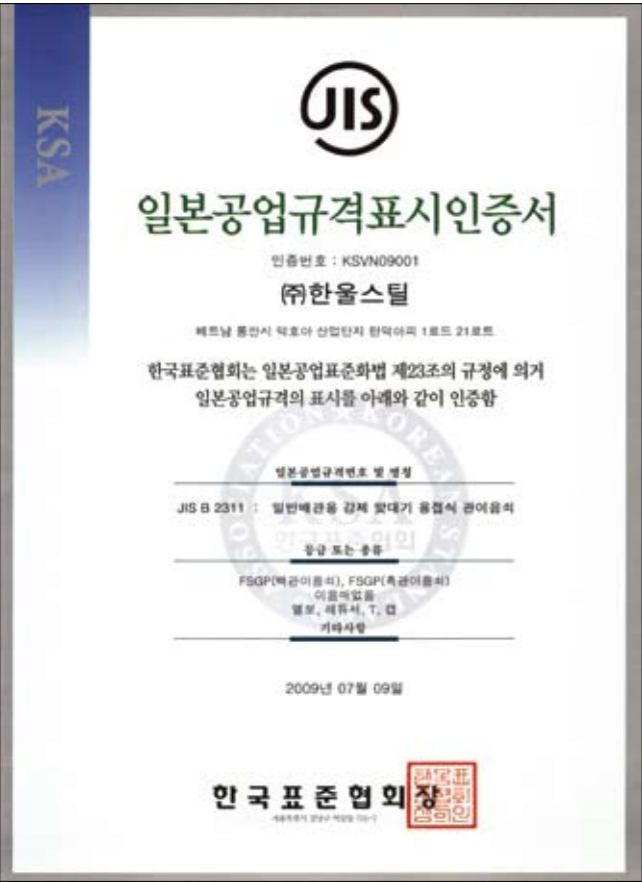
- **인 증 기 관** : 한국표준협회
- **인 증 범 위** : 일반 배관 및 연료가스 배관용 강제 맞대기 용접식 관 이음쇠
- **인증취득일** : 2009년 5월 20일
- **Official Certificate Authority** : Korea Standards Association
- **Certification Scope** : Steel butt-welding pipe fittings for ordinary use and fuel gas
- **Date of Authentication Acquisition** : 20 May 2009
- **Giấy chứng nhận chính thức** : Tiêu chuẩn công nghệ Hàn Quốc
- **Chứng nhận hoạt động trong ngành** : Ống thép nối sử dụng trong lĩnh vực thông thường và nhiên liệu, khí đốt
- **Ngày chứng nhận** : Ngày 20 tháng 5 năm 2009



Quality Management

JIS Japan Industrial Standard

- **인 증 기 관** : 한국표준협회
- **인 증 범 위** : 일반 배관 및 연료가스 배관용 강제 맞대기 용접식 관 이음쇠
- **인증취득일** : 2009년 7월 9일
- **Official Certificate Authority** : Korea Standards Association
- **Certification Scope** : Steel butt-welding pipe fittings for ordinary use and fuel gas
- **Date of Authentication Acquisition** : 9 July 2009
- **Giấy chứng nhận chính thức** : Tiêu chuẩn công nghệ Hàn Quốc
- **Chứng nhận hoạt động trong ngành** : Ống thép nối sử dụng trong lĩnh vực thông thường và nhiên liệu, khí đốt
- **Ngày chứng nhận** : Ngày 9 tháng 7 năm 2009



Main Products 주요생산품목 Sản phẩm chính



Stainless Steel Butt-Welding Pipe Fittings
스테인레스 용접용 관 이음쇠 Ống thép nối không rỉ

한울스틸에서 생산하는 모든 파이프 관 이음쇠는 KS/ JIS/ ANSI/ ASTM/ BS/ DIN 규격의 용접용 관 이음쇠 규격에 따르고 있습니다.

- **재질** : 스테인레스 강관 (Sch10S, Sch20S, Sch40S)
- **구분** : STS304, STS304L, STS316L
- **치수** : 15A ~ 500A

All products from Hanwool Steel are manufactured in accordance with KS/ JIS/ ANSI/ ASTM/ BS/ DIN standards.

- **Material** : Stainless Steel Pipes (Sch10S, Sch20S, Sch40S)
- **Class** : Sus304, Sus304L, Sus316L
- **Size** : 15A ~ 500A

Tất cả các sản phẩm của Hanwool Steel đều sản xuất theo tiêu chuẩn KS/ JIS/ ANSI/ ASTM/ BS/ DIN

- **Nguyên liệu** : Ống thép nối không rỉ (Sch10S, Sch20S, Sch40S)
- **Loại** : Sus304, Sus304L, Sus316L
- **Kích thước** : 15A ~ 500A

Main Products 주요생산품목 Sản phẩm chính



Steel Butt-Welding Pipe Fittings
용접용 관 이음쇠 Ống thép nối

한울스틸에서 생산하는 모든 파이프 관 이음쇠는 KS/ JIS/ ANSI/ ASTM/ BS/ DIN 규격의 용접용 관 이음쇠 규격에 따르고 있습니다.

- 재질 : 카본스틸 강관 (SPP/SGP, Sch40S)
- 도색 : 흑, 백
- 치수 : 15A ~ 500A

All products from Hanwool Steel are manufactured in accordance with KS/ JIS/ ANSI/ ASTM/ BS/ DIN standards.

- Material : Carbon Steel Pipes (SPP/SGP, Sch40S)
- Coating way : Black, Galvanizing
- Size : 15A ~ 500A

Tất cả các sản phẩm của Hanwool Steel đều sản xuất theo tiêu chuẩn KS/ JIS/ ANSI/ ASTM/ BS/ DIN

- Nguyên liệu : Ống thép carbon (SPP/SGP, Sch40S)
- Phương pháp phủ : Đen, mạ kẽm
- Kích thước : 15A ~ 500A

STEEL BUTT-WELDING PIPE FITTINGS



Stainless Press Fittings HW조인트 Ống thép nối không rỉ

한울스틸은 지속적인 연구개발을 통하여 신제품을 개발함으로써 종합배관System 회사로서의 발전을 거듭하고 있습니다.
스테인레스 압착식 조인트는 한울스틸의 오랜 노하우로 기존의 동종 제품 이상의 품질로 사용자 에게 제공될 것입니다.

Hanwool Steel Co., Ltd is still improving as a best manufacturer for general pipe system products with hi technical research and development.
All of our customers will be provided our Joints of Stainless press which is contended our special knowledge and experience with more hi quality.

Hanwool Steel Co., Ltd sẽ không ngừng cải tiến công nghệ để là nhà sản xuất các sản phẩm thông dụng trong lĩnh vực đường ống với kỹ thuật cao.
Chúng tôi sẽ cung cấp cho khách hàng các Ống thép nối không rỉ có chất lượng cao qua hệ thống ép dập đặc biệt với những kiến thức và kinh nghiệm của chúng tôi.

Flange 플랜지 Mặt bích

플랜지는 충분한 강도를 보장하고 누수를 방지하기 위해 사용되고 있는 제품입니다. 사용자들은 비용이나 기능에 따라 여러 형태의 플랜지를 선택하며 당사는 이런 기호 에 맞춰 여러가지 형태의 제품을 최고의 품질로 공급 하고 있습니다.

Flange is a product which protects water from leaking out with high strength. The user may choose the useful flange upon the requirements and the budget.
We are available to supply the best quality products for your purpose.

Mặt bích là sản phẩm có độ chính xác tuyệt đối ngăn không cho nước rò rỉ. Khách hàng có thể lựa chọn nhiều chủng loại tùy theo yêu cầu và khả năng tài chính. Chúng tôi cung cấp các loại sản phẩm với chất lượng tốt nhất theo mục đích của quý khách.



Products Information

STEEL BUTT-WELDING PIPE FITTINGS



Products Information

STEEL BUTT-WELDING PIPE FITTINGS

- 90° / 45° Elbow (SPP/SGP)
- 180° Elbow (SPP/SGP)
- Tee (SPP/SGP)
- Reducer (SPP/SGP)
- 90° / 45° Elbow (Sch40S, Sch80S, Sch120S, Sch160S)
- 180° Elbow / Cap (Sch40S, Sch80S, Sch120S, Sch160S)
- Tee (Sch40S, Sch80S, Sch120S, Sch160S)
- Reducer (Sch40S, Sch80S, Sch160S)
- Reducer (Sch40S, Sch80S, Sch120S, Sch160S)

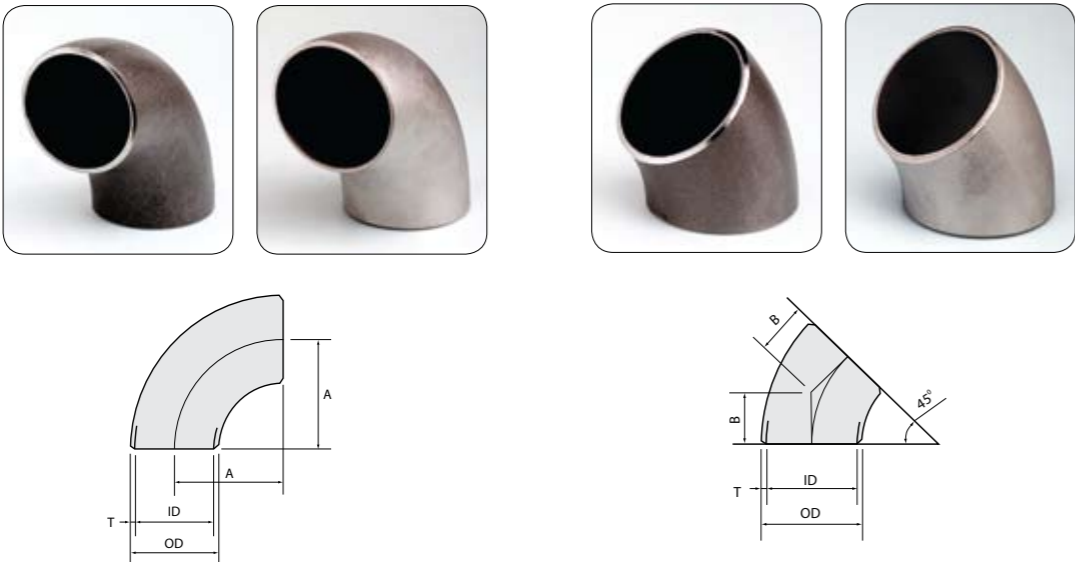
Steel Butt-Welding Pipe Fittings

90° Elbow (Long, Short) / 45° Elbow (Long)

SPP/SGP

Cúc (dài, ngắn) / Chếch (dài)

SPP/SGP



KS B 1522, JIS B 2311

Unit : mm

Nominal Pipe Size	Outside Diameter OD	Inside Diameter ID	Wall Thickness T	Long		Short
				90°	45°	90°
				A	B	A
15	21.7	16.1	2.8	38.1	15.8	-
20	27.2	21.6	2.8	38.1	15.8	-
25	34.0	27.6	3.2	38.1	15.8	25.4
32	42.7	35.7	3.5	47.6	19.7	31.8
40	48.6	41.6	3.5	57.2	23.7	38.1
50	60.5	52.9	3.8	76.2	31.6	50.8
65	76.3	67.9	4.2	95.3	39.5	63.5
80	89.1	80.7	4.2	114.3	47.3	76.2
90	101.6	93.2	4.2	133.4	55.3	88.9
100	114.3	105.3	4.5	152.4	63.1	101.6
125	139.8	130.8	4.5	190.5	78.9	127.0
150	165.2	155.2	5.0	228.6	94.7	152.4
200	216.3	204.7	5.8	304.8	126.3	203.2
250	267.4	254.2	6.6	381.0	157.8	254.0
300	318.5	304.7	6.9	457.2	189.4	304.8
350	355.6	339.8	7.9	533.4	220.9	355.6
400	406.4	390.6	7.9	609.6	252.5	406.4
450	457.2	441.4	7.9	685.8	284.1	457.2
500	508.0	492.2	7.9	762.0	315.6	508.0

Please contact directly to the Head Office if you have any inquiry for the products which have the nominal pipe size over 550A.
Vui lòng liên hệ trực tiếp nếu Quý khách có nhu cầu về sản phẩm trên 550A.

EXPERT Company in PIPE FITTINGS

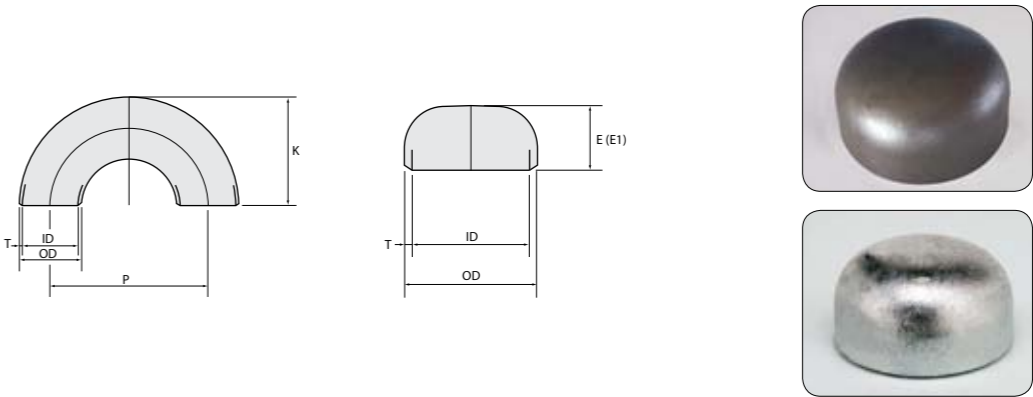
STEEL BUTT-WELDING PIPE FITTINGS

180° Elbow (Long, Short) / CAP

SPP/SGP

Chếch (dài, ngắn) / Đầu Bịch Chụp

SPP/SGP



KS B 1522, JIS B 2311

Unit : mm

Nominal Pipe Size	Outside Diameter OD	Inside Diameter ID	Wall Thickness T	Cap	180° Elbow			
				E	Long		Short	
					P	K	P	K
15	21.7	16.1	2.8	25.4	76.2	49.0	-	-
20	27.2	21.6	2.8	25.4	76.2	51.7	-	-
25	34.0	27.6	3.2	38.1	76.2	55.1	50.8	42.4
32	42.7	35.7	3.5	38.1	95.2	69.0	63.6	53.2
40	48.6	41.6	3.5	38.1	114.4	81.5	76.2	62.4
50	60.5	52.9	3.8	38.1	152.4	106.5	101.6	81.1
65	76.3	67.9	4.2	38.1	190.6	133.5	127.0	101.7
80	89.1	80.7	4.2	50.8	228.6	158.9	152.4	120.8
90	101.6	93.2	4.2	63.5	266.8	184.2	177.8	139.7
100	114.3	105.3	4.5	63.5	304.8	209.6	203.2	158.8
125	139.8	130.8	4.5	76.2	381.0	260.4	254.0	196.9
150	165.2	155.2	5.0	88.9	457.2	311.2	304.8	235.0
200	216.3	204.7	5.8	101.6	609.6	413.0	406.4	311.4
250	267.4	254.2	6.6	127.0	762.0	514.7	508.0	387.7
300	318.5	304.7	6.9	152.4	914.4	616.5	609.6	464.1
350	355.6	339.8	7.9	165.1	1066.8	711.2	711.2	533.4
400	406.4	390.6	7.9	177.8	1219.2	812.8	812.8	609.6
450	457.2	441.4	7.9	203.2	-	-	-	-
500	508.0	492.2	7.9	228.6	-	-	-	-

Please contact directly to the Head Office if you have any inquiry for the products which have the nominal pipe size over 550A.
Vui lòng liên hệ trực tiếp nếu Quý khách có nhu cầu về sản phẩm trên 550A.

Steel Butt-Welding Pipe Fittings

Tee SPP/SGP

Tê SPP/SGP



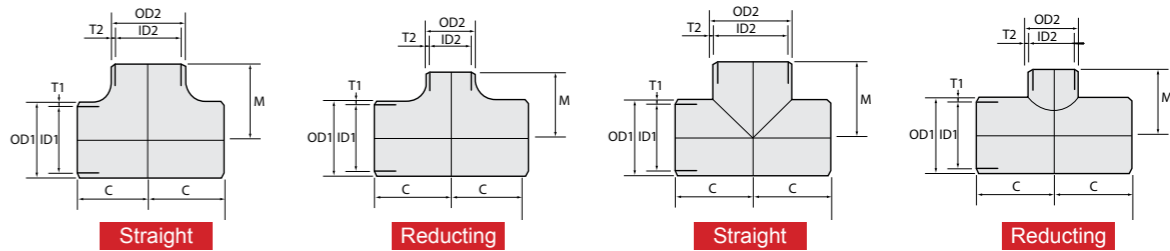
■ KS B 1522, JIS B 2311

Unit : mm

Nominal Pipe Size	Run			Outlet			Center to End	
	Outside Diameter OD ₁	Inside Diameter ID ₁	Wall Thickness T ₁	Outside Diameter OD ₂	Inside Diameter ID ₂	Wall Thickness T ₂	C	M
15 x 15	21.7	16.1	2.8	21.7	16.1	2.8	25.4	25.4
20 x 20	27.2	21.6	2.8	27.2	21.6	2.8	28.6	28.6
20 x 15	27.2	21.6	2.8	21.7	16.1	2.8	28.6	28.6
25 x 25	34.0	27.6	3.2	34.0	27.6	3.2	38.1	38.1
25 x 20	34.0	27.6	3.2	27.2	21.6	2.8	38.1	38.1
25 x 15	34.0	27.6	3.2	21.7	16.1	2.8	38.1	38.1
32 x 32	42.7	35.7	3.5	42.7	35.7	3.5	47.6	47.6
32 x 25	42.7	35.7	3.5	34.0	27.6	3.2	47.6	47.6
32 x 20	42.7	35.7	3.5	27.2	21.6	2.8	47.6	47.6
32 x 15	42.7	35.7	3.5	21.7	16.1	2.8	47.6	47.6
40 x 40	48.6	41.6	3.5	48.6	41.6	3.5	57.2	57.2
40 x 32	48.6	41.6	3.5	42.7	35.7	3.5	57.2	57.2
40 x 25	48.6	41.6	3.5	34.0	27.6	3.2	57.2	57.2
40 x 20	48.6	41.6	3.5	27.2	21.6	2.8	57.2	57.2
40 x 15	48.6	41.6	3.5	21.7	16.1	2.8	57.2	57.2
50 x 50	60.5	52.9	3.8	60.5	52.9	3.8	63.5	63.5
50 x 40	60.5	52.9	3.8	48.6	41.6	3.5	63.5	60.3
50 x 32	60.5	52.9	3.8	42.7	35.7	3.5	63.5	57.2
50 x 25	60.5	52.9	3.8	34.0	27.6	3.2	63.5	50.8
50 x 20	60.5	52.9	3.8	27.2	21.6	2.8	63.5	44.5
65 x 65	76.3	67.9	4.2	76.3	67.9	4.2	76.2	76.2
65 x 50	76.3	67.9	4.2	60.5	52.9	3.8	76.2	69.9
65 x 40	76.3	67.9	4.2	48.6	41.6	3.5	76.2	66.7
65 x 32	76.3	67.9	4.2	42.7	35.7	3.5	76.2	63.5
65 x 25	76.3	67.9	4.2	34.0	27.6	3.2	76.2	57.2
80 x 80	89.1	80.7	4.2	89.1	80.7	4.2	85.7	85.7
80 x 65	89.1	80.7	4.2	76.3	67.9	4.2	85.7	82.6
80 x 50	89.1	80.7	4.2	60.5	52.9	3.8	85.7	76.2
80 x 40	89.1	80.7	4.2	48.6	41.6	3.5	85.7	73.0
80 x 32	89.1	80.7	4.2	42.7	35.7	3.5	85.7	69.9
90 x 90	101.6	93.2	4.2	101.6	93.2	4.2	95.3	95.3
90 x 80	101.6	93.2	4.2	89.1	80.7	4.2	95.3	92.1
90 x 65	101.6	93.2	4.2	76.3	67.9	4.2	95.3	88.9
90 x 50	101.6	93.2	4.2	60.5	52.9	3.8	95.3	82.6
90 x 40	101.6	93.2	4.2	48.6	41.6	3.5	95.3	79.4
100 x 100	114.3	105.3	4.5	114.3	105.3	4.5	104.8	104.8
100 x 90	114.3	105.3	4.5	101.6	93.2	4.2	104.8	101.6
100 x 80	114.3	105.3	4.5	89.1	80.7	4.2	104.8	98.4
100 x 65	114.3	105.3	4.5	76.3	67.9	4.2	104.8	95.3
100 x 50	114.3	105.3	4.5	60.5	52.9	3.8	104.8	88.9
100 x 40	114.3	105.3	4.5	48.6	41.6	3.5	104.8	85.7
125 x 125	139.8	130.8	4.5	139.8	130.8	4.5	123.8	123.8
125 x 100	139.8	130.8	4.5	114.3	105.3	4.5	123.8	117.5
125 x 90	139.8	130.8	4.5	101.6	93.2	4.2	123.8	114.3
125 x 80	139.8	130.8	4.5	89.1	80.7	4.2	123.8	111.1
125 x 65	139.8	130.8	4.5	76.3	67.9	4.2	123.8	108.0

