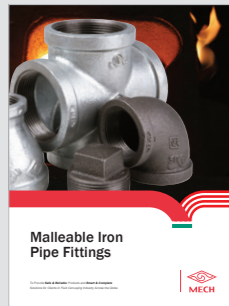
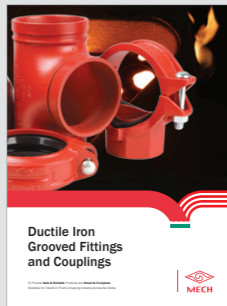


MECH FLOW SUPPLIES



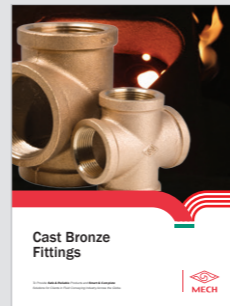
Malleable Iron Pipe Fittings



Ductile Iron Grooved Fittings and Couplings



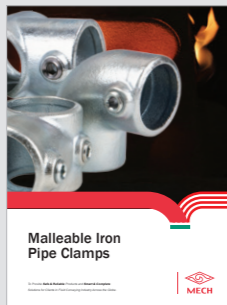
Valves



Cast Bronze Fittings



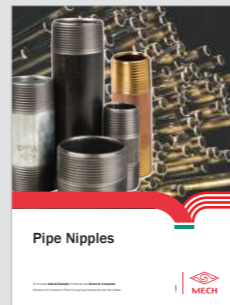
Electrical Power Fittings



Malleable Iron Pipe Clamps



Ductile Iron Pipe Fittings
Cast Iron Pipe Fittings



Pipe Nipples



Malleable Iron Pipe Fittings

American Standard

To Provide **Safe & Reliable** Products and **Smart & Complete** Solutions for Clients in Fluid Conveying Industry Across the Globe.





More than
50 years of
Foundry
Experience

Company Profile

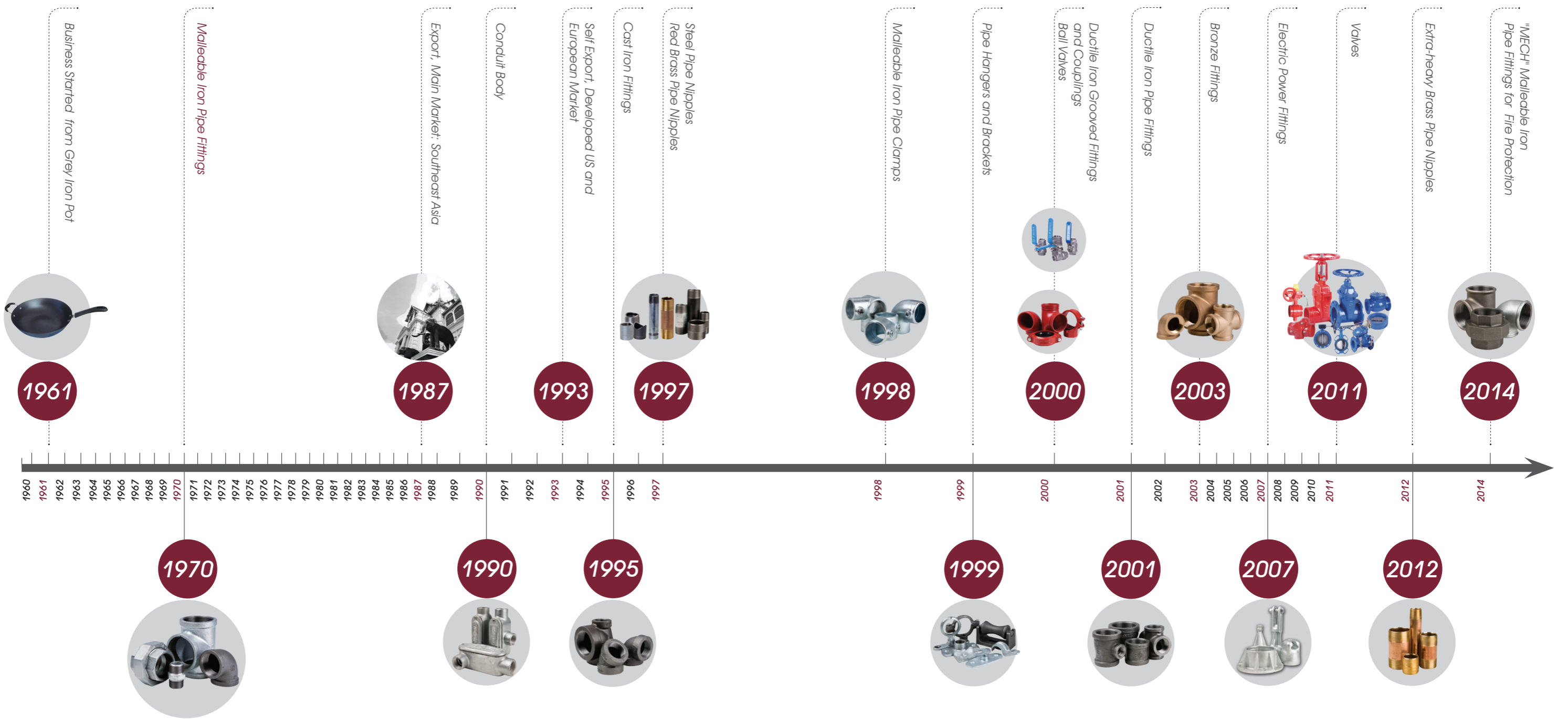
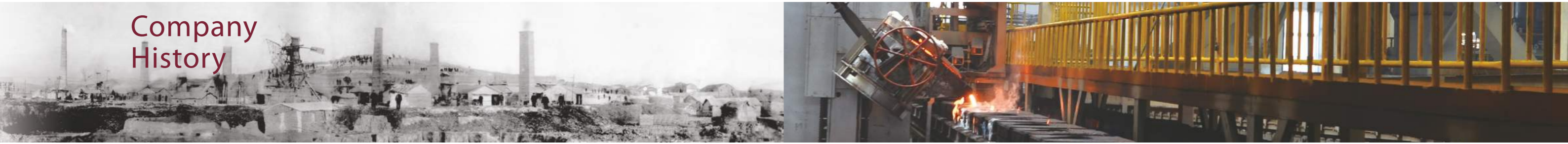
We are a high-tech enterprise specialized in supplying fittings and valves in fluid industry. The company has won more than 400 great honors, such as Single Champion Demonstration Enterprise, Green Manufacturing Enterprise, China's top 100 Light Industrial Enterprise, China's Leading Enterprise of Malleable Iron Pipe Fitting Production Base, National Enterprise with Good Creditworthiness and China's Famous Brand.