EXPERT Company in PIPE FITTINGS

STEEL BUTT-WELDING PIPE FITTINGS



■ KS B 1522, JIS B 2311

Unit : mm

Nominal Pipe Size	Run			Outlet			Center to End	
	Outside Diameter OD ₁	Inside Diameter ID ₁	Wall Thickness T ₁	Outside Diameter OD ₂	Inside Diameter ID ₂	Wall Thickness T ₂	C	M
125 x 50	139.8	130.8	4.5	60.5	52.9	3.8	123.8	104.8
150 x 150	165.2	155.2	5.0	165.2	155.2	5.0	142.9	142.9
150 x 125	165.2	155.2	5.0	139.8	130.8	4.5	142.9	136.5
150 x 100	165.2	155.2	5.0	114.3	105.3	4.5	142.9	130.2
150 x 90	165.2	155.2	5.0	101.6	93.2	4.2	142.9	127.0
150 x 80	165.2	155.2	5.0	89.1	80.7	4.2	142.9	123.8
150 x 65	165.2	155.2	5.0	76.3	67.9	4.2	142.9	120.7
200 x 200	216.3	204.7	5.8	216.3	204.7	5.8	177.8	177.8
200 x 150	216.3	204.7	5.8	165.2	155.2	5.0	177.8	168.3
200 x 125	216.3	204.7	5.8	139.8	130.8	4.5	177.8	161.9
200 x 100	216.3	204.7	5.8	114.3	105.3	4.5	177.8	155.6
200 x 90	216.3	204.7	5.8	101.6	93.2	4.2	177.8	152.4
250 x 250	267.4	254.2	6.6	267.4	254.2	6.6	215.9	215.9
250 x 200	267.4	254.2	6.6	216.3	204.7	5.8	215.9	203.2
250 x 150	267.4	254.2	6.6	165.2	155.2	5.0	215.9	193.7
250 x 125	267.4	254.2	6.6	139.8	130.8	4.5	215.9	190.5
250 x 100	267.4	254.2	6.6	114.3	105.3	4.5	215.9	184.2
300 x 300	318.5	304.7	6.9	318.5	304.7	6.9	254.0	254.0
300 x 250	318.5	304.7	6.9	267.4	254.2	6.6	254.0	241.3
300 x 200	318.5	304.7	6.9	216.3	204.7	5.8	254.0	228.6
300 x 150	318.5	304.7	6.9	165.2	155.2	5.0	254.0	219.1
300 x 125	318.5	304.7	6.9	139.8	130.8	4.5	254.0	215.9
350 x 350	355.6	339.8	7.9	355.6	339.8	7.9	279.4	279.4
350 x 300	355.6	339.8	7.9	318.5	304.7	6.9	279.4	269.9
350 x 250	355.6	339.8	7.9	267.4	254.2	6.6	279.4	257.2
350 x 200	355.6	339.8	7.9	216.3	204.7	5.8	279.4	247.7
350 x 150	355.6	339.8	7.9	165.2	155.2	5.0	279.4	238.1
400 x 400	406.4	390.6	7.9	406.4	390.6	7.9	304.8	304.8
400 x 350	406.4	390.6	7.9	355.6	339.8	7.9	304.8	304.8
400 x 300	406.4	390.6	7.9	318.5	304.7	6.9	304.8	295.3
400 x 250	406.4	390.6	7.9	267.4	254.2	6.6	304.8	282.6
400 x 200	406.4	390.6	7.9	216.3	204.7	5.8	304.8	273.1
400 x 150	406.4	390.6	7.9	165.2	155.2	5.0	304.8	263.5
450 x 450	457.2	441.4	7.9	457.2	441.4	7.9	342.9	342.9
450 x 400	457.2	441.4	7.9	406.4	390.6	7.9	342.9	330.2
450 x 350	457.2	441.4	7.9	355.6	339.8	7.9	342.9	330.2
450 x 300	457.2	441.4	7.9	318.5	304.7	6.9	342.9	320.7
450 x 250	457.2	441.4	7.9	267.4	254.2	6.6	342.9	308.0
500 x 500	508.0	492.2	7.9	508.0	492.2	7.9	381.0	381.0
500 x 450	508.0	492.2	7.9	457.2	441.4	7.9	381.0	368.3
500 x 400	508.0	492.2	7.9	406.4	390.6	7.9	381.0	355.6
500 x 350	508.0	492.2	7.9	355.6	339.8	7.9	381.0	355.6
500 x 300	508.0	492.2	7.9	318.5	304.8	6.9	381.0	346.1
500 x 250	508.0	492.2	7.9	267.4	254.2	6.6	381.0	333.4
500 x 200	508.0	492.2	7.9	216.3	204.7	5.8	381.0	323.9

▶ Please contact directly to the Head Office if you have any inquiry for the products which have the nominal pipe size over 550A.
▶ Vui lòng liên hệ trực tiếp nếu Quý khách có nhu cầu về sản phẩm trên 550A.

Steel Butt-Welding Pipe Fittings

Reducer SPP/SGP

Côn Thu SPP/SGP



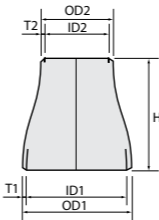
KS B 1522, JIS B 2311

Unit : mm

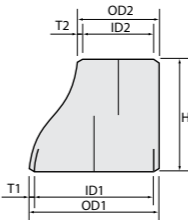
Nominal Pipe Size	Large End			Small End			End to End H
	Outside Diameter OD ₁	Inside Diameter ID ₁	Wall Thickness T ₁	Outside Diameter OD ₂	Inside Diameter ID ₂	Wall Thickness T ₂	
20 x 15	27.2	21.6	2.8	21.7	16.1	2.8	38.1
25 x 20	34.0	27.6	3.2	27.2	21.6	2.8	50.8
25 x 15	34.0	27.6	3.2	21.7	16.1	2.8	50.8
32 x 25	42.7	35.7	3.5	34.0	27.6	3.2	50.8
32 x 20	42.7	35.7	3.5	27.2	21.6	2.8	50.8
32 x 15	42.7	35.7	3.5	21.7	16.1	2.8	50.8
40 x 32	48.6	41.6	3.5	42.7	35.7	3.5	63.5
40 x 25	48.6	41.6	3.5	34.0	27.6	3.2	63.5
40 x 20	48.6	41.6	3.5	27.2	21.6	2.8	63.5
40 x 15	48.6	41.6	3.5	21.7	16.1	2.8	63.5
50 x 40	60.5	52.9	3.8	48.6	41.6	3.5	76.2
50 x 32	60.5	52.9	3.8	42.7	35.7	3.5	76.2
50 x 25	60.5	52.9	3.8	34.0	27.6	3.2	76.2
50 x 20	60.5	52.9	3.8	27.2	21.6	2.8	76.2
65 x 50	76.3	67.9	4.2	60.5	52.9	3.8	88.9
65 x 40	76.3	67.9	4.2	48.6	41.6	3.5	88.9
65 x 32	76.3	67.9	4.2	42.7	35.7	3.5	88.9
65 x 25	76.3	67.9	4.2	34.0	27.6	3.2	88.9
80 x 65	89.1	80.7	4.2	76.3	67.9	4.2	88.9
80 x 50	89.1	80.7	4.2	60.5	52.9	3.8	88.9
80 x 40	89.1	80.7	4.2	48.6	41.6	3.5	88.9
80 x 32	89.1	80.7	4.2	42.7	35.7	3.5	88.9
90 x 80	101.6	93.2	4.2	89.1	80.7	4.2	101.6
90 x 65	101.6	93.2	4.2	76.3	67.9	4.2	101.6
90 x 50	101.6	93.2	4.2	60.5	52.9	3.8	101.6
90 x 40	101.6	93.2	4.2	48.6	41.6	3.5	101.6
90 x 32	101.6	93.2	4.2	42.7	35.7	3.5	101.6
100 x 90	114.3	105.3	4.5	101.6	93.2	4.2	101.6
100 x 80	114.3	105.3	4.5	89.1	80.7	4.2	101.6
100 x 65	114.3	105.3	4.5	76.3	67.9	4.2	101.6
100 x 50	114.3	105.3	4.5	60.5	52.9	3.8	101.6
100 x 40	114.3	105.3	4.5	48.6	41.6	3.5	101.6
125 x 100	139.8	130.8	4.5	114.3	105.3	4.5	127.0
125 x 90	139.8	130.8	4.5	101.6	93.2	4.2	127.0
125 x 80	139.8	130.8	4.5	89.1	80.7	4.2	127.0

EXPERT Company in PIPE FITTINGS

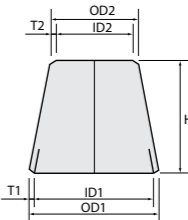
STEEL BUTT-WELDING PIPE FITTINGS



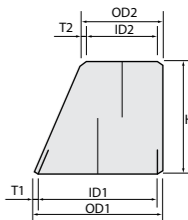
Concentric



Eccentric



Concentric



Eccentric

KS B 1522, JIS B 2311

Unit : mm

Nominal Pipe Size	Large End			Small End			End to End H
	Outside Diameter OD ₁	Inside Diameter ID ₁	Wall Thickness T ₁	Outside Diameter OD ₂	Inside Diameter ID ₂	Wall Thickness T ₂	
125 x 65	139.8	130.8	4.5	76.3	67.9	4.2	127.0
125 x 50	139.8	130.8	4.5	60.5	52.9	3.8	127.0
150 x 125	165.2	155.2	5.0	139.8	130.8	4.5	139.7
150 x 100	165.2	155.2	5.0	114.3	105.3	4.5	139.7
150 x 90	165.2	155.2	5.0	101.6	93.2	4.2	139.7
150 x 80	165.2	155.2	5.0	89.1	80.7	4.2	139.7
150 x 65	165.2	155.2	5.0	76.3	67.9	4.2	139.7
200 x 150	216.3	204.7	5.8	165.2	155.2	5.0	152.4
200 x 125	216.3	204.7	5.8	139.8	130.8	4.5	152.4
200 x 100	216.3	204.7	5.8	114.3	105.3	4.5	152.4
200 x 90	216.3	204.7	5.8	101.6	93.2	4.2	152.4
250 x 200	267.4	254.2	6.6	216.3	204.7	5.8	177.8
250 x 150	267.4	254.2	6.6	165.2	155.2	5.0	177.8
250 x 125	267.4	254.2	6.6	139.8	130.8	4.5	177.8
250 x 100	267.4	254.2	6.6	114.3	105.3	4.5	177.8
300 x 250	318.5	304.7	6.9	267.4	254.2	6.6	203.2
300 x 200	318.5	304.7	6.9	216.3	204.7	5.8	203.2
300 x 150	318.5	304.7	6.9	165.2	155.2	5.0	203.2
300 x 125	318.5	304.7	6.9	139.8	130.8	4.5	203.2
350 x 300	355.6	339.8	7.9	318.5	304.7	6.9	330.2
350 x 250	355.6	339.8	7.9	267.4	254.2	6.6	330.2
350 x 200	355.6	339.8	7.9	216.3	204.7	5.8	330.2
350 x 150	355.6	339.8	7.9	165.2	155.2	5.0	330.2
400 x 350	406.4	390.6	7.9	355.6	339.8	7.9	355.6
400 x 300	406.4	390.6	7.9	318.5	304.7	6.9	355.6
400 x 250	406.4	390.6	7.9	267.4	254.2	6.6	355.6
400 x 200	406.4	390.6	7.9	216.3	204.7	5.8	355.6
450 x 400	457.2	441.4	7.9	406.4	390.6	7.9	381.0
450 x 350	457.2	441.4	7.9	355.6	339.8	7.9	381.0
450 x 300	457.2	441.4	7.9	318.5	304.7	6.9	381.0
450 x 250	457.2	441.4	7.9	267.4	254.2	6.6	381.0
500 x 450	508.0	492.2	7.9	457.2	441.4	7.9	508.0
500 x 400	508.0	492.2	7.9	406.4	390.6	7.9	508.0
500 x 350	508.0	492.2	7.9	355.6	339.8	7.9	508.0
500 x 300	508.0	492.2	7.9	318.5	304.7	6.9	508.0

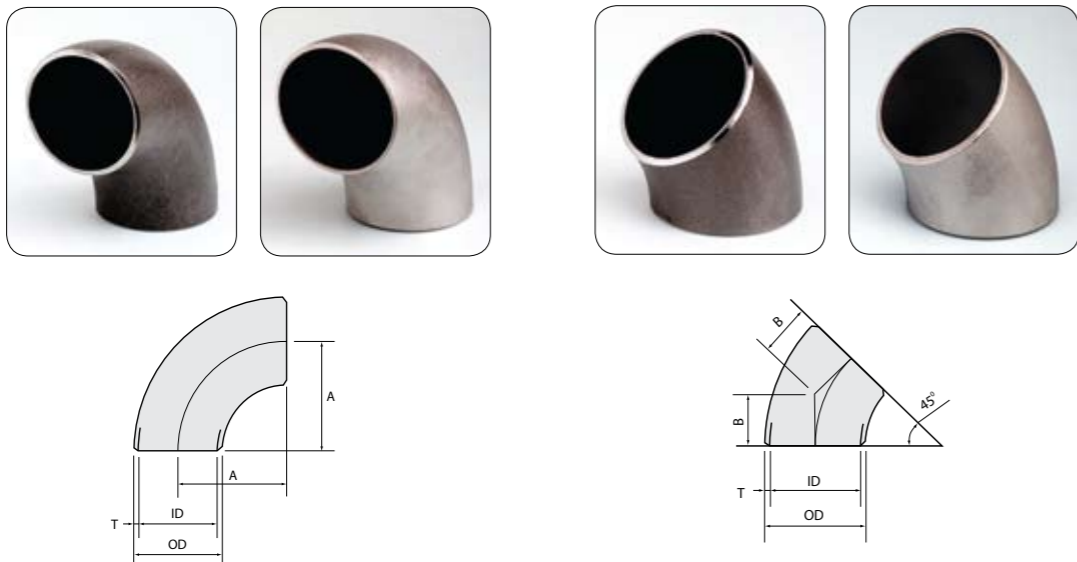
► Please contact directly to the Head Office if you have any inquiry for the products which have the nominal pipe size over 550A.
► Vui lòng liên hệ trực tiếp nếu Quý khách có nhu cầu về sản phẩm trên 550A.

Steel Butt-Welding Pipe Fittings

90° Elbow (Long, Short) / 45° Elbow (Long)
Cúc (dài, ngắn) / Chếch (dài)

Sch40S, Sch80S, Sch120S, Sch160S

Sch40S, Sch80S, Sch120S, Sch160S



KS B 1541, JIS B 2312

Unit : mm

Nominal Pipe Size	Outside Diameter OD	Wall Thickness T								Center to Center		
		Sch40S		Sch80S		Sch120S		Sch160S		Long		Short
		ID	T	ID	T	ID	T	ID	T	A(90°)	B(45°)	A(90°)
15	21.7	16.1	2.8	14.3	3.7	-	-	-	-	38.1	15.8	-
20	27.2	21.4	2.9	19.4	3.9	-	-	-	-	38.1	15.8	-
25	34.0	27.2	3.4	25.0	4.5	-	-	-	-	38.1	15.8	25.4
32	42.7	35.5	3.6	32.9	4.9	-	-	-	-	47.6	19.7	31.8
40	48.6	41.2	3.7	38.4	5.1	-	-	34.4	7.1	57.2	23.7	38.1
50	60.5	52.7	3.9	49.5	5.5	-	-	43.1	8.7	76.2	31.6	50.8
65	76.3	65.9	5.2	62.3	7.0	-	-	57.3	9.5	95.3	39.5	63.5
80	89.1	78.1	5.5	73.9	7.6	-	-	66.9	11.1	114.3	47.3	76.2
90	101.6	90.2	5.7	85.4	8.1	-	-	76.2	12.7	133.4	55.3	88.9
100	114.3	102.3	6.0	97.1	8.6	92.1	11.1	87.3	13.5	152.4	63.1	101.6
125	139.8	126.6	6.6	120.8	9.5	114.4	12.7	108.0	15.9	190.5	78.9	127.0
150	165.2	151.0	7.1	143.2	11.0	136.6	14.3	128.8	18.2	228.6	94.7	152.4
200	216.3	199.9	8.2	190.9	12.7	179.9	18.2	170.3	23.0	304.8	126.3	203.2
250	267.4	248.8	9.3	237.2	15.1	224.6	21.4	210.2	28.6	381.0	157.8	254.0
300	318.5	297.9	10.3	283.7	17.4	267.7	25.4	251.9	33.3	457.2	189.4	304.8
350	355.6	333.4	11.1	317.6	19.0	300.0	27.8	284.2	35.7	533.4	220.9	355.6
400	406.4	381.0	12.7	363.6	21.4	344.6	30.9	325.4	40.5	609.6	252.5	406.4
450	457.2	428.6	14.3	409.6	23.8	387.4	34.9	366.8	45.2	685.8	284.1	457.2
500	508.0	477.8	15.1	455.6	26.2	431.8	38.1	408.0	50.0	762.0	315.6	508.0

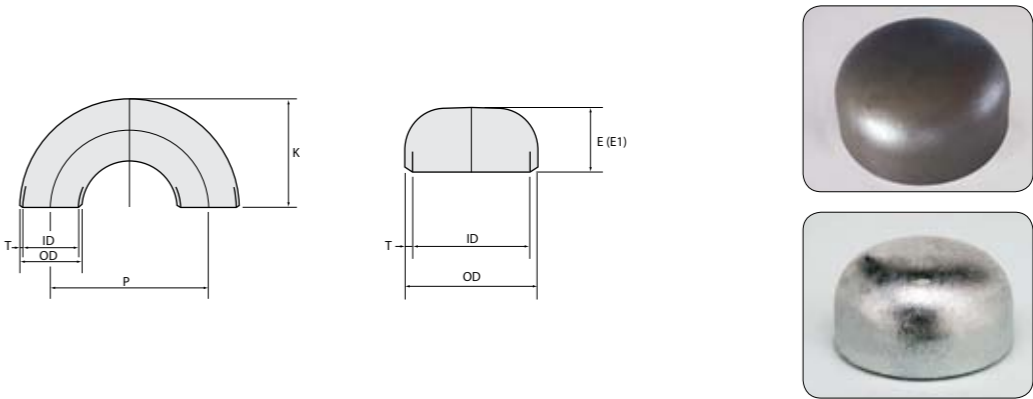
Please contact directly to the Head Office if you have any inquiry for the products which have the nominal pipe size over 550A.
Vui lòng liên hệ trực tiếp nếu Quý khách có nhu cầu về sản phẩm trên 550A.

STEEL BUTT-WELDING PIPE FITTINGS

180° Elbow (Long, Short) / CAP
Chếch (dài, ngắn) / Đầu Bịch Chụp

Sch40S, Sch80S, Sch120S, Sch160S

Sch40S, Sch80S, Sch120S, Sch160S



KS B 1541, JIS B 2312

Unit : mm

Nominal Pipe Size	Outside Diameter OD	Wall Thickness T				CAP			180° Elbow			
		Sch40S	Sch80S	Sch120S	Sch160S	E	E ₁	Limited Wall Thickness Fore	Long		Short	
									P	K	P	K
15	21.7	2.8	3.7	-	-	25.4	-	-	76.2	49.0	-	-
20	27.2	2.9	3.9	-	-	25.4	-	-	76.2	51.7	-	-
25	34.0	3.4	4.5	-	-	38.1	-	-	76.2	55.1	50.8	42.4
32	42.7	3.6	4.9	-	-	38.1	-	-	95.2	69.0	63.6	53.2
40	48.6	3.7	5.1	-	7.1	38.1	-	-	114.4	81.5	76.2	62.4
50	60.5	3.9	5.5	-	8.7	38.1	44.5	5.5	152.4	106.5	101.6	81.1
65	76.3	5.2	7.0	-	9.5	38.1	50.8	7.0	190.6	133.5	127.0	101.7
80	89.1	5.5	7.6	-	11.1	50.8	63.5	7.6	228.6	158.9	152.4	120.8
90	101.6	5.7	8.1	-	12.7	63.5	76.2	8.1	266.8	184.2	177.8	139.7
100	114.3	6.0	8.6	11.1	13.5	63.5	76.2	8.6	304.8	209.6	203.2	158.8
125	139.8	6.6	9.5	12.7	15.9	76.2	88.9	9.5	381.0	260.4	254.0	196.9
150	165.2	7.1	11.0	14.3	18.2	88.9	101.6	11.0	457.2	311.2	304.8	235.0
200	216.3	8.2	12.7	18.2	23.0	101.6	127.0	12.7	609.6	413.0	406.4	311.4
250	267.4	9.3	15.1	21.4	28.6	127.0	152.4	12.7	762.0	514.7	508.0	387.7
300	318.5	10.3	17.4	25.4	33.3	152.4	177.8	12.7	914.4	616.5	609.6	464.1
350	355.6	11.1	19.0	27.8	35.7	165.1	190.5	12.7	1066.8	711.2	711.2	533.4
400	406.4	12.7	21.4	30.9	40.5	177.8	203.2	12.7	1219.2	812.8	812.8	609.6
450	457.2	14.3	23.8	34.9	45.2	203.2	228.6	12.7	1371.6	914.4	914.4	685.8
500	508.0	15.1	26.2	38.1	50.0	228.6	254.0	12.7	1524.0	1016.0	1016.0	762.0

Please contact directly to the Head Office if you have any inquiry for the products which have the nominal pipe size over 550A.
Vui lòng liên hệ trực tiếp nếu Quý khách có nhu cầu về sản phẩm trên 550A.

Steel Butt-Welding Pipe Fittings

Tee Sch40S, Sch80S, Sch120S, Sch160S

Tê Sch40S, Sch80S, Sch120S, Sch160S



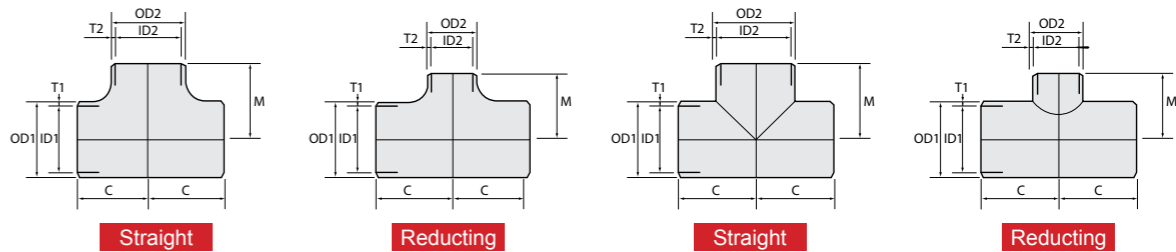
■ KS B 1541, JIS B 2312

Unit : mm

Nominal Pipe Size	Outside Diameter		Wall Thickness T								Center to End	
	OD ₁	OD ₂	Sch40S		Sch80S		Sch120S		Sch160S		C	M
			T ₁	T ₂	T ₁	T ₂	T ₁	T ₂	T ₁	T ₂		
15 x 15	21.7	21.7	2.8	2.8	3.7	3.7	-	-	-	-	25.4	25.4
20 x 20	27.2	27.2	2.9	2.9	3.9	3.9	-	-	-	-	28.6	28.6
20 x 15	27.2	21.7	2.9	2.8	3.9	3.7	-	-	-	-	28.6	28.6
25 x 25	34.0	34.0	3.4	3.4	4.5	4.5	-	-	-	-	38.1	38.1
25 x 20	34.0	27.2	3.4	2.9	4.5	3.9	-	-	-	-	38.1	38.1
25 x 15	34.0	21.7	3.4	2.8	4.5	3.7	-	-	-	-	38.1	38.1
32 x 32	42.7	42.7	3.6	3.6	4.9	4.9	-	-	-	-	47.6	47.6
32 x 25	42.7	34.0	3.6	3.4	4.9	4.5	-	-	-	-	47.6	47.6
32 x 20	42.7	27.2	3.6	2.9	4.9	3.9	-	-	-	-	47.6	47.6
32 x 15	42.7	21.7	3.6	2.8	4.9	3.7	-	-	-	-	47.6	47.6
40 x 40	48.6	48.6	3.7	3.7	5.1	5.1	-	-	7.1	7.1	57.2	57.2
40 x 32	48.6	42.7	3.7	3.6	5.1	4.9	-	-	-	-	57.2	57.2
40 x 25	48.6	34.0	3.7	3.4	5.1	4.5	-	-	-	-	57.2	57.2
40 x 20	48.6	27.2	3.7	2.9	5.1	3.9	-	-	-	-	57.2	57.2
40 x 15	48.6	21.7	3.7	2.8	5.1	3.7	-	-	-	-	57.2	57.2
50 x 50	60.5	60.5	3.9	3.9	5.5	5.5	-	-	8.7	8.7	63.5	63.5
50 x 40	60.5	48.6	3.9	3.7	5.5	5.1	-	-	8.7	7.1	63.5	60.3
50 x 32	60.5	42.7	3.9	3.6	5.5	4.9	-	-	-	-	63.5	57.2
50 x 25	60.5	34.0	3.9	3.4	5.5	4.5	-	-	-	-	63.5	50.8
50 x 20	60.5	27.2	3.9	2.9	5.5	3.9	-	-	-	-	63.5	44.5
65 x 65	76.3	76.3	5.2	5.2	7.0	7.0	-	-	9.5	9.5	76.2	76.2
65 x 50	76.3	60.5	5.2	3.9	7.0	5.5	-	-	9.5	8.7	76.2	69.9
65 x 40	76.3	48.6	5.2	3.7	7.0	5.1	-	-	9.5	7.1	76.2	66.7
65 x 32	76.3	42.7	5.2	3.6	7.0	4.9	-	-	-	-	76.2	63.5
65 x 25	76.3	34.0	5.2	3.4	7.0	4.5	-	-	-	-	76.2	57.2

► Please contact directly to the Head Office if you have any inquiry for the products which have the nominal pipe size over 550A and Sch80S.
► Vui lòng liên hệ trực tiếp nếu Quý khách có nhu cầu về sản phẩm trên 550A và Sch80S.

STEEL BUTT-WELDING PIPE FITTINGS



■ KS B 1541, JIS B 2312

Unit : mm

Nominal Pipe Size	Outside Diameter		Wall Thickness T								Center to End	
	OD ₁	OD ₂	Sch40S		Sch80S		Sch120S		Sch160S		C	M
			T ₁	T ₂	T ₁	T ₂	T ₁	T ₂	T ₁	T ₂		
80 x 80	89.1	89.1	5.5	5.5	7.6	7.6	-	-	11.1	11.1	85.7	85.7
80 x 65	89.1	76.3	5.5	5.2	7.6	7.0	-	-	11.1	9.5	85.7	82.6
80 x 50	89.1	60.5	5.5	3.9	7.6	5.5	-	-	11.1	8.7	85.7	76.2
80 x 40	89.1	48.6	5.5	3.7	7.6	5.1	-	-	11.1	7.1	85.7	73.0
80 x 32	89.1	42.7	5.5	3.6	7.6	4.9	-	-	-	-	85.7	69.9
90 x 90	101.6	101.6	5.7	5.7	8.1	8.1	-	-	12.7	12.7	95.3	95.3
90 x 80	101.6	89.1	5.7	5.5	8.1	7.6	-	-	12.7	11.1	95.3	92.1
90 x 65	101.6	76.3	5.7	5.2	8.1	7.0	-	-	12.7	9.5	95.3	88.9
90 x 50	101.6	60.5	5.7	3.9	8.1	5.5	-	-	12.7	8.7	95.3	82.6
90 x 40	101.6	48.6	5.7	3.7	8.1	5.1	-	-	12.7	7.1	95.3	79.4
100 x 100	114.3	114.3	6.0	6.0	8.6	8.6	11.1	11.1	13.5	13.5	104.8	104.8
100 x 90	114.3	101.6	6.0	5.7	8.6	8.1	-	-	13.5	12.7	104.8	101.6
100 x 80	114.3	89.1	6.0	5.5	8.6	7.6	-	-	13.5	11.1	104.8	98.4
100 x 65	114.3	76.3	6.0	5.2	8.6	7.0	-	-	13.5	9.5	104.8	95.3
100 x 50	114.3	60.5	6.0	3.9	8.6	5.5	-	-	13.5	8.7	104.8	88.9
100 x 40	114.3	48.6	6.0	3.7	8.6	5.1	-	-	13.5	7.1	104.8	85.7
125 x 125	139.8	139.8	6.6	6.6	9.5	9.5	12.7	12.7	15.9	15.9	123.8	123.8
125 x 100	139.8	114.3	6.6	6.0	9.5	8.6	12.7	11.1	15.9	13.5	123.8	117.5
125 x 90	139.8	101.6	6.6	5.7	9.5	8.1	-	-	15.9	12.7	123.8	114.3
125 x 80	139.8	89.1	6.6	5.5	9.5	7.6	-	-	15.9	11.1	123.8	111.1
125 x 65	139.8	76.3	6.6	5.2	9.5	7.0	-	-	15.9	9.5	123.8	108.0
125 x 50	139.8	60.5	6.6	3.9	9.5	5.5	-	-	15.9	8.7	123.8	104.0
150 x 150	165.2	165.2	7.1	7.1	11.0	11.0	14.3	14.3	18.2	18.2	142.9	142.9
150 x 125	165.2	139.8	7.1	6.6	11.0	9.5	14.3	12.7	18.2	15.9	142.9	136.5
150 x 100	165.2	114.3	7.1	6.0	11.0	8.6	14.3	11.1	18.2	13.2	142.9	130.2

► Please contact directly to the Head Office if you have any inquiry for the products which have the nominal pipe size over 550A and Sch80S.
► Vui lòng liên hệ trực tiếp nếu Quý khách có nhu cầu về sản phẩm trên 550A và Sch80S.

Steel Butt-Welding Pipe Fittings

Tee Sch40S, Sch80S, Sch120S, Sch160S

Tê Sch40S, Sch80S, Sch120S, Sch160S



KS B 1541, JIS B 2312

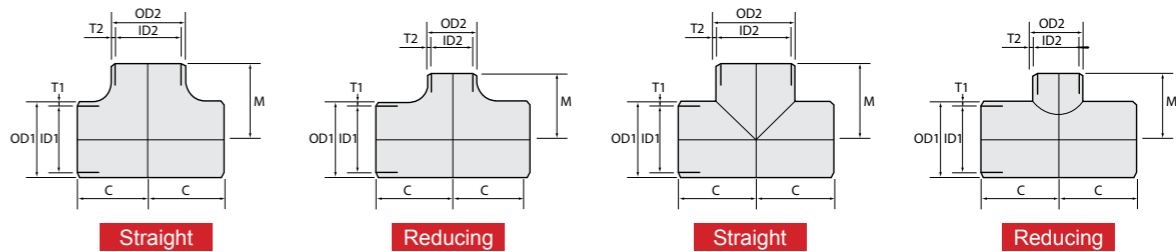
Unit : mm

Nominal Pipe Size	Outside Diameter		Wall Thickness T								Center to End	
	OD ₁	OD ₂	Sch40S		Sch80S		Sch120S		Sch160S		C	M
			T ₁	T ₂	T ₁	T ₂	T ₁	T ₂	T ₁	T ₂		
150 x 90	165.2	101.6	7.1	5.7	11.0	8.1	-	-	18.2	12.7	142.9	127.0
150 x 80	165.2	89.1	7.1	5.5	11.0	7.6	-	-	18.2	11.1	142.9	123.8
150 x 65	165.2	76.3	7.1	5.2	11.0	7.0	-	-	18.2	9.5	142.9	120.7
200 x 200	216.3	216.3	8.2	8.2	12.7	12.7	18.2	18.2	23.0	23.0	177.8	177.8
200 x 150	216.3	165.2	8.2	7.1	12.7	11.0	18.2	14.3	23.0	18.2	177.8	168.3
200 x 125	216.3	139.8	8.2	6.6	12.7	9.5	18.2	12.7	23.0	15.9	177.8	161.9
200 x 100	216.3	114.3	8.2	6.0	12.7	8.6	18.2	11.1	23.0	13.5	177.8	155.6
200 x 90	216.3	101.6	8.2	5.7	12.7	8.1	-	-	23.0	12.7	177.8	152.4
250 x 250	267.4	267.4	9.3	9.3	15.1	15.1	21.4	21.4	28.6	28.6	215.9	215.9
250 x 200	267.4	216.3	9.3	8.2	15.1	12.7	21.4	18.2	28.6	23.0	215.9	203.2
250 x 150	267.4	165.2	9.3	7.1	15.1	11.0	21.4	14.3	28.6	18.2	215.9	193.7
250 x 125	267.4	139.8	9.3	6.6	15.1	9.5	21.4	12.7	28.6	15.9	215.9	190.5
250 x 100	267.4	114.3	9.3	6.0	15.1	8.6	21.4	11.1	28.6	13.5	215.9	184.2
300 x 300	318.5	318.5	10.3	10.3	17.4	17.4	25.4	25.4	33.3	33.3	254.0	254.0
300 x 250	318.5	267.4	10.3	9.3	17.4	15.1	25.4	21.4	33.3	28.6	254.0	241.3
300 x 200	318.5	216.3	10.3	8.2	17.4	12.7	25.4	18.2	33.3	23.0	254.0	228.6
300 x 150	318.5	165.2	10.3	7.1	17.4	11.0	25.4	14.3	33.3	18.2	254.0	219.1
300 x 125	318.5	139.8	10.3	6.6	17.4	9.5	25.4	12.7	33.3	15.9	254.0	215.9
350 x 350	355.6	355.6	11.1	11.1	19.0	19.0	27.8	27.8	35.7	35.7	279.4	279.4
350 x 300	355.6	318.5	11.1	10.3	19.0	17.4	27.8	25.4	35.7	33.3	279.4	269.9
350 x 250	355.6	267.4	11.1	9.3	19.0	15.1	27.8	21.4	35.7	28.6	279.4	257.2

► Please contact directly to the Head Office if you have any inquiry for the products which have the nominal pipe size over 550A and Sch80S.
► Vui lòng liên hệ trực tiếp nếu Quý khách có nhu cầu về sản phẩm trên 550A và Sch80S.

EXPERT Company in PIPE FITTINGS

STEEL BUTT-WELDING PIPE FITTINGS



KS B 1541, JIS B 2312

Unit : mm

Nominal Pipe Size	Outside Diameter		Wall Thickness T								Center to End	
	OD ₁	OD ₂	Sch40S		Sch80S		Sch120S		Sch160S		C	M
			T ₁	T ₂	T ₁	T ₂	T ₁	T ₂	T ₁	T ₂		
350 x 200	355.6	216.3	11.1	8.2	19.0	12.7	27.8	18.2	35.7	23.0	279.4	247.7
350 x 150	355.6	165.2	11.1	7.1	19.0	11.0	27.8	14.3	35.7	18.2	279.4	238.1
400 x 400	406.4	406.4	12.7	12.7	21.4	21.4	30.9	30.9	40.5	40.5	304.8	304.8
400 x 350	406.4	355.6	12.7	11.1	21.4	19.0	30.9	27.8	40.5	35.7	304.8	304.8
400 x 300	406.4	318.5	12.7	10.3	21.4	17.4	30.9	25.4	40.5	33.3	304.8	295.3
400 x 250	406.4	267.4	12.7	9.3	21.4	15.1	30.9	21.4	40.5	28.6	304.8	282.6
400 x 200	406.4	216.3	12.7	8.2	21.4	12.7	30.9	18.2	40.5	23.0	304.8	273.1
400 x 150	406.4	165.2	12.7	7.1	21.4	11.0	30.9	14.3	40.5	18.2	304.8	263.5
450 x 450	457.2	457.2	14.3	14.3	23.8	23.8	34.9	34.9	45.2	45.2	342.9	342.9
450 x 400	457.2	406.4	14.3	12.7	23.8	21.4	34.9	30.9	45.2	40.5	342.9	330.2
450 x 350	457.2	355.6	14.3	11.1	23.8	19.0	34.9	27.8	45.2	35.7	342.9	330.2
450 x 300	457.2	318.5	14.3	10.3	23.8	17.4	34.9	25.4	45.2	33.3	342.9	320.7
450 x 250	457.2	267.4	14.3	9.3	23.8	15.1	34.9	21.4	45.2	28.6	342.9	308.0
450 x 200	457.2	216.3	14.3	8.2	23.8	12.7	34.9	18.2	45.2	23.0	342.9	298.5
500 x 500	508.0	508.0	15.1	15.1	26.2	26.2	38.1	38.1	50.0	50.0	381.0	381.0
500 x 450	508.0	457.2	15.1	14.3	26.2	23.8	38.1	34.9	50.0	45.2	381.0	368.3
500 x 400	508.0	406.4	15.1	12.7	26.2	21.4	38.1	30.9	50.0	40.5	381.0	355.6
500 x 350	508.0	355.6	15.1	11.1	26.2	19.0	38.1	27.8	50.0	35.7	381.0	355.6
500 x 300	508.0	318.5	15.1	10.3	26.2	17.4	38.1	25.4	50.0	33.3	381.0	346.1
500 x 250	508.0	267.4	15.1	9.3	26.2	15.1	38.1	21.4	50.0	28.6	381.0	333.4
500 x 200	508.0	216.3	15.1	8.2	26.2	12.7	38.1	18.2	50.0	23.0	381.0	323.9

► Please contact directly to the Head Office if you have any inquiry for the products which have the nominal pipe size over 550A and Sch80S.
► Vui lòng liên hệ trực tiếp nếu Quý khách có nhu cầu về sản phẩm trên 550A và Sch80S.