Inheriting the originality, and striving for excellence. "MECH" brand products are widely used in Burj Khalifa, Dubai, New WTC in New York, Shanghai Tower, UHV transmission lines and other landmark buildings and projects such as Beijing-Shanghai high-speed railway. Adhering to the customer-centered product development and innovation concept, to meet and guide the growing needs of users, to provide safe & reliable products and smart & complete solutions for clients in fluid industry across the globe, our Group has become the industry leader.

Using development innovation platform such as National Enterprise Technical Center and Post-Doctoral Research Center, Our Group is promoting the transformation of technology innovation achievements into productive forces, has completed the transformation of production process from mechanization to automation and intelligence, management from experience to institutionalization and process, marketing is from selling products to offering solutions, steadily improve our Group's role in the global value chain.

Through the construction of three production bases, including Jinan, Linyi and Bangkok, Our Group has formed a cross-regional, multi-base international development pattern. Mech never forgets the original intention, operates in compliance, keeps growing, insists on sharing development results with customers, employees, shareholders and the community, and strive to be a happy and respectable company.

Company History



State of the Art Equipment

High precision equipment is quality assurance. Jinan Meide's 8 factories are all equipped with the most advanced facilities and equipment in the industry. The main production facilities include Sinto automatic molding line, Tokyu automatic molding line, Chinese 416 automatic vertical molding line, automatic molding sand mixers, cupola furnaces, electric furnaces, water-cooled longevous cupola furnaces, CNC vertical machining centers, CNC machines, NC vertical lathes, radial drills, Jinan ourproprietary automatic machines, hot-dipped galvanization line, automac box sealing line, stereoscopic warehouse and so on.



Pattern



Core Making



Sand Mulling



Melting



Tokyu AMF-111055



DISA



Sinto FCMX



Pouring



Annealing



End Grinding Line



Warehouse



Threading, Air Pressure Test, and Anti-rust Treatment

Reliable Quality Assurance

Mech is honored as the National enterprise technical center and is capable and qualified to conduct full series of tests and inspections including chemical checking, etc.

Inspection facilities include: spectrometer, carbon sulfur analyzer, metallurgical microscope, tensile strength testing equipment, pressure testing equipment, adhesive force testing equipment, CMM, hardness tester, etc.

From incoming inspection to finished product, quality is checked and monitored in the whole process. Each step of the manufacturing process is carefully documented, regularly reviewed for revision control and updating standard. Quality procedures are constantly monitored and updated to assure that only the highest and most consistent quality products are supplied to our valued customers.