Steel Butt-Welding Pipe Fittings

Reducer Sch40S, Sch80S, Sch160S

Côn Thu Sch40S, Sch80S, Sch160S



■ KS B 1541, JIS B 2312

Unit : mm

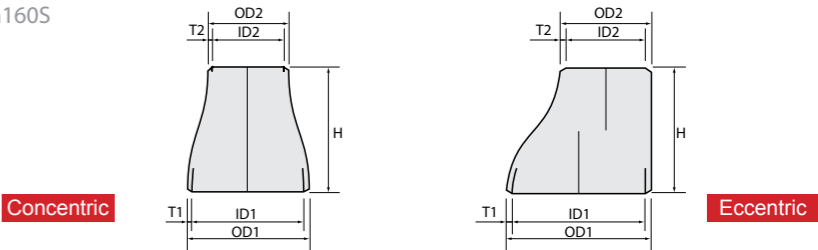
Nominal Pipe Size	Outside Diameter		Wall Thickness T						End to End H
	OD ₁	OD ₂	Sch40S		Sch80S		Sch160S		
			T ₁	T ₂	T ₁	T ₂	T ₁	T ₂	
20 x 15	27.2	21.7	2.9	2.8	3.9	3.7	-	-	38.1
25 x 20	34.0	27.2	3.4	2.9	4.5	3.9	-	-	50.8
25 x 15	34.0	21.7	3.4	2.8	4.5	3.7	-	-	50.8
32 x 25	42.7	34.0	3.6	3.4	4.9	4.5	-	-	50.8
32 x 20	42.7	27.2	3.6	2.9	4.9	3.9	-	-	50.8
32 x 15	42.7	21.7	3.6	2.8	4.9	3.7	-	-	50.8
40 x 32	48.6	42.7	3.7	3.6	5.1	4.9	-	-	63.5
40 x 25	48.6	34.0	3.7	3.4	5.1	4.5	-	-	63.5
40 x 20	48.6	27.2	3.7	2.9	5.1	3.9	-	-	63.5
40 x 15	48.6	21.7	3.7	2.8	5.1	3.7	-	-	63.5
50 x 40	60.5	48.6	3.9	3.7	5.5	5.1	8.7	7.1	76.2
50 x 32	60.5	42.7	3.9	3.6	5.5	4.9	-	-	76.2
50 x 25	60.5	34.0	3.9	3.4	5.5	4.5	-	-	76.2
50 x 20	60.5	27.2	3.9	2.9	5.5	3.9	-	-	76.2
65 x 50	76.3	60.5	5.2	3.9	7.0	5.5	9.5	8.7	88.9
65 x 40	76.3	48.6	5.2	3.7	7.0	5.1	9.5	7.1	88.9
65 x 32	76.3	42.7	5.2	3.6	7.0	4.9	-	-	88.9
65 x 25	76.3	34.0	5.2	3.4	7.0	4.5	-	-	88.9
80 x 65	89.1	76.3	5.5	5.2	7.6	7.0	11.1	9.5	88.9
80 x 50	89.1	60.5	5.5	3.9	7.6	5.5	11.1	8.7	88.9
80 x 40	89.1	48.6	5.5	3.7	7.6	5.1	11.1	7.1	88.9
80 x 32	89.1	42.7	5.5	3.6	7.6	4.9	-	-	88.9
90 x 80	101.6	89.1	5.7	5.5	8.1	7.6	12.7	11.1	101.6
90 x 65	101.6	76.3	5.7	5.2	8.1	7.0	12.7	9.5	101.6
90 x 50	101.6	60.5	5.7	3.9	8.1	5.5	12.7	8.7	101.6
90 x 40	101.6	48.6	5.7	3.7	8.1	5.1	12.7	7.1	101.6
90 x 32	101.6	42.7	5.7	3.6	8.1	4.9	-	-	101.6
100 x 90	114.3	101.6	6.0	5.7	8.6	8.1	13.5	12.7	101.6
100 x 80	114.3	89.1	6.0	5.5	8.6	7.6	13.5	11.1	101.6
100 x 65	114.3	76.3	6.0	5.2	8.6	7.0	13.5	9.5	101.6
100 x 50	114.3	60.5	6.0	3.9	8.6	5.5	13.5	8.7	101.6
100 x 40	114.3	48.6	6.0	3.7	8.6	5.1	13.5	7.1	101.6

EXPERT Company in PIPE FITTINGS

STEEL BUTT-WELDING PIPE FITTINGS

Reducer Sch40S, Sch80S, Sch120S, Sch160S

Côn Thu Sch40S, Sch80S, Sch120S, Sch160S



■ KS B 1541, JIS B 2312

Unit : mm

Nominal Pipe Size	Outside Diameter		Wall Thickness T								End to End H
	OD ₁	OD ₂	Sch40S		Sch80S		Sch120S		Sch160S		
			T ₁	T ₂	T ₁	T ₂	T ₁	T ₂	T ₁	T ₂	
125 x 100	139.8	114.3	6.6	6.0	9.5	8.6	12.7	11.1	15.9	13.5	127.0
125 x 90	139.8	101.6	6.6	5.7	9.5	8.1	-	-	15.9	12.7	127.0
125 x 80	139.8	89.1	6.6	5.5	9.5	7.6	-	-	15.9	11.1	127.0
125 x 65	139.8	76.3	6.6	5.2	9.5	7.0	-	-	15.9	9.5	127.0
125 x 50	139.8	60.5	6.6	3.9	9.5	5.5	-	-	15.9	8.7	127.0
150 x 125	165.2	139.8	7.1	6.6	11.0	9.5	14.3	12.7	18.2	15.9	139.7
150 x 100	165.2	114.3	7.1	6.0	11.0	8.6	14.3	11.1	18.2	13.5	139.7
150 x 90	165.2	101.6	7.1	5.7	11.0	8.1	-	-	18.2	12.7	139.7
150 x 80	165.2	89.1	7.1	5.5	11.0	7.6	-	-	18.2	11.1	139.7
150 x 65	165.2	76.3	7.1	5.2	11.0	7.0	-	-	18.2	9.5	139.7
200 x 150	216.3	165.2	8.2	7.1	12.7	11.0	18.2	14.3	23.0	18.2	152.4
200 x 125	216.3	139.8	8.2	6.6	12.7	9.5	18.2	12.7	23.0	15.9	152.4
200 x 100	216.3	114.3	8.2	6.0	12.7	8.6	18.2	11.1	23.0	13.5	152.4
200 x 90	216.3	101.6	8.2	5.7	12.7	8.1	-	-	23.0	12.7	152.4
250 x 200	267.4	216.3	9.3	8.2	15.1	12.7	21.4	18.2	28.6	23.0	177.8
250 x 150	267.4	165.2	9.3	7.1	15.1	11.0	21.4	14.3	28.6	18.2	177.8
250 x 125	267.4	139.8	9.3	6.6	15.1	9.5	21.4	12.7	28.6	15.9	177.8
250 x 100	267.4	114.3	9.3	6.0	15.1	8.6	-	-	28.6	13.5	177.8
300 x 250	318.5	267.4	10.3	9.3	17.4	15.1	25.4	21.4	33.3	28.6	203.2
300 x 200	318.5	216.3	10.3	8.2	17.4	12.7	25.4	18.2	33.3	23.0	203.2
300 x 150	318.5	165.2	10.3	7.1	17.4	11.0	25.4	14.3	33.3	18.2	203.2
300 x 125	318.5	139.8	10.3	6.6	17.4	9.5	25.4	12.7	33.3	15.9	203.2
350 x 300	355.6	318.5	11.1	10.3	19.0	17.4	27.8	25.4	35.7	33.3	330.2
350 x 250	355.6	267.4	11.1	9.3	19.0	15.1	27.8	21.4	35.7	28.6	330.2
350 x 200	355.6	216.3	11.1	8.2	19.0	12.7	27.8	18.2	35.7	23.0	330.2
350 x 150	355.6	165.2	11.1	7.1	19.0	11.0	27.8	14.3	35.7	18.2	330.2
400 x 350	406.4	355.6	12.7	11.1	21.4	19.0	30.9	27.8	40.5	35.7	355.6
400 x 300	406.4	318.5	12.7	10.3	21.4	17.4	30.9	25.4	40.5	33.3	355.6
400 x 250	406.4	267.4	12.7	9.3	21.4	15.1	30.9	21.4	40.5	28.6	355.6
400 x 200	406.4	216.3	12.7	8.2	21.4	12.7	30.9	18.2	40.5	23.0	355.6
450 x 400	457.2	406.4	14.3	12.7	23.8	21.4	34.9	30.9	45.2	40.5	381.0
450 x 350	457.2	355.6	14.3	11.1	23.8	19.0	34.9	27.8	45.2	35.7	381.0
450 x 300	457.2	318.5	14.3	10.3	23.8	17.4	34.9	25.4	45.2	33.3	381.0
450 x 250	457.2	267.4	14.3	9.3	23.8	15.1	34.9	21.4	45.2	28.6	381.0
500 x 450	508.0	457.2	15.1	14.3	26.2	23.8	38.1	34.9	50.0	54.2	508.0
500 x 400	508.0	406.4	15.1	12.7	26.2	21.4	38.1	30.9	50.0	40.5	508.0
500 x 350	508.0	355.6	15.1	11.1	26.2	19.0	38.1	27.8	50.0	35.7	508.0
500 x 300	508.0	318.5	15.1	10.3	26.2	17.4	38.1	25.4	50.0	33.3	508.0

► Please contact directly to the Head Office if you have any inquiry for the products which have the nominal pipe size over 550A and Sch80S.
► Vui lòng liên hệ trực tiếp nếu Quý khách có nhu cầu về sản phẩm trên 550A và Sch80S.

Products Information

STAINLESS STEEL BUTT-WELDING PIPE FITTINGS



Products Information

STAINLESS STEEL BUTT-WELDING PIPE FITTINGS

90° / 45° Elbow (Sch10S, Sch20S, Sch40S)

180° Elbow / Cap (Sch10S, Sch20S, Sch40S)

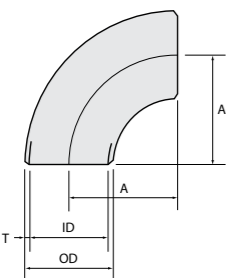
Tee (Sch10S, Sch20S, Sch40S)

Reducer (Sch10S, Sch20S, Sch40S)

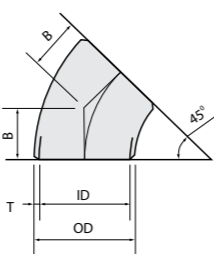
Stainless Steel Butt-Welding Pipe Fittings

90° Elbow (Long, Short) / 45° Elbow (Long) Sch10S, Sch20S, Sch40S

Cúc (dài, ngắn) / Chếch (dài) Sch10S, Sch20S, Sch40S



90° Elbow



45° Elbow



■ KS B 1541/43, JIS B 2312/13

Unit : mm

Nominal Pipe Size	Outside Diameter OD	Wall Thickness T						Center to Center		
		Sch10S		Sch20S		Sch40S		Long		Short
		ID	T	ID	T	ID	T	A(90°)	B(45°)	A(90°)
15	21.7	17.5	2.1	16.7	2.5	16.1	2.8	38.1	15.8	-
20	27.2	23.0	2.1	22.2	2.5	21.4	2.9	38.1	15.8	-
25	34.0	28.4	2.8	28.0	3.0	27.2	3.4	38.1	15.8	25.4
32	42.7	37.1	2.8	36.7	3.0	35.5	3.6	47.6	19.7	31.8
40	48.6	43.0	2.8	42.6	3.0	41.2	3.7	57.2	23.7	38.1
50	60.5	54.9	2.8	53.5	3.5	52.7	3.9	76.2	31.6	50.8
65	76.3	70.3	3.0	69.3	3.5	65.9	5.2	95.3	39.5	63.5
80	89.1	83.1	3.0	81.1	4.0	78.1	5.5	114.3	47.3	76.2
90	101.6	95.6	3.0	93.6	4.0	90.2	5.7	133.4	55.3	88.9
100	114.3	108.3	3.0	106.3	4.0	102.3	6.0	152.4	63.1	101.6
125	139.8	133.0	3.4	129.8	5.0	126.6	6.6	190.5	78.9	127.0
150	165.2	158.4	3.4	155.2	5.0	151.0	7.1	228.6	94.7	152.4
200	216.3	208.3	4.0	203.3	6.5	199.9	8.2	304.8	126.3	203.2
250	267.4	259.4	4.0	254.4	6.5	248.8	9.3	381.0	157.8	254.0
300	318.5	309.5	4.5	305.5	6.5	297.9	10.3	457.2	189.4	304.8
350	355.6	346.0	4.8	339.6	8.0	333.4	11.1	533.4	220.9	355.6
400	406.4	396.8	4.8	390.4	8.0	381.0	12.7	609.6	252.5	406.4
450	457.2	447.6	4.8	441.2	8.0	428.6	14.3	685.8	284.1	457.2
500	508.0	497.0	5.5	489.0	9.5	477.8	15.1	762.0	315.6	508.0
550	558.8	547.8	5.5	-	-	-	-	838.2	347.2	558.8
600	609.6	596.8	6.4	-	-	-	-	914.4	378.7	609.6
750	762.0	746.2	7.9	-	-	-	-	1143.0	473.4	762.0

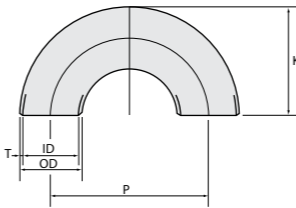
► Please contact directly to the Head Office if you have any inquiry for the products which have the nominal pipe size over 550A.
► Vui lòng liên hệ trực tiếp nếu Quý khách có nhu cầu về sản phẩm trên 550A.

EXPERT Company in PIPE FITTINGS

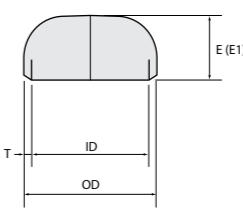
STAINLESS STEEL BUTT-WELDING PIPE FITTINGS

180° Elbow (Long, Short) / CAP Sch10S, Sch20S, Sch40S

Chếch (dài, ngắn) / Đầu Bịch Chụp Sch10S, Sch20S, Sch40S



180° Elbow



Cap



■ KS B 1541/43, JIS B 2312/13

Unit : mm

Nominal Pipe Size	Outside Diameter OD	Wall Thickness T			CAP			180° Elbow			
		Sch10S	Sch20S	Sch40S	E	E _i	Limited Wall	Long		Short	
								P	K	P	K
15	21.7	2.1	2.5	2.8	25.4	-	-	76.2	49.0	-	-
20	27.2	2.1	2.5	2.9	25.4	-	-	76.2	51.7	-	-
25	34.0	2.8	3.0	3.4	38.1	-	-	76.2	55.1	50.8	42.4
32	42.7	2.8	3.0	3.6	38.1	-	-	95.2	69.0	63.6	53.2
40	48.6	2.8	3.0	3.7	38.1	-	-	114.4	81.5	76.2	62.4
50	60.5	2.8	3.5	3.9	38.1	44.5	5.5	152.4	106.5	101.6	81.1
65	76.3	3.0	3.5	5.2	38.1	50.8	7.0	190.6	133.5	127.0	101.7
80	89.1	3.0	4.0	5.5	50.8	63.5	7.6	228.6	158.9	152.4	120.8
90	101.6	3.0	4.0	5.7	63.5	76.2	8.1	266.8	184.2	177.8	139.7
100	114.3	3.0	4.0	6.0	63.5	76.2	8.6	304.8	209.6	203.2	158.8
125	139.8	3.4	5.0	6.6	76.2	88.9	9.5	381.0	260.4	254.0	196.9
150	165.2	3.4	5.0	7.1	88.9	101.6	11.0	457.2	311.2	304.8	235.0
200	216.3	4.0	6.5	8.2	101.6	127.0	12.7	609.6	413.0	406.4	311.4
250	267.4	4.0	6.5	9.3	127.0	152.4	12.7	762.0	514.7	508.0	387.7
300	318.5	4.5	6.5	10.3	152.4	177.8	12.7	914.4	616.5	609.6	464.1
350	355.6	4.8	8.0	11.1	165.1	190.5	12.7	1066.8	711.2	711.2	533.4
400	406.4	4.8	8.0	12.7	177.8	203.2	12.7	1219.2	812.8	812.8	609.6
450	457.2	4.8	8.0	14.3	203.2	228.6	12.7	1371.6	914.4	914.4	685.8
500	508.0	5.5	9.5	15.1	228.6	254.0	12.7	1524.0	1016.0	1016.0	762.0

► Please contact directly to the Head Office if you have any inquiry for the products which have the nominal pipe size over 550A.
► Vui lòng liên hệ trực tiếp nếu Quý khách có nhu cầu về sản phẩm trên 550A.

Stainless Steel Butt-Welding Pipe Fittings

Tee Sch10S, Sch20S, Sch40S

Tê Sch10S, Sch20S, Sch40S



■ KS B 1541/43, JIS B 2312/13

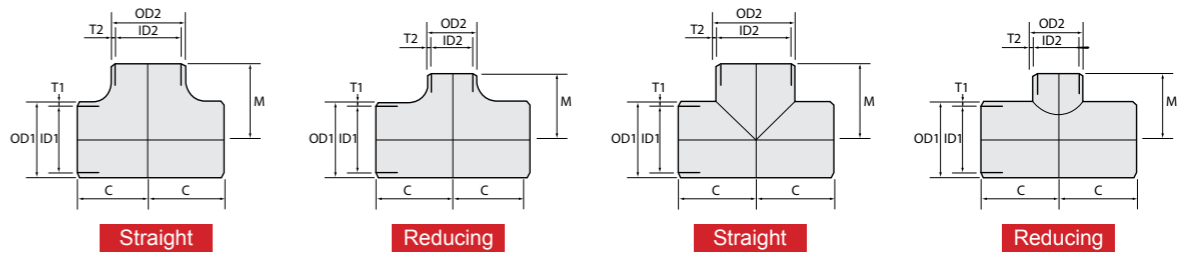
Unit : mm

Nominal Pipe Size	Outside Diameter		Wall Thickness T						Center to End	
	OD ₁	OD ₂	Sch10S		Sch20S		Sch40S		C	M
			T ₁	T ₂	T ₁	T ₂	T ₁	T ₂		
15 x 15	21.7	21.7	2.1	2.1	2.5	2.5	2.8	2.8	25.4	25.4
20 x 20	27.2	27.2	2.1	2.1	2.5	2.5	2.9	2.9	28.6	28.6
25 x 25	34.0	34.0	2.8	2.8	3.0	3.0	3.4	3.4	38.1	38.1
32 x 32	42.7	42.7	2.8	2.8	3.0	3.0	3.6	3.6	47.6	47.6
32 x 25	42.7	34.0	2.8	2.8	3.0	3.0	3.6	3.4	47.6	47.6
40 x 40	48.6	48.6	2.8	2.8	3.0	3.0	3.7	3.7	57.2	57.2
40 x 32	48.6	42.7	2.8	2.8	3.0	3.0	3.7	3.6	57.2	57.2
40 x 25	48.6	34.0	2.8	2.8	3.0	3.0	3.7	3.4	57.2	57.2
50 x 50	60.5	60.5	2.8	2.8	3.5	3.5	3.9	3.9	63.5	63.5
50 x 40	60.5	48.6	2.8	2.8	3.5	3.0	3.9	3.7	63.5	60.3
50 x 32	60.5	42.7	2.8	2.8	3.5	3.0	3.9	3.6	63.5	57.2
65 x 65	76.3	76.3	3.0	3.0	3.5	3.5	5.2	5.2	76.2	76.2
65 x 50	76.3	60.5	3.0	2.8	3.5	3.5	5.2	3.9	76.2	69.9
65 x 40	76.3	48.6	3.0	2.8	3.5	3.0	5.2	3.7	76.2	66.7
80 x 80	89.1	89.1	3.0	3.0	4.0	4.0	5.5	5.5	85.7	85.7
80 x 65	89.1	76.3	3.0	3.0	4.0	3.5	5.5	5.2	85.7	85.6
80 x 50	89.1	60.5	3.0	2.8	4.0	3.5	5.5	3.9	85.7	76.2
90 x 90	101.6	101.6	3.0	3.0	4.0	4.0	5.7	5.7	95.3	95.3
90 x 80	101.6	89.1	3.0	3.0	4.0	4.0	5.7	5.5	95.3	92.1
90 x 65	101.6	76.3	3.0	3.0	4.0	3.5	5.7	5.2	95.3	88.9
100 x 100	114.3	114.3	3.0	3.0	4.0	4.0	6.0	6.0	104.8	104.8
100 x 90	114.3	101.6	3.0	3.0	4.0	4.0	6.0	5.7	104.8	101.6
100 x 80	114.3	89.1	3.0	3.0	4.0	4.0	6.0	5.5	104.8	96.4
100 x 65	114.3	76.3	3.0	3.0	4.0	3.5	6.0	5.2	104.8	95.3
125x125	139.8	139.8	3.4	3.4	5.0	5.0	6.6	6.6	123.8	123.8
125x100	139.8	114.3	3.4	3.0	5.0	4.0	6.6	6.0	123.8	117.5
125x90	139.8	101.6	3.4	3.0	5.0	4.0	6.6	5.7	123.8	114.3
125x80	139.8	89.1	3.4	3.0	5.0	4.0	6.6	5.5	123.8	111.1
150x150	165.2	165.2	3.4	3.4	5.0	5.0	7.1	7.1	142.9	142.9
150x125	165.5	139.8	3.4	3.4	5.0	5.0	7.1	6.6	142.9	136.5
150x100	165.2	114.3	3.4	3.0	5.0	4.0	7.1	6.0	142.9	130.2
200x200	216.3	216.3	4.0	4.0	6.5	6.5	8.2	8.2	177.8	177.8
200x150	216.3	165.2	4.0	3.4	6.5	5.0	8.2	7.1	177.8	168.3

▶ Please contact directly to the Head Office if you have any inquiry for the products which have the nominal pipe size over 550A.
▶ Vui lòng liên hệ trực tiếp nếu Quý khách có nhu cầu về sản phẩm trên 550A.

EXPERT Company in PIPE FITTINGS

STAINLESS STEEL BUTT-WELDING PIPE FITTINGS



■ KS B 1541/43, JIS B 2312/13

Unit : mm

Nominal Pipe Size	Outside Diameter		Wall Thickness T						Center to End	
	OD ₁	OD ₂	Sch10S		Sch20S		Sch40S		C	M
			T ₁	T ₂	T ₁	T ₂	T ₁	T ₂		
200x125	216.3	139.8	4.0	3.4	6.5	5.0	8.2	6.6	177.8	161.9
250x250	267.4	267.4	4.0	4.0	6.5	6.5	9.3	9.3	215.9	215.9
250x200	267.4	216.3	4.0	4.0	6.5	6.5	9.3	8.2	215.9	203.2
250x150	267.4	165.2	4.0	3.4	6.5	5.0	9.3	7.1	215.9	193.7
300x300	318.5	318.5	4.5	4.5	6.5	6.5	10.3	10.3	254.0	254.0
300x250	318.5	267.4	4.5	4.0	6.5	6.5	10.3	9.3	254.0	241.3
300x200	318.5	216.3	4.5	4.0	6.5	6.5	10.3	8.2	254.0	228.6
350x350	355.6	355.6	4.8	4.8	8.0	8.0	11.1	11.1	279.4	279.4
350x300	355.6	318.5	4.8	4.5	8.0	6.5	11.1	10.3	279.4	269.9
350x250	355.6	267.4	4.8	4.0	8.0	6.5	11.1	9.3	279.4	247.2
350x200	355.6	216.3	4.8	4.0	8.0	6.5	11.1	8.2	279.4	247.7
400x400	406.4	406.4	4.8	4.8	8.0	8.0	12.7	12.7	304.8	304.8
400x350	406.4	355.6	4.8	4.8	8.0	8.0	12.7	11.1	304.8	304.8
400x300	406.4	318.5	4.8	4.5	8.0	6.5	12.7	10.3	304.8	295.3
400x250	406.4	267.4	4.8	4.0	8.0	6.5	12.7	9.3	304.8	282.6
450x450	457.2	457.2	4.8	4.8	8.0	8.0	14.3	14.3	342.9	341.9
450x400	457.2	406.4	4.8	4.8	8.0	8.0	14.3	12.7	342.9	330.2
450x350	457.2	355.6	4.8	4.8	8.0	8.0	14.3	11.1	342.9	330.2
450x300	457.2	318.5	4.8	4.5	8.0	6.5	14.3	10.3	342.9	310.7
500x500	508.0	508.0	5.5	5.5	9.5	9.5	15.1	15.1	381.0	381.0
500x450	508.0	457.2	5.5	4.8	9.5	8.0	15.1	14.3	381.0	368.0
500x400	508.0	406.4	5.5	4.8	9.5	8.0	15.1	12.7	381.0	355.6
500x350	508.0	355.6	5.5	4.8	9.5	8.0	15.1	11.1	381.0	355.6
550x550	558.8	558.8	5.5	5.5	-	-	-	-	419.1	419.1
550x500	558.8	508.0	5.5	5.5	-	-	-	-	419.1	406.4
550x450	558.8	457.2	5.5	4.8	-	-	-	-	419.1	393.7
550x400	558.8	406.4	5.5	4.8	-	-	-	-	419.1	381.0
600x600	609.6	609.6	6.4	6.4	-	-	-	-	431.8	431.8
600x550	609.6	558.8	6.4	5.5	-	-	-	-	431.8	431.8
600x500	609.6	508.0	6.4	5.5	-	-	-	-	431.8	431.8
600x450	609.6	457.2	6.4	4.8	-	-	-	-	431.8	419.1
750x750	762.0	762.0	7.9	7.9	-	-	-	-	558.8	558.8
750x600	762.0	609.6	7.9	6.4	-	-	-	-	558.8	533.4

▶ Please contact directly to the Head Office if you have any inquiry for the products which have the nominal pipe size over 550A.
▶ Vui lòng liên hệ trực tiếp nếu Quý khách có nhu cầu về sản phẩm trên 550A.

Stainless Steel Butt-Welding Pipe Fittings

Reducer Sch10S, Sch20S, Sch40S

Côn Thu Sch10S, Sch20S, Sch40S



■ KS B 1541/43, JIS B 2312/13

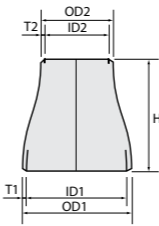
Unit : mm

Nominal Pipe Size	Outside Diameter		Wall Thickness T						End to End H
	OD ₁	OD ₂	Sch10S		Sch20S		Sch40S		
			T ₁	T ₂	T ₁	T ₂	T ₁	T ₂	
25 x 20	34.0	27.2	2.8	2.1	3.0	2.5	3.4	2.9	50.8
25 x 15	34.0	21.7	2.8	2.1	3.0	2.5	3.4	2.8	50.8
32 x 25	42.7	34.0	2.8	2.8	3.0	3.0	3.6	3.4	50.8
32 x 20	42.7	27.2	2.8	2.1	3.0	2.5	3.6	2.9	50.8
40 x 32	48.6	42.7	2.8	2.8	3.0	3.0	3.7	3.6	63.5
40 x 25	48.6	34.0	2.8	2.8	3.0	3.0	3.7	3.4	63.5
40 x 20	48.6	27.2	2.8	2.1	3.0	2.5	3.7	2.9	63.5
50 x 40	60.5	48.6	2.8	2.8	3.5	3.0	3.9	3.7	76.2
50 x 32	60.5	42.7	2.8	2.8	3.5	3.0	3.9	3.6	76.2
50 x 25	60.5	34.0	2.8	2.8	3.5	3.0	3.9	3.4	76.2
65 x 50	76.3	60.5	3.0	2.8	3.5	3.5	5.2	3.9	88.9
65 x 40	76.3	48.6	3.0	2.8	3.5	3.0	5.2	3.7	88.9
65 x 32	76.3	42.7	3.0	2.8	3.5	3.0	5.2	3.6	88.9
80 x 65	89.1	76.3	3.0	3.0	4.0	3.5	5.5	5.2	88.9
80 x 50	89.1	60.5	3.0	2.8	4.0	3.5	5.5	3.9	88.9
80 x 40	89.1	48.6	3.0	2.8	4.0	3.0	5.5	3.7	88.9
90 x 80	101.6	89.1	3.0	3.0	4.0	4.0	5.7	5.5	101.6
90 x 65	101.6	76.3	3.0	3.0	4.0	3.5	5.7	5.2	101.6
90 x 50	101.6	60.5	3.0	2.8	4.0	3.5	5.7	3.9	101.6
100 x 90	114.3	101.6	3.0	3.0	4.0	4.0	6.0	5.7	101.6
100 x 80	114.3	89.1	3.0	3.0	4.0	4.0	6.0	5.5	101.6
100 x 65	114.3	76.3	3.0	3.0	4.0	3.5	6.0	5.2	101.6
100 x 50	114.3	60.5	3.0	2.8	4.0	3.5	6.0	3.9	101.6
125 x 100	139.8	114.3	3.4	3.0	5.0	4.0	6.6	6.0	127.0
125 x 90	139.8	101.6	3.4	3.0	5.0	4.0	6.6	5.7	127.0
125 x 80	139.8	89.1	3.4	3.0	5.0	4.0	6.6	5.5	127.0
125 x 65	139.8	76.3	3.4	3.0	5.0	3.5	6.6	5.2	127.0
150 x 125	165.2	139.8	3.4	3.4	5.0	5.0	7.1	6.6	139.7
150 x 100	165.2	114.3	3.4	3.0	5.0	4.0	7.7	6.0	139.7
150 x 90	165.2	101.6	3.4	3.0	5.0	4.0	7.1	5.7	139.7
150 x 80	165.2	89.1	3.4	3.0	5.0	4.0	7.1	5.5	139.7
200 x 150	216.3	165.2	4.0	3.4	6.5	5.0	8.2	7.1	152.4
200 x 125	216.3	139.8	4.0	3.4	5.5	5.0	8.2	6.6	152.4
200 x 100	216.3	114.3	4.0	3.0	6.5	4.0	8.2	6.0	152.4

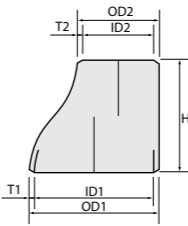
► Please contact directly to the Head Office if you have any inquiry for the products which have the nominal pipe size over 550A.
► Vui lòng liên hệ trực tiếp nếu Quý khách có nhu cầu về sản phẩm trên 550A.

EXPERT Company in PIPE FITTINGS

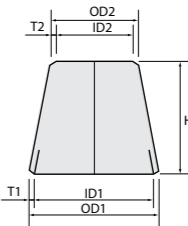
STAINLESS STEEL BUTT-WELDING PIPE FITTINGS



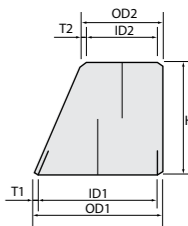
Concentric



Eccentric



Concentric



Eccentric

■ KS B 1541/43, JIS B 2312/13

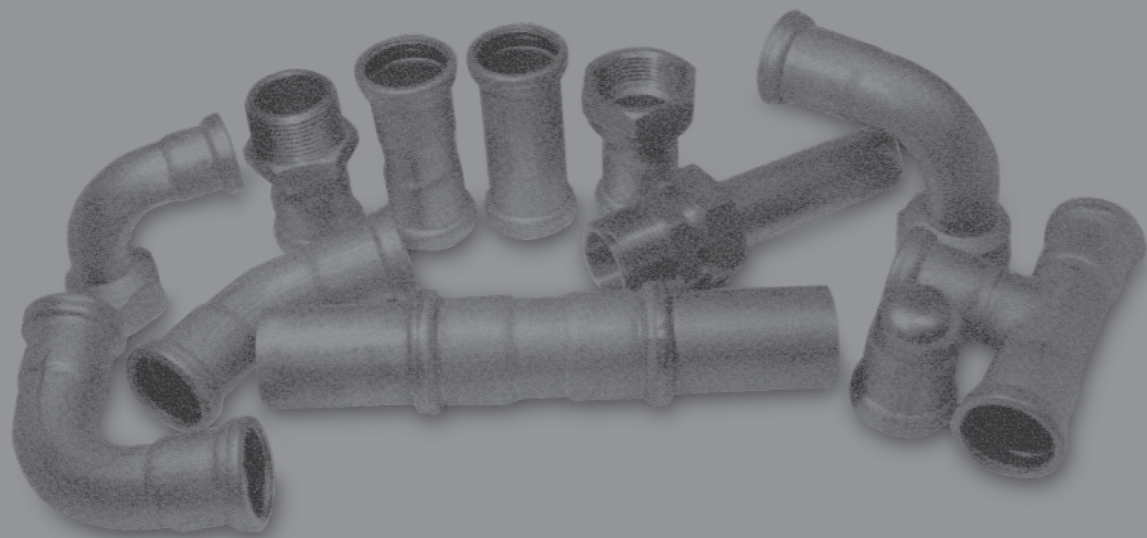
Unit : mm

Nominal Pipe Size	Outside Diameter		Wall Thickness T						End to End H
	OD ₁	OD ₂	Sch10S		Sch20S		Sch40S		
			T ₁	T ₂	T ₁	T ₂	T ₁	T ₂	
250 x 200	267.4	216.3	4.0	4.0	6.5	6.5	9.3	8.2	177.8
250 x 150	267.4	165.2	4.0	3.4	6.5	5.0	9.3	7.1	177.8
250 x 125	267.4	139.8	4.0	3.4	6.5	5.0	9.3	6.6	177.8
250 x 100	267.4	114.3	4.0	3.0	6.5	4.0	9.3	6.0	177.8
300 x 250	318.5	267.4	4.5	4.0	6.5	6.5	10.3	9.3	203.2
300 x 200	318.5	216.3	4.5	4.0	6.5	6.5	10.3	8.2	203.2
300 x 150	318.5	165.2	4.5	3.4	6.5	5.0	10.3	7.1	203.2
300 x 100	318.5	139.8	4.5	3.4	6.5	5.0	10.3	6.6	203.2
350 x 300	355.6	318.5	4.8	4.5	8.0	6.5	11.1	10.3	330.2
350 x 250	355.6	267.4	4.8	4.0	8.0	6.5	11.1	9.3	330.2
350 x 200	355.6	216.3	4.8	4.0	8.0	6.5	11.1	8.2	330.2
350 x 150	355.6	165.2	4.8	3.4	8.0	5.0	11.1	7.1	330.2
400 x 350	406.4	355.6	4.8	4.8	8.0	8.0	12.7	11.1	355.6
400 x 300	406.4	318.5	4.8	4.5	8.0	6.5	12.7	10.3	355.6
400 x 250	406.4	267.4	4.8	4.0	8.0	6.5	12.7	9.3	355.6
400 x 200	406.4	216.3	4.8	4.0	8.0	6.5	12.7	8.2	355.6
450 x 400	457.2	406.4	4.8	4.8	8.0	8.0	14.3	12.7	381.0
450 x 350	457.2	355.6	4.8	4.8	8.0	8.0	14.3	11.1	381.0
450 x 300	457.2	318.5	4.8	4.5	8.0	6.5	14.3	10.3	381.0
450 x 250	457.2	267.4	3.8	4.0	8.0	6.5	14.3	9.3	381.0
500 x 450	508.0	457.2	5.5	4.8	9.5	8.0	15.1	14.3	508.0
500 x 400	508.0	406.4	5.5	4.8	9.5	8.0	15.1	12.7	508.0
500 x 350	508.0	355.6	5.5	4.8	9.5	8.0	15.1	11.1	508.0
500 x 300	508.0	318.5	5.5	4.5	9.5	6.5	15.1	10.3	508.0
550 x 500	558.8	508.0	5.5	5.5	-	-	-		508.0
550 x 450	558.8	457.2	5.5	4.8	-	-	-		508.0
550 x 400	558.8	406.4	5.5	4.8	-	-	-		508.0
600 x 550	609.6	558.8	6.4	5.5	-	-	-		508.0
600 x 500	609.6	508.0	6.4	5.5	-	-	-		508.0
600 x 450	609.6	457.2	6.4	4.8	-	-	-		508.0
750 x 600	762.0	609.6	7.9	6.4	-	-	-		609.6

► Please contact directly to the Head Office if you have any inquiry for the products which have the nominal pipe size over 550A.
► Vui lòng liên hệ trực tiếp nếu Quý khách có nhu cầu về sản phẩm trên 550A.

Products Information

STAINLESS PRESS FITTINGS



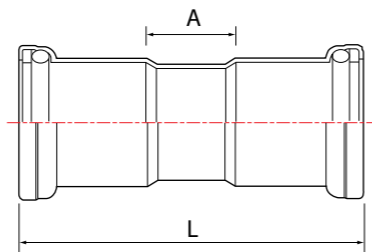
Products Information

HW JOINT SYSTEM

- Socket
- Bear Socket
- 90° Elbow
- 45° Elbow
- Tee
- Reducer
- Cap

HW JOINT SYSTEM

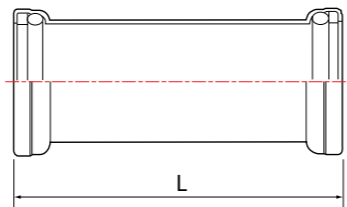
SOCKET



Unit : mm

ID	Symbol	A	Allowance(A)	L	Allowance(L)
13		13	+1	57	±1
20		14	+1	64	±1
25		14	+1	64	±1
30		24	+1	95	±1
40		24	+1	95	±1
50		24	+1	111	±1
60		29	+2	127	±1

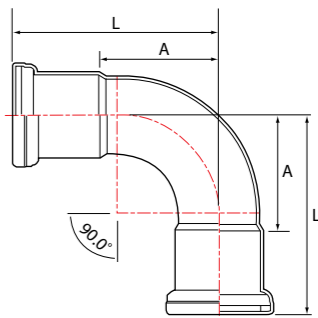
BEAR SOCKET



Unit : mm

ID	Symbol	L	Allowance(L)
13		119	±1
20		132	±1
25		132	±1
30		93	±1
40		96	±1
50		112	±1
60		128	±1

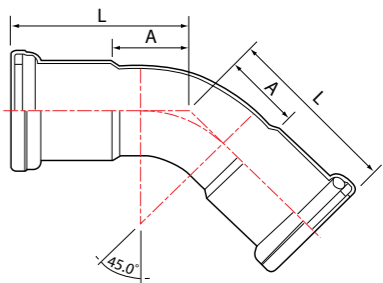
90° ELBOW



Unit : mm

ID	Symbol	A	Allowance(A)	L	Allowance(L)
13		28	+1	50	±1
20		35	+1	60	±1
25		44	+1	69	±1
30		54	+1	88	±1
40		64	+1	100	±1
50		72	+1	115	±1
60		89	+2	128	±1

45° ELBOW

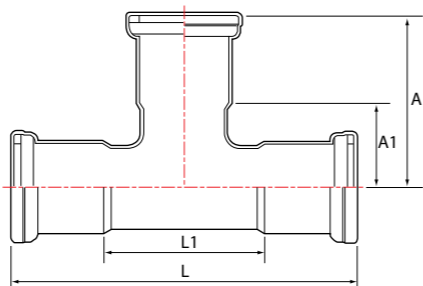


Unit : mm

ID	Symbol	A	Allowance(A)	L	Allowance(L)
13		17	+1	39	±1
20		20	+1	45	±1
25		24	+1	49	±1
30		30	+1	65	±1
40		35	+1	70	±1
50		38	+1	81	±1
60		45	+2	94	±1

HW JOINT SYSTEM

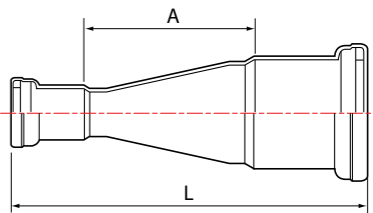
TEE



Unit : mm

ID	Symbol	A	A1	L	L1	Allowance(L)
13 × 13		42	20	84	40	±1.0
20 × 13		45	23	96	46	±1.0
20 × 20		48	23	96	46	±1.0
25 × 20		50	28	106	56	±1.0
30 × 20		53	28	106	56	±1.0
25 × 25		53	28	106	56	±1.0
30 × 13		62	40	133	63	±2.0
30 × 20		58	33	133	63	±2.0
30 × 25		58	33	133	63	±2.0
30 × 30		69	34	133	63	±2.0
40 × 13		68	46	145	75	±2.0
40 × 20		65	40	145	75	±2.0
40 × 25		65	40	145	75	±2.0
40 × 30		75	40	145	75	±2.0
40 × 40		75	40	145	75	±2.0
50 × 13		71	49	137	51	±2.0
50 × 20		67	42	137	51	±2.0
50 × 25		67	42	137	51	±2.0
50 × 30		78	43	155	69	±2.0
50 × 40		86	43	155	69	±2.0
50 × 50		86	43	155	69	±2.0
60 × 13		81	59	211	113	±2.0
60 × 20		77	52	211	113	±2.0
60 × 25		77	52	211	113	±2.0
60 × 30		93	58	239	141	±2.0
60 × 40		101	66	239	141	±2.0
60 × 50		109	66	239	141	±2.0
60 × 60		116	67	239	141	±2.0

REDUCER

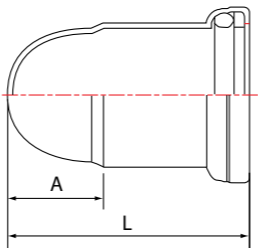


Unit : mm

ID	Symbol	A	L	Allowance(L)
20 × 13		20	67	±1.0
25 × 13		37	87	±1.0
25 × 20		19	69	±1.0
30 × 13		43	99	±1.0
30 × 20		36	95	±1.0
30 × 25		27	86	±1.0
40 × 13		52	110	±2.0
40 × 20		45	106	±2.0
40 × 25		47	108	±2.0
40 × 30		32	102	±2.0
50 × 13		64	129	±2.0
50 × 20		57	125	±2.0
50 × 25		54	122	±2.0
50 × 30		51	128	±2.0
50 × 40		28	107	±2.0
60 × 13		95	166	±2.0
60 × 20		76	150	±2.0
60 × 25		70	144	±2.0
60 × 30		69	152	±2.0
60 × 40		52	137	±2.0
60 × 50		36	128	±2.0

HW JOINT SYSTEM

CAP



Unit : mm

SU	Symbol	A	Allowance(A)	L	Allowance(L)
13		15	+1	37	±1
20		19	+1	44	±1
25		20	+1	45	±1
30		24	+1	59	±1
40		33	+1	68	±1
50		33	+1	76	±1
60		38	+2	87	±1

Products Information

FLANGE

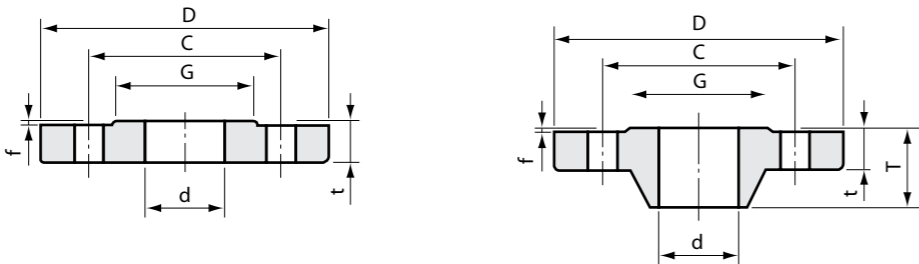


Products Information

FLANGE

FLANGE

FLANGE [KS / JIS CODE]



■ KS B 1503, JIS B 2220

Unit : mm

Class	Size	D	t	f	G	T	T1	d	Bolting			
									C	Number of Holes	Dia. of Holes	Bolt Size
5K	10	75	9	1	39	-	-	17.8	55	4	12	M10
	15	80	9	1	44	-	-	22.2	60	4	12	M10
	20	85	10	1	49	-	-	27.7	65	4	12	M10
	25	95	10	1	59	-	-	34.5	75	4	12	M10
	32	115	12	2	70	-	-	43.2	90	4	15	M12
	40	120	12	2	75	-	-	49.1	95	4	15	M12
	50	130	14	2	85	-	-	61.1	105	4	15	M12
	65	155	14	2	110	-	-	77.1	130	4	15	M12
	80	180	14	2	121	-	-	90.0	145	4	19	M16
	100	200	16	2	141	-	-	115.4	165	8	19	M16
	125	235	16	2	176	-	-	141.2	200	8	19	M16
	150	265	18	2	206	-	-	166.6	230	8	19	M16
	200	320	20	2	252	-	-	218.0	280	8	23	M20
	250	385	22	2	317	-	-	269.5	345	12	23	M20
	300	430	22	3	360	-	-	321.0	390	12	23	M20
	350	480	24	3	403	-	-	358.1	435	12	25	M22
	400	540	24	3	463	-	-	409.0	495	16	25	M22
	450	605	24	3	523	40	-	460.0	555	16	25	M22
	500	655	24	3	573	42	-	511.0	605	20	25	M22
	600	770	26	3	680	44	-	613.0	715	20	27	M24
10K	10	90	12	1	48	-	-	17.8	65	4	15	M12
	15	95	12	1	52	-	-	22.2	70	4	15	M12
	20	100	14	1	58	-	-	27.7	75	4	15	M12
	25	125	14	1	70	-	-	34.5	90	4	19	M16
	32	135	16	2	80	-	-	43.2	100	4	19	M16
	40	140	16	2	85	-	-	49.1	105	4	19	M16
	50	155	16	2	100	-	-	61.1	120	4	19	M16
	65	175	18	2	120	-	-	77.1	140	4	19	M16
	80	185	18	2	130	-	-	90	150	8	19	M16
	100	210	18	2	155	-	-	115.4	175	8	19	M16
	125	250	20	2	185	-	-	141.2	210	8	23	M20

■ KS B 1503, JIS B 2220

Unit : mm

Class	Size	D	t	f	G	T	T1	d	Bolting			
									C	Number of Holes	Dia. of Holes	Bolt Size
10K	150	280	22	2	215	-	-	166.6	240	8	23	M20
	200	330	22	2	265	-	-	218	290	12	23	M20
	250	400	24	2	325	36	-	269.5	355	12	25	M22
	300	445	24	3	370	38	-	321	400	16	25	M22
	350	490	26	3	415	42	-	358.1	445	16	25	M22
	400	560	28	3	475	44	-	409	510	16	27	M24
	450	620	30	3	530	48	-	460	565	20	27	M24
	500	675	30	3	585	48	-	511	620	20	27	M24
20K	600	795	32	3	-	52	-	613	730	24	33	
	10	90	14	1	48	20	-	17.8	65	4	15	M12
	15	95	14	1	52	20	-	22.2	70	4	15	M12
	20	100	16	1	58	22	-	27.7	75	4	15	M12
	25	125	16	1	70	24	-	34.5	90	4	19	M16
	32	135	18	2	80	26	-	43.2	100	4	19	M16
	40	140	18	2	85	26	-	49.1	105	4	19	M16
	50	155	18	2	100	26	-	61.1	120	8	19	M16
	65	175	20	2	120	30	-	77.1	140	8	19	M16
	80	200	22	2	135	34	-	90	160	8	23	M20
	100	225	24	2	160	36	-	115.4	185	8	23	M20
	125	270	26	2	195	40	-	141.2	225	8	25	M22
	150	305	28	2	230	42	-	166.6	260	12	25	M22
	200	350	30	2	275	46	-	218	305	12	25	M22
	250	430	34	2	345	52	-	269.5	380	12	27	M24
	300	480	36	3	395	56	-	321	430	16	27	M24
	350	540	40	3	440	62	-	358.1	480	16	33	M30
	400	605	46	3	495	70	-	409	540	16	33	M30
	450	675	48	3	560	78	-	460	605	20	33	M30
	500	730	52	3	615	84	-	511	660	20	33	M30
30K	10	110	16	1	52	24	-	17.8	75	4	19	M16
	15	115	18	1	55	26	45	22.2	80	4	19	M16
	20	120	18	1	60	28	45	27.7	85	4	19	M16
	25	130	20	1	70	30	48	34.5	95	4	19	M16
	32	140	22	2	80	32	52	43.2	105	4	19	M16
	40	160	22	2	90	34	54	49.1	120	4	23	M20
	50	165	22	2	105	36	57	61.1	130	8	19	M16
	65	200	26	2	130	40	69	77.1	160	8	23	M20
	80	210	28	2	140	44	73	90	170	8	23	M20
	100	240	32	2	160	48	76	115.4	195	8	25	M22
	125	275	36	2	195	54	86	141.2	230	8	25	M22
	150	325	38	2	235	58	95	166.6	275	12	27	M24
	200	370	42	2	280	64	102	218	320	12	27	M24
	250	450	48	2	345	72	118	269.5	390	12	33	M30
	300	515	52	3	405	78	127	321	450	16	33	M30
	350	560	54	3	450	84	134	358.1	495	16	33	M30

References

STEEL BUTT-WELDING PIPE FITTINGS



References

STEEL BUTT-WELDING PIPE FITTINGS

Welding End Preparations KS / JIS

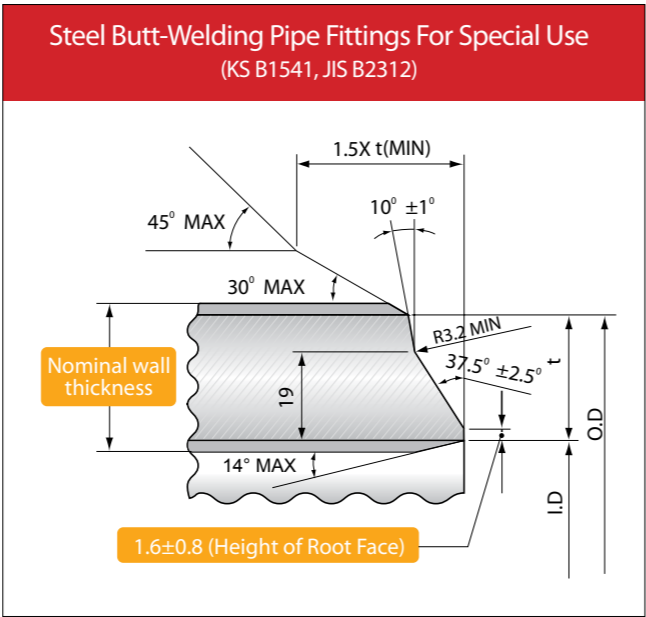
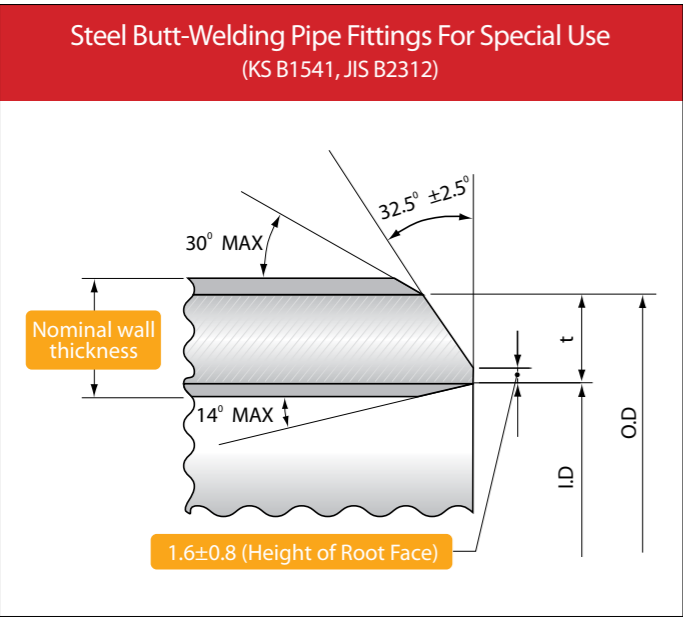
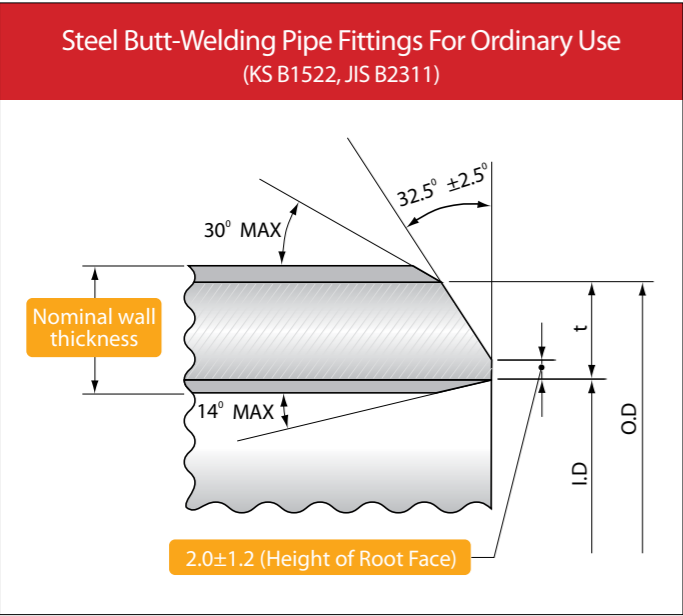
Dimensional Tolerances KS / JIS

Steel Butt-Welding Pipe Fittings Approx Weight

Materials Specifications For JIS Materials

Steel Butt-Welding Pipe Fittings

Welding End Preparations KS / JIS



Dimensional Tolerances KS / JIS

Steel Butt-Welding Pipe Fittings For Ordinary Use

■ KS B 1522, JIS B 2311

Unit : mm

Item	Type Of Pipe fittings	Nominal Diameter						
		15-65	80-100	125-200	250-450	500-600	650-750	800-1200
		Tolerance						
Outside Dia, at end face (OD)	All pipe fittings	± 2.0	± 2.5	± 3.5	+ 5.0 - 4.5	+ 6.4 - 4.8		
Inside Dia, at end face (ID)		± 2.0	± 2.5	± 3.5	± 4.5	± 4.8		
Wall thickness (T)		+ Not Specified -15%						
Center-to-end dimension (A,B)	90° Elbow /45° Elbow	± 2.0		± 3.2				± 4.8
Center-to-center dimension (P)	180° Elbow	± 6.4		± 9.5		-		
Back-to-face dimension (K)		± 6.4				-		
Alignment of ends (Max.) (U)		1.6		3.2		-		
End-to-end dimension (H)	Reducer	± 2.0		± 3.2			± 4.8	
Center-to-end dimension (C,M)	Tee	± 2.0		± 3.2				± 4.8
Back-to-face dimension (E)	Cap	± 3.2		± 6.4			-	
Outside of end Peripheral length	All pipe fittings	-					± 0.5%	

Steel Butt-Welding Pipe Fittings For Ordinary and Special Use

■ KS B 1541, JIS B 2312

Unit : mm

Item	Type Of Pipe fittings	Nominal Diameter						
		15-65	80-100	125-200	250-450	500-600	650-750	800-1200
		Tolerance						
Outside Dia, at end face (OD)	All pipe fittings	+ 1.6 - 0.8	± 1.6	+ 2.4 - 1.6	+ 4.0 - 3.2	+ 6.4 - 4.8		
Inside Dia, at end face (ID)		± 0.8	± 1.6		± 3.2		± 4.8	
Wall thickness (T)		+ Not Specified						-12.5%
Center-to-end dimension (A,B)	90° Elbow /45° Elbow	± 1.6			± 2.4		± 3.2	± 4.8
Center-to-center dimension (P)	180° Elbow	± 6.4			± 9.5		-	
Back-to-face dimension (K)		± 6.4			-			
Alignment of ends (Max.) (U)		1.6			3.2		-	
End-to-end dimension (H)	Reducer	± 1.6			± 2.4		± 4.8	
Center-to-end dimension (C,M)	Tee	± 1.6			± 2.4		± 3.2	± 4.8
Back-to-face dimension (E)	Cap	± 3.2		± 6.4			-	
Outside of end Peripheral length	All pipe fittings	-					± 0.5%	

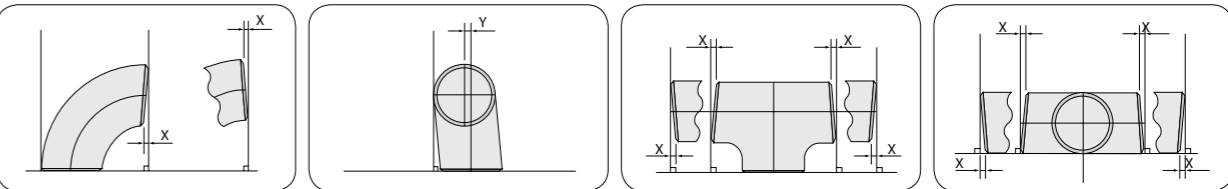
■ Application of KS B 1541, JIS B 2312 / Application of KS B 1543, JIS B 2313

Right Angle For Shaft-Center Of Pipe Fittings

■ KS B 1522/41 JIS B 2311/12

Unit : mm

Item	Type Of Pipe fittings	Nominal Diameter							
		15-100	125-200	250-300	350-400	450-600	650-750	800-1050	1100-1200
		Tolerance							
Off Angle (X)	All pipe fittings	0.8	1.6	2.4		3.2	4.8		
Off Plane (Y)		1.6	3.2	4.8	6.4	9.5		12.7	19.1



Steel Butt-Welding Pipe Fittings

Steel Butt-Welding Fittings Approx Weight 90° ELBOW

Unit : kg

Nominal Pipe	Long							Short							Nominal Pipe
	SGP	STD	S40S	X-S	S80S	XX-S	S160S	SGP	STD	S40S	X-S	S80S	XX-S	S160S	
15	0.08	0.08	0.08	0.10	0.10	0.15	0.12	-	-	-	-	-	-	-	15
20	0.10	0.11	0.11	0.14	0.14	0.22	0.13	-	-	-	-	-	-	-	20
25	0.15	0.16	0.16	0.20	0.20	0.36	0.25	0.10	0.11	0.11	0.14	0.14	0.22	0.17	25
32	0.26	0.26	0.26	0.35	0.35	0.64	0.42	0.17	0.18	0.18	0.23	0.23	0.39	0.28	32
40	0.35	0.37	0.37	0.50	0.50	0.93	0.65	0.24	0.25	0.25	0.33	0.33	0.57	0.49	40
50	0.64	0.66	0.66	0.90	0.90	1.69	1.33	0.43	0.44	0.44	0.60	0.60	1.13	0.89	50
65	1.12	1.29	1.29	1.79	1.79	3.43	2.33	0.75	0.91	0.91	1.19	1.19	2.19	1.49	65
80	1.58	2.04	2.04	2.74	2.74	5.25	3.83	1.05	1.36	1.36	1.83	1.83	3.49	2.55	80
100	2.91	3.84	3.84	5.36	5.36	10.20	8.02	1.94	2.56	2.56	3.58	3.58	6.79	5.35	100
125	4.49	6.48	6.48	9.13	9.13	17.60	14.70	2.99	4.32	4.32	6.09	6.09	11.80	9.79	125
150	7.09	9.94	9.94	15.00	15.00	29.10	24.20	4.73	6.63	6.63	10.00	10.00	19.50	16.20	150
200	14.40	20.10	20.10	30.50	30.50	51.40	53.20	9.61	13.40	13.40	20.30	20.30	34.30	35.50	200
250	25.40	35.40	35.40	47.70	57.00	92.80	103.00	16.90	23.60	23.60	31.80	38.00	61.00	68.60	250
300	38.10	52.00	57.00	68.70	94.00	134.00	171.00	25.40	34.60	38.00	45.80	63.00	89.50	114.00	300
350	56.70	67.90	79.10	89.90	133.00	-	236.00	37.80	45.30	53.00	60.00	89.00	-	158.00	350
400	74.30	89.00	118.00	118.00	195.00	-	350.00	49.50	59.10	79.00	78.30	130.00	-	234.00	400
450	94.20	113.00	169.00	150.00	275.00	-	495.00	62.80	75.30	113.00	99.90	183.00	-	330.00	450
500	116.00	140.00	220.00	186.00	373.00	-	676.00	77.70	93.10	147.00	124.00	249.00	-	451.00	500
550	141.00	169.00	267.00	225.00	493.00	-	886.00	94.10	113.00	178.00	150.00	329.00	-	591.00	550
600	168.00	202.00	366.00	268.00	636.00	-	1160.00	112.00	135.00	244.00	179.00	424.00	-	773.00	600
650	198.00	237.00	430.00	315.00	-	-	-	132.00	158.00	287.00	210.00	-	-	-	650
700	230.00	276.00	500.00	367.00	-	-	-	154.00	184.00	334.00	245.00	-	-	-	700
750	264.00	316.00	575.00	421.00	-	-	-	176.00	211.00	383.00	281.00	-	-	-	750
800	301.00	361.00	654.00	480.00	-	-	-	201.00	241.00	436.00	320.00	-	-	-	800
850	340.00	408.00	739.00	543.00	-	-	-	227.00	272.00	493.00	362.00	-	-	-	850
900	380.00	457.00	904.00	608.00	-	-	-	253.00	304.00	603.00	405.00	-	-	-	900
950	425.00	510.00	-	679.00	-	-	-	283.00	340.00	-	453.00	-	-	-	950
1000	471.00	565.00	-	753.00	-	-	-	314.00	377.00	-	502.00	-	-	-	1000
1050	518.00	622.00	-	828.00	-	-	-	346.00	416.00	-	554.00	-	-	-	1050
1100	570.00	684.00	-	912.00	-	-	-	380.00	456.00	-	608.00	-	-	-	1100
1150	623.00	748.00	-	997.00	-	-	-	415.00	499.00	-	665.00	-	-	-	1150
1200	677.00	814.00	-	1085.00	-	-	-	452.00	543.00	-	724.00	-	-	-	1200
1250	735.00	884.00	-	1178.00	-	-	-	490.00	589.00	-	786.00	-	-	-	1250
1300	796.00	956.00	-	1305.00	-	-	-	530.00	637.00	-	870.00	-	-	-	1300
1350	857.00	1031.00	-	1375.00	-	-	-	572.00	688.00	-	917.00	-	-	-	1350
1400	926.00	1109.00	-	1480.00	-	-	-	616.00	740.00	-	976.00	-	-	-	1400
1450	991.00	1190.00	-	1588.00	-	-	-	661.00	794.00	-	1059.00	-	-	-	1450
1500	1060.00	1274.00	-	1700.00	-	-	-	707.00	849.00	-	1133.00	-	-	-	1500

45° ELBOW

Unit : kg

CAP

Unit : kg

Nominal Pipe	Long							Nominal Pipe	SGP	STD	S40S	X-S	S80S	XX-S	S160S
	SGP	STD	S40S	X-S	S80S	XX-S	S160S								
15	0.04	0.04	0.04	0.06	0.05	-	-	15	0.03	0.04	0.04	0.05	0.05	0.10	0.06
20	0.05	0.06	0.06	0.07	0.07	-	-	20	0.04	0.05	0.05	0.05	0.07	0.13	0.09
25	0.08	0.08	0.08	0.10	0.10	0.18	0.13	25	0.08	0.11	0.11	0.15	0.15	0.29	0.20
32	0.13	0.13	0.13	0.18	0.18	0.32	0.21	32	0.11	0.14	0.14	0.20	0.20	0.39	0.25
40	0.18	0.19	0.19	0.25	0.25	0.47	0.33	40	0.15	0.17	0.17	0.24	0.24	0.50	0.35
50	0.32	0.33	0.33	0.45	0.45	0.85	0.67	50	0.23	0.24	0.24	0.33	0.33	0.68	0.54
65	0.60	0.69	0.69	0.90	0.90	1.72	1.17	65	0.34	0.42	0.42	0.57	0.57	1.33	0.77
80	0.79	1.02	1.02	1.37	1.37	2.68	1.92	80	0.51	0.67	0.67	0.92	0.92	2.18	1.40
100	1.46	1.92	1.92	2.68	2.68	5.09	4.01	100	0.88	1.17	1.17	1.68	1.68	3.80	2.76
125	2.25	3.24	3.24	4.57	4.57	8.80	7.35	125	1.29	1.90	1.90	2.73	2.73	6.22	4.85
150	3.55	4.97	4.97	7.50	7.50	14.50	12.10	150	1.99	2.83	2.83	4.38	4.38	9.85	7.81
200	7.20	10.10	10.10	15.30	15.30	25.70	26.60	200	3.61	5.11	5.11	7.91	7.91	16.40	15.20
250	12.70	17.70	17.70	23.90	28.50	41.00	51.50	250	6.33	8.92	8.92	12.20	16.40	28.35	28.90
300	19.00	26.00	28.50	34.40	47.00	65.00	85.50	300	9.43	13.10	13.10	17.40	26.40	39.40	47.70
350	28.40	34.00	40.10	45.00	66.50	-	118.00	350	13.20	15.90	18.60	21.20	34.90	-	61.20
400	37.20	44.50	59.00	59.00	97.50	-	175.00	400	16.60	20.00	26.70	26.70	49.00	-	92.80
450	47.10	56.50	84.50	75.50	138.00	-	247.00	450	21.20	25.50	41.50	34.10	69.00	-	131.00
500	58.30	70.00	110.00	93.00	187.00	-	338.00	500	26.40	31.80	54.10	42.50	93.70	-	179.00
550	70.50	84.50	-	113.00	257.00	-	443.00	550	31.50	38.80	61.40	51.70	116.00	-	219.00
600	84.10	101.00	183.00	134.00	318.00	-	580.00	600	36.60	45.10	90.10	60.10	160.00	-	307.00
650	99.00	119.00	-	158.00	-	-	-	650	41.00	50.50	82.30	67.30	-	-	-
700	115.00	138.00	-	184.00	-	-	-	700	45.50	56.20	103.00	74.90	-	-	-
750	132.00	158.00	-	211.00	-	-	-	750	50.30	62.10	114.00	82.80	-	-	-
800	150.00	180.00	327.00	240.00	-	-	-	800	55.40	68.40	126.00	91.20	-	-	-
850	170.00	204.00	369.00	272.00	-	-	-	850	62.30	75.40	138.00	100.00	-	-	-
900	190.00	228.00	452.00	304.00	-	-	-	900	68.00	81.90	164.00	109.00	-	-	-
950	212.00	255.00	-	339.00	-	-	-	950	79.00	94.70	-	126.00	-	-	-
1000	235.00	282.00	-	376.00	-	-	-	1000	95.00	102.00	-	137.00	-	-	-
1050	259.00	311.00	-	414.00	-	-	-	1050	92.00	110.00	-	147.00	-	-	-
1100	285.00	342.00	-	156.00	-	-	-	1100	103.00	126.00	-	167.00	-	-	-
1150	312.00	374.00	-	498.00	-	-	-	1150	111.00	134.00	-	179.00	-	-	-
1200	339.00	407.00	-	542.00	-	-	-	1200	118.00	143.00	-	191.00	-	-	-

STEEL BUTT-WELDING PIPE FITTINGS

TEE

Unit : kg

Nominal Pipe	SGP	STD	S40S	X-S	S80S	XX-S	S160S	Nominal Pipe	SGP	STD	S40S	X-S	S80S	XX-S	S160S
15 X 15	0.09	0.09	0.09	0.11	0.11	0.17	0.12	450 X 450	70.00	83.90	125.00	111.00	204.00	-	356.00
20 X 20	0.13	0.13	0.13	0.17	0.17	0.26	0.21	450 X 400	67.90	81.40	121.00	108.00	197.00	-	352.00
20 X 15	0.12	0.12	0.12	0.16	0.16	0.24	0.19	450 X 350	66.90	80.20	119.00	106.00	194.00	-	344.00
25 X 25	0.24	0.25	0.25	0.32	0.32	0.53	0.41	450 X 300	65.40	78.30	117.00	104.00	189.00	-	337.00
25 X 20	0.23	0.24	0.24	0.30	0.30	0.49	0.38	450 X 250	63.40	76.90	114.00	102.00	186.00	-	329.00
25 X 15	0.22	0.23	0.23	0.29	0.29	0.47	0.37	500 X 500	86.60	104.00	163.00	138.00	277.00	-	502.00
32 X 32	0.42	0.43	0.43	0.56	0.56	0.95	0.69	500 X 450	84.20	101.00	158.00	134.00	268.00	-	488.00
32 X 25	0.39	0.40	0.40	0.53	0.53	0.89	0.65	500 X 400	82.10	98.40	154.00	131.00	262.00	-	475.00
32 X 20	0.37	0.37	0.37	0.48	0.48	0.84	0.62	500 X 350	81.10	97.20	152.00	129.00	258.00	-	469.00
32 X 15	0.36	0.36	0.36	0.47	0.47	0.81	0.59	500 X 300	79.20	96.00	150.00	127.00	254.00	-	462.00
40 X 40	0.58	0.61	0.61	0.81	0.81	1.40	1.07	500 X 250	77.60	94.00	147.00	125.00	250.00	-	452.00
40 X 32	0.56	0.59	0.59	0.78	0.78	1.35	1.01	500 X 200	76.30	92.10	145.00	123.00	245.00	-	444.00
40 X 25	0.53	0.56	0.56	0.74	0.74	1.28	0.97	550 X 550	106.00	126.00	198.00	167.00	365.00	-	657.00
40 X 20	0.51	0.53	0.53	0.70	0.70	1.21	0.92	550 X 500	103.00	123.00	193.00	163.00	356.00	-	640.00
40 X 15	0.49	0.51	0.51	0.67	0.67	1.17	0.90	550 X 450	101.00	120.00	188.00	159.00	347.00	-	624.00
50 X 50	0.86	0.88	0.88	1.20	1.20	2.16	1.78	550 X 400	98.90	117.00	183.00	156.00	340.00	-	610.00
50 X 40	0.80	0.82	0.82	1.11	1.11	2.00	1.63	600 X 600	116.00	139.00	252.00	185.00	438.00	-	800.00
50 X 32	0.77	0.79	0.79	1.07	1.07	1.91	1.56	600 X 550	115.00	138.00	249.00	183.00	432.00	-	790.00
50 X 25	0.73	0.75	0.75	1.01	1.01	1.81	1.50	600 X 500	114.00	136.00	247.00	181.00	427.00	-	782.00
50 X 20	0.70	0.71	0.71	0.98	0.98	1.76	1.45	600 X 450	111.00	133.00	241.00	177.00	418.00	-	764.00
65 X 65	1.42	1.74	1.74	2.28	2.28	3.92	2.86	650 X 650	147.00	176.00	319.00	234.00	-	-	-
65 X 50	1.31	1.56	1.56	2.06	2.06	3.56	2.64	650 X 600	144.00	172.00	312.00	229.00	-	-	-
65 X 40	1.25	1.51	1.51	1.98	1.98	3.40	2.48	650 X 550	141.00	169.00	308.00	225.00	-	-	-
62 X 32	1.22	1.48	1.48	1.94	1.94	3.32	2.42	650 X 500	138.00	166.00	302.00	221.00	-	-	-
65 X 25	1.18	1.36	1.36	1.80	1.80	3.22	2.36	700 X 700	165.00	198.00	359.00	264.00	-	-	-
80 X 80	1.87	2.41	2.41	3.25	3.25	5.90	4.55	700 X 650	163.00	197.00	356.00	261.00	-	-	-
80 X 65	1.79	2.29	2.29	3.07	3.07	5.53	4.23	700 X 600	160.00	193.00	350.00	256.00	-	-	-
80 X 50	1.68	2.12	2.12	2.85	2.85	5.18	4.02	700 X 550	157.00	190.00	347.00	252.00	-	-	-
80 X 40	1.62	2.06	2.06	2.77	2.77	5.03	3.87	750 X 750	190.00	228.00	414.00	304.00	-	-	-
80 X 32	1.60	2.02	2.02	2.74	2.74	4.95	3.80	750 X 700	188.00	226.00	406.00	301.00	-	-	-
100 X 100	3.13	4.12	4.12	5.77	5.77	10.60	8.50	750 X 650	185.00	222.00	356.00	296.00	-	-	-
100 X 80	2.92	3.93	3.83	5.33	5.33	9.76	7.92	750 X 600	182.00	218.00	350.00	291.00	-	-	-
100 X 65	2.84	3.71	3.71	5.15	5.15	9.39	7.56	800 X 800	217.00	259.00	474.00	347.00	-	-	-
100 X 50	2.72	3.53	3.53	4.94	4.94	9.02	7.34	800 X 750	213.00	256.00	466.00	341.00	-	-	-
100 X 40	2.66	3.48	3.48	4.83	4.83	8.87	7.23	800 X 700	209.00	252.00	458.00	335.00	-	-	-
125 X 125	4.53	6.54	6.54	9.20	9.20	17.30	14.80	800 X 650	208.00	250.00	455.00	333.00	-	-	-
125 X 100	4.30	6.13	6.13	8.63	8.63	16.10	13.70	850 X 850	246.00	295.00	535.00	393.00	-	-	-
125 X 80	4.08	5.83	5.83	8.19	8.19	15.30	13.00	850 X 800	243.00	292.00	526.00	389.00	-	-	-
125 X 65	4.00	5.71	5.71	8.01	8.01	15.00	12.80	850 X 750	238.00	290.00	518.00	380.00	-	-	-
125 X 50	3.90	5.58	5.58	7.92	7.92	14.70	12.50	850 X 700	236.00	288.00	511.00	377.00	-	-	-
150 X 150	6.84	9.58	9.58	15.40	15.40	27.20	23.30	900 X 900	276.00	331.00	656.00	441.00	-	-	-
150 X 125	6.45	9.08	9.08	13.60	13.60	25.60	21.90	900 X 850	271.00	329.00	645.00	434.00	-	-	-
150 X 100	6.23	8.67	8.67	13.00	13.00	24.50	20.80	900 X 800	269.00	326.00	636.00	431.00	-	-	-
150 X 80	6.01	8.38	8.38	12.60	12.60	23.70	20.10	900 X 750	264.00	323.00	627.00	422.00	-	-	-
150 X 65	5.92	8.36	8.36	12.50	12.50	23.30	19.80	950 X 950	308.00	370.00	-	493.00	-	-	-
200 X 200	12.80	17.90	17.90	27.10	27.10	45.70	47.20	950 X 900	306.00	367.00	-	489.00	-	-	-
200 X 150	11.90	16.60	16.60	25.20	25.20	43.00	43.50	950 X 850	302.00	362.00	-	481.00	-	-	-
200 X 125	11.50	16.10	16.10	24.30	24.30	41.40	42.10	950 X 800	298.00	357.00	-	476.00	-	-	-
200 X 100	11.30	15.70	15.70	23.70	23.70	41.00	40.30	1000 X 1000	342.00	411.00	-	547.00	-	-	-
250 X 250	21.80	30.40	30.40	41.00	49.00	79.20	88.00	1000 X 950	340.00	408.00	-	543.00	-	-	-
250 X 200	20.40	28.50	28.50	38.90	45.80	54.40	81.40	1000 X 900	335.00	402.00	-	536.00	-	-	-
250 X 150	19.50	27.20	27.20	37.00	43.90	71.50	78.50	1000 X 850	331.00	397.00	-	529.00	-	-	-
250 X 125	19.20	26.80	26.80	36.20	43.10	70.00	77.00	1050 X 1050	352.00	422.00	-	562.00	-	-	-
250 X 100	18.90	26.80	26.80	36.20	12.50	68.90	76.30	1050 X 1000	350.00	420.00	-	559.00	-	-	-
300 X 300	32.00	43.60	48.70	57.70	79.20	113.00	143.00	1050 X 950	348.00	418.00	-	557.00	-	-	-
300 X 250	30.40	41.60	45.30	55.20	74.80	104.00	135.00	1050 X 900	346.00	416.00	-	554.00	-	-	-
300 X 200	29.00	39.70	42.50	53.10	71.40	102.00	128.00	1100 X 1100	369.00	475.00	-	633.00	-	-	-
300 X 150	28.10	38.40	42.00	51.20	69.50	100.00	125.00	1100 X 1050	394.00	473.00	-	630.00	-	-	-
300 X 125	27.80	38.70	41.70	51.20	68.70	98.30	124.00	1100 X 1000	389.00	467.00	-	623.00	-	-	-
350 X 350	44.70	53.50	62.40	70.90	104.00	-	186.00	1100 X 950	385.00	462.00	-	616.00	-	-	-
350 X 300	42.70	51.90	60.20	68.80	100.00	-	179.00	1150 X 1150	434.00	521.00	-	695.00	-	-	-
350 X 250	41.20	49.90	57.60	66.30	95.90	-	174.00	1150 X 1100	432.00	519.00	-	691.00	-	-	-
350 X 200	40.00	48.20	55.80	64.50	92.90	-	168.00	1150 X 1050	427.00	513.00	-	683.00	-	-	-
350 X 150	39.00	47.10	54.50	62.60	91.00	-	164.00	1150 X 1000	423.00	507.00	-	676.00	-	-	-
400 X 400	55.20	66.10	88.00	87.70	145.00	-	260.00	1200 X 1200	474.00	569.00	-	759.00	-	-	-
400 X 350	54.20	64.90	86.00	86.10	140.00	-	255.00	1200 X 1150	472.00	566.00	-	755.00	-	-	-
400 X 300	52.70	63.10	84.00	83.60	136.00	-	248.00	1200 X 1100	470.00	564.00	-	751.00	-	-	-
400 X 250	51.20	61.30	82.00	81.20	132.00	-	241.00	1200 X 1050	462.00	555.00	-	739.00	-	-	-
400 X 200	49.40	59.80	79.00	80.00	129.00	-	235.00								
400 X 150	48.50	58.50	77.00	77.80	127.00	-	230.00								

Steel Butt-Welding Pipe Fittings

Steel Butt-Welding Pipe Fittings Approx Weight REDUCER

Unit : kg

Nominal Pipe	SGP	STD	S40S	X-S	S80S	XX-S	S160S	Nominal Pipe	SGP	STD	S40S	X-S	S80S	XX-S	S160S
20 X 15	0.06	0.06	0.06	0.08	0.08	-	-	250 X 125	6.06	8.42	8.42	11.30	14.50	21.10	23.90
25 X 20	0.11	0.12	0.12	0.15	0.15	0.25	0.19	250 X 100	5.80	8.20	8.20	11.00	14.00	20.50	22.60
25 X 15	0.10	0.11	0.11	0.14	0.14	0.22	0.17	300 X 250	9.97	13.60	14.70	18.00	24.80	35.00	44.60
32 X 25	0.16	0.16	0.16	0.21	0.21	0.35	0.25	300 X 200	9.29	12.70	13.70	16.70	22.70	33.00	41.00
32 X 20	0.15	0.15	0.15	0.19	0.19	0.31	0.23	300 X 150	8.69	11.80	12.80	15.60	21.40	32.00	38.00
32 X 15	0.13	0.14	0.14	0.18	0.18	-	-	300 X 125	8.39	11.70	12.60	15.30	20.60	31.00	36.40
40 X 32	0.24	0.25	0.25	0.33	0.33	0.57	0.43	350 X 300	21.20	25.40	29.50	33.60	49.80	-	88.50
40 X 25	0.21	0.22	0.22	0.30	0.30	0.50	0.38	350 X 250	19.70	23.60	27.40	31.20	46.10	-	81.60
40 X 20	0.20	0.21	0.21	0.27	0.27	0.45	0.35	350 X 200	18.30	21.80	25.40	28.90	42.20	-	74.70
40 X 15	0.18	0.18	0.18	0.24	0.24	0.40	0.32	350 X 150	16.90	20.30	23.60	26.80	39.10	-	68.30
50 X 40	0.37	0.38	0.38	0.51	0.51	0.91	0.75	400 X 350	25.90	31.00	41.10	41.10	67.70	-	121.00
50 X 32	0.35	0.36	0.36	0.48	0.48	0.85	0.70	400 X 300	24.10	29.60	39.20	39.20	65.00	-	116.00
52 X 25	0.31	0.33	0.33	0.44	0.44	0.77	0.64	400 X 250	22.40	27.80	36.80	36.80	60.80	-	108.00
50 X 20	0.29	0.30	0.30	0.40	0.40	0.69	0.58	400 X 200	21.70	26.20	34.50	34.50	56.60	-	99.90
65 X 50	0.60	0.73	0.73	0.95	0.95	1.68	1.20	450 X 400	31.50	37.80	56.20	50.10	91.40	-	165.00
65 X 40	0.55	0.67	0.67	0.87	0.87	1.51	1.08	450 X 350	29.80	35.70	53.00	47.40	86.40	-	155.00
65 X 32	0.52	0.64	0.64	0.83	0.83	1.42	1.02	450 X 300	27.70	33.20	51.70	44.00	83.00	-	149.00
65 X 25	0.48	0.56	0.56	0.73	0.73	1.23	0.93	450 X 250	27.10	32.70	48.40	43.20	78.50	-	140.00
80 X 65	0.73	0.94	0.94	1.25	1.25	2.25	1.71	500 X 450	47.00	56.40	88.40	74.90	150.00	-	-
80 X 50	0.66	0.85	0.85	1.13	1.13	2.01	1.57	500 X 400	44.70	53.50	83.90	71.10	142.00	-	-
80 X 40	0.62	0.79	0.79	1.04	1.04	1.83	1.44	500 X 350	42.40	50.80	79.60	67.40	136.00	-	233.00
80 X 32	0.59	0.75	0.75	1.00	1.00	1.74	1.37	500 X 300	40.80	49.20	76.90	65.10	130.00	-	-
100 X 80	1.10	1.45	1.45	2.02	2.02	3.65	3.00	550 x 500	52.10	62.40	98.00	82.90	181.00	-	-
100 X 65	1.04	1.37	1.37	1.90	1.90	3.41	2.76	550 x 450	49.50	59.40	93.20	78.90	172.00	-	-
100 X 50	0.97	1.27	1.27	1.76	1.76	3.11	2.58	550 x 400	47.00	56.40	88.40	74.80	164.00	-	-
100 X 40	0.91	1.19	1.19	1.64	1.64	2.89	2.41	550 x 350	45.30	54.30	83.60	72.10	156.00	-	-
125 X 100	1.74	2.50	2.50	3.52	3.52	6.47	5.59	600 x 550	57.10	68.40	124.00	91.00	215.00	-	-
125 X 80	1.58	2.27	2.27	3.18	3.18	5.78	5.30	600 x 500	54.80	65.70	119.00	87.30	206.00	-	-
125 X 65	1.50	2.16	2.16	3.02	3.02	5.46	4.70	600 x 450	52.60	63.00	114.00	83.80	197.00	-	-
125 X 50	1.41	2.03	2.03	2.85	2.85	5.12	4.43	600 x 400	50.40	60.50	109.00	80.30	185.00	-	-
150 X 125	2.55	3.57	3.57	5.38	5.38	9.89	8.63	650 x 600	74.50	89.40	162.00	119.00	-	-	-
150 X 100	2.36	3.30	3.30	4.96	4.96	8.98	7.88	650 x 550	71.50	85.80	155.00	114.00	-	-	-
150 X 80	2.18	3.04	3.04	4.56	4.56	8.21	7.21	650 x 500	68.50	82.10	148.00	109.00	-	-	-
150 X 65	2.09	2.94	2.94	4.38	4.38	7.88	6.80	650 x 450	66.30	79.50	142.00	106.00	-	-	-
200 X 150	4.17	5.71	5.71	8.63	8.63	14.30	15.00	700 x 650	80.60	96.60	175.00	129.00	-	-	-
200 X 125	3.87	5.40	5.40	8.14	8.14	13.40	14.00	700 x 600	77.50	93.00	168.00	124.00	-	-	-
200 X 100	3.67	5.10	5.10	7.68	7.68	12.60	13.10	700 x 550	74.50	89.40	162.00	119.00	-	-	-
250 X 200	6.87	9.58	9.58	12.90	15.40	24.30	27.50	700 x 500	72.40	86.80	155.00	115.00	-	-	-
250 X 150	6.32	8.78	8.78	11.80	14.20	22.10	25.10	750 x 700	86.60	104.00	188.00	138.00	-	-	-

STEEL BUTT-WELDING PIPE FITTINGS

Unit : kg

Nominal Pipe	SGP	STD	S40S	X-S	S80S	XX-S	S160S	Nominal Pipe	SGP	STD	S40S	X-S	S80S	XX-S	S160S
750x650	83.60	100.00	182.00	133.00	-	-	-	1000x900	114.00	137.00	-	182.00	-	-	-
750x600	80.60	96.60	175.00	129.00	-	-	-	1000x850	111.00	133.00	-	177.00	-	-	-
750x550	78.50	94.20	168.00	125.00	-	-	-	1000 X 800	109.00	131.00	-	174.00	-	-	-
800x750	92.60	111.00	202.00	148.00	-	-	-	1050 X 1000	123.00	147.00	-	196.00	-	-	-
800x700	89.60	108.00	195.00	143.00	-	-	-	1050 X 950	120.00	144.00	-	192.00	-	-	-
800x650	86.60	104.00	188.00	138.00	-	-	-	1050 X 900	117.00	140.00	-	187.00	-	-	-
800x600	84.60	102.00	184.00	135.00	-	-	-	1050 X 850	115.00	138.00	-	184.00	-	-	-
850x800	98.70	118.00	215.00	158.00	-	-	-	1100 X 1050	129.00	155.00	-	206.00	-	-	-
850x750	95.60	115.00	208.00	153.00	-	-	-	1100 X 1000	126.00	151.00	-	201.00	-	-	-
850x700	92.60	111.00	205.00	148.00	-	-	-	1100 X 950	123.00	147.00	-	196.00	-	-	-
850x650	90.70	109.00	200.00	145.00	-	-	-	1100 X 900	121.00	146.00	-	194.00	-	-	-
900x850	104.60	125.60	250.00	167.30	-	-	-	1150 X 1100	157.00	189.00	-	252.00	-	-	-
900x800	101.60	122.00	243.00	162.40	-	-	-	1150 X 1050	154.00	185.00	-	246.00	-	-	-
900x750	98.60	118.40	238.00	157.60	-	-	-	1150 X 1000	150.00	180.00	-	241.00	-	-	-
900x700	95.60	114.70	234.00	152.80	-	-	-	1150 X 950	148.00	178.00	-	237.00	-	-	-
950x900	112.00	133.00	-	177.00	-	-	-	1200 X 1150	164.00	197.00	-	263.00	-	-	-
950x850	108.00	129.00	-	172.00	-	-	-	1200 X 1100	161.00	193.00	-	257.00	-	-	-
950x800	105.00	126.00	-	167.00	-	-	-	1200 X 1050	157.00	189.00	-	252.00	-	-	-
950x750	103.00	124.00	-	165.00	-	-	-	1200 X 1000	155.00	186.00	-	248.00	-	-	-
1000x950	117.00	140.00	-	187.00	-	-	-								

STAINLESS STEEL BUTT-WELDING PIPE FITTINGS

Unit : kg

Nominal Pipe Size	90° Elbow (L)		90° Elbow (S)		Tee		Reducer		Cap	
	Sch10S	Sch20S	Sch10S	Sch20S	Sch10S	Sch20S	Sch10S	Sch20S	Sch10S	Sch20S
15	0.06	0.07	-	-	0.07	0.08	-	-	0.03	0.03
20	0.06	0.09	-	-	0.10	0.11	0.04	0.05	0.04	0.04
25	0.13	0.14	0.08	0.09	0.20	0.22	0.09	0.10	0.09	0.10
32	0.20	0.22	0.13	0.15	0.33	0.36	0.12	0.13	0.11	0.12
40	0.28	0.30	0.19	0.20	0.46	0.50	0.18	0.20	0.13	0.14
50	0.47	0.59	0.31	0.39	0.63	0.79	0.27	0.34	0.17	0.21
65	0.79	0.94	0.52	0.63	1.00	1.18	0.43	0.50	0.23	0.28
80	1.16	1.51	0.77	1.00	1.38	1.78	0.52	0.69	0.37	0.48
100	2.00	2.60	1.33	1.74	2.15	2.80	0.80	1.04	0.59	0.78
125	3.46	4.97	2.31	3.31	3.48	5.01	1.33	1.92	0.99	1.11
150	4.96	7.09	3.31	4.73	4.75	6.83	1.78	2.55	1.39	1.99
200	9.55	15.90	6.37	10.70	8.43	14.30	2.72	4.56	2.38	4.05
250	16.60	25.00	11.10	16.70	14.20	21.50	4.49	6.77	4.13	6.23
300	25.80	35.70	17.20	23.90	21.60	30.20	6.78	9.40	6.39	8.89
350	34.60	56.90	23.10	37.80	27.30	44.80	13.00	21.20	7.99	13.20
400	45.30	74.50	30.20	49.50	33.70	55.20	15.80	25.90	10.10	16.70
450	57.40	94.50	38.30	62.80	42.70	70.00	19.20	29.80	12.90	21.30
500	82.10	142.00	54.70	95.00	61.00	104.00	33.10	56.00	18.50	31.80
550	99.50	170.00	66.30	114.00	74.10	136.20	36.70	62.50	22.60	38.80
600	136.00	202.00	90.40	135.00	93.90	139.40	46.00	68.60	30.10	45.10

Steel Butt-Welding Pipe Fittings

Materials Specifications For JIS Materials

Markings Symbol	JIS Code Number & Materials	Chemical Composition(%)					
		C	Si	Mn	P	S	Ni
SGP	G3452, SGP	-	-	-	0.040 Max.	0.040 Max.	-
PG370	S3454, STPG370	0.25 Max.	0.35 Max.	0.30-0.90	0.040 Max.	0.040 Max.	-
PG410	G3454, STPG410	0.30 Max.	0.35 Max.	0.30-1.00	0.040 Max.	0.040 Max.	-
PT370	G3456, STPT370	0.25 Max.	0.10-0.35	0.30-0.90	0.035 Max.	0.035 Max.	-
PT410	G3456, STPT410	0.30 Max.	0.10-0.35	0.30-1.00	0.035 Max.	0.035 Max.	-
PT480	G3456, STPT480	0.33 Max.	0.10-0.35	0.30-1.00	0.035 Max.	0.035 Max.	-
STS370	G3455, STS370	0.25 Max.	0.10-0.35	0.30-1.10	0.035 Max.	0.035 Max.	-
STS410	G3455, STS410	0.30 Max.	0.10-0.35	0.30-1.40	0.035 Max.	0.035 Max.	-
STS480	G3455, STS480	0.33 Max.	0.10-0.35	0.30-1.50	0.035 Max.	0.035 Max.	-
PY400	G3457, STPY400	0.25 Max.	-	-	0.040 Max.	0.040 Max.	-
SUS304	G3459, SUS304TP	0.08 Max.	1.00 Max.	2.00 Max.	0.040 Max.	0.030 Max.	8.00-11.00
SUS304H	G3459, SUS304HTP	0.04-1.00	0.75 Max.	2.00 Max.	0.040 Max.	0.030 Max.	8.00-11.00
SUS340L	G3459, SUS304LTP	0.03 Max.	1.00 Max.	2.00 Max.	0.040 Max.	0.030 Max.	9.00-13.00
SUS316	G3459, SUS316TP	0.08 Max.	1.00 Max.	2.00 Max.	0.040 Max.	0.030 Max.	10.00-14.00
SUS316H	G3459, SUS316HTP	0.04-0.10	0.75 Max.	2.00 Max.	0.030 Max.	0.030 Max.	11.00-14.00
SUS316L	G3459, SUS316LTP	0.03 Max.	1.00 Max.	2.00 Max.	0.040 Max.	0.030 Max.	12.00-16.00
PL380	G3460, STPL380	0.25 Max.	0.35 Max.	1.35 Max.	0.035 Max.	0.035 Max.	-
PL450	G3460, STPL450	0.18 Max.	0.10-0.35	0.30-0.60	0.030 Max.	0.030 Max.	3.00-3.80
SS400	G3101, SS400	-	-	-	0.050 Max.	0.050 Max.	-
SM400B	S3106, SM400B	0.20 Max.	0.35 Max.	0.60-1.20	0.040 Max.	0.040 Max.	-
SM490B	G3106, SM490B	0.18 Max.	0.55 Max.	1.50 Max.	0.040 Max.	0.040 Max.	-
SB410	G3103, SB410	0.24 Max.	0.15-0.30	0.90 Max.	0.035 Max.	0.040 Max.	-
SB450	G3103, SB450	0.28 Max.	0.15-0.30	0.90 Max.	0.035 Max.	0.040 Max.	-
S20C	G4051, S20C	0.18-0.23	0.15-0.35	0.30-0.60	0.030 Max.	0.035 Max.	-
S25C	G4051, S25C	0.22-0.28	0.15-0.35	0.30-0.60	0.030 Max.	0.035 Max.	-
S45C	G4051, S45C	0.42-0.48	0.15-0.30	0.60-.090	0.030 Max.	0.035 Max.	-
SF45	G3201, SF45	0.60 Max.	0.15-0.50	0.30-1.20	0.030 Max.	0.035 Max.	-
SF50	G3201, SF50	0.60 Max.	0.15-0.50	0.30-1.20	0.030 Max.	0.035 Max.	-

Chemical Composition(%)		Mechanical Properties			Reduction Of Area	Hardness (HB)
Cr	Mo	Tensile Strength kgf/mm ² (N/mm ²)	Yield Strength kgf/mm ² (N/mm ²)	Elongation(%) Test Piece No.(N/mm ²)		
-	-	“30 Min. (294) Min.”	-	“(11,12) 30 Min.(5) 25 Min.”	-	-
-	-	“38 Min. (373) Min.”	“22 Min. (216) Min.”	“(11,12) 30 Min.(5) 25 Min.”	-	-
-	-	“42 Min. (412) Min.”	“25 Min. (245) Min.”	“(11,12) 25 Min.(5) 20 Min.”	-	-
-	-	“38 Min. (373) Min.”	“22 Min. (216) Min.”	“(11,12) 30 Min.(5) 25 Min.”	-	-
-	-	“42 Min. (412) Min.”	“25 Min. (245) Min.”	“(11,12) 25 Min.(5) 20 Min.”	-	-
-	-	“49 Min. (481) Min.”	“28 Min. (275) Min.”	“(11,12) 25 Min.(5) 20 Min.”	-	-
-	-	“38 Min. (373) Min.”	“22 Min. (216) Min.”	“(11,12) 30 Min.(5) 25 Min.”	-	-
-	-	“42 Min. (412) Min.”	“25 Min. (245) Min.”	“(11,12) 25 Min.(5) 20 Min.”	-	-
-	-	“49 Min. (481) Min.”	“28 Min. (275) Min.”	“(11,12) 25 Min.(5) 20 Min.”	-	-
-	-	“41 Min. (402) Min.”	“23 Min. (226) Min.”	“(11,12) 25 Min.(5) 20 Min.”	-	-
18.00-20.00	-	“53 Min. (520) Min.”	“21 Min. (206) Min.”	“(5) 18 Min.”	-	-
18.00-20.00	-	“53 Min. (520) Min.”	“21 Min. (206) Min.”	“(11,12) 35 Min.(5) 25 Min.”	-	-
18.00-20.00	-	“49 Min. (481) Min.”	“18 Min. (177) Min.”	“(11,12) 35 Min.(5) 25 Min.”	-	-
16.00-18.00	2.00-3.00	“53 Min. (520) Min.”	“21 Min. (206) Min.”	“(11,12) 35 Min.(5) 25 Min.”	-	-
16.00-18.00	2.00-3.00	“53 Min. (520) Min.”	“21 Min. (206) Min.”	“(11,12) 35 Min.(5) 25 Min.”	-	-
16.00-18.00	2.00-3.00	“49 Min. (481) Min.”	“18 Min. (177) Min.”	“(11,12) 35 Min.(5) 25 Min.”	-	-
-	-	“39 Min. (382) Min.”	“21 Min. (206) Min.”	“(11,12) 35 Min.(5) 25 Min.”	-	-
-	-	“46 Min. (451) Min.”	“25 Min. (245) Min.”	“(11,12) 30 Min.(5) 20 Min.”	-	-
-	-	“41-52 (402-510)”	“16t Max. 25 Min. (245) Min.”	“(5) 21 Min.(14) 17 Min.”	-	-
-	-	“41-52 (402-510)”	“16t Max. 25 Min. (245) Min.”	“(5) 23 Min.(1A) 18 Min.”	-	-
-	-	“50-62 (490-608)”	“16t Max. 33 Min. (324) Min.”	“(5) 22 Min.(1A) 17 Min.”	-	-
-	-	“42-56 (412-549)”	“23 Min. (226) Min.”	“(1A) 21 Min.(10) 25 Min.”	-	-
-	-	“46-60 (451-588)”	“25 Min. (245) Min.”	“(1A) 19 Min.(10) 23 Min.”	-	-
-	-	“41 Min. (402) Min.”	“(N) 25 Min. (245) Min.”	“28 Min.”	-	116-174
-	-	“45 Min. (441) Min.”	“(N) 27 Min. (265) Min.”	“27 Min.”	-	123-183
-	-	“58 Min. (569) Min.”	“(N) 35 Min. (343) Min.”	“20 Min.”	-	167-227
-	-	“45-55 (444-539)”	“23 Min. (226) Min.”	“(14A)(A) 24 Min.(T) 19 Min.”	“(A)45(T)35”	“121 Min.”
-	-	“50-60 (490-588)”	“25 Min. (245) Min.”	“(14A)(A) 22 Min.(T) 17 Min.”	“(A)40(T)30”	“134 Min.”

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