Metallurgical Microscope



Spectrometer



CMM



Projector



The Length of The Test Instrument



Roughness Tester



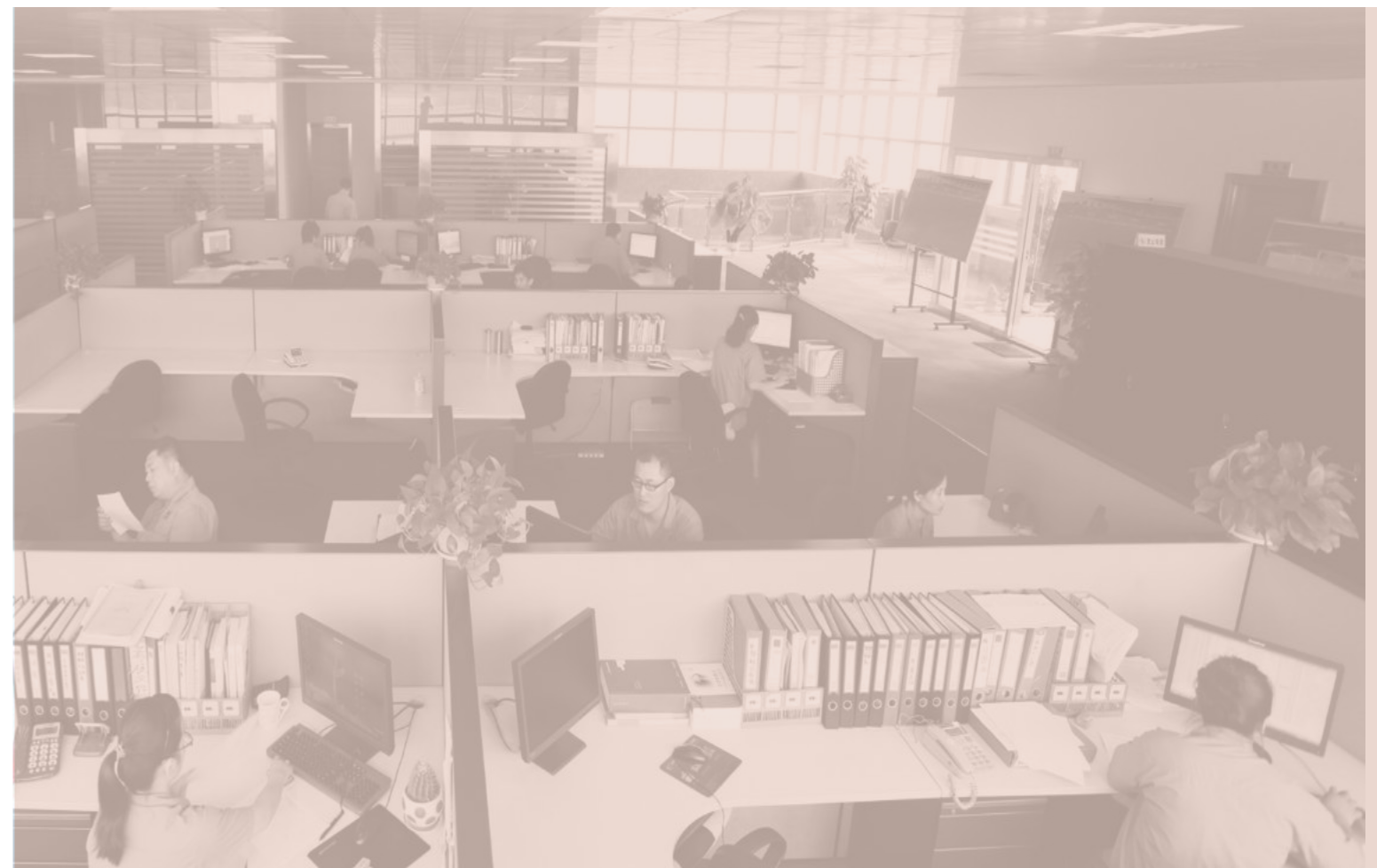
Carbon Sulfur Analyzer



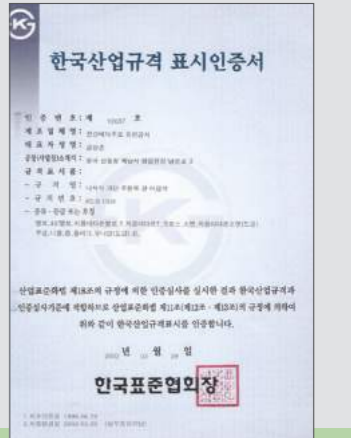
Tensile Strength Testing Equipment



Sand Testing Instrument



Certificates



Malleable Iron Pipe Fittings

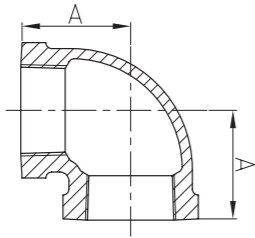
American Standard Class 150

Material: ASTM A197/A197M
 Dimensions: ASME B16.3, B16.14
 Union Dimensions: B16.39
 Threads: ASME B1.20.1
 Size Available: 1/8" - 8"



90

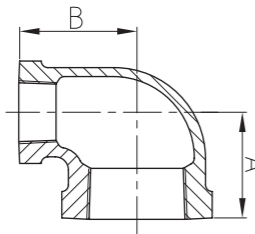
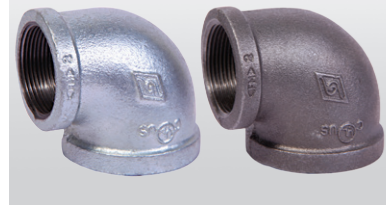
90° Elbow



Size	Inch	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2
	mm	6	8	10	15	20	25	32	40
Dim. (mm)	A	17.5	20.6	24.1	28.5	33.3	38.1	44.5	49.3
Size	Inch	2	2 1/2	3	4	5	6	8	
	mm	50	65	80	100	125	150	200	
Dim. (mm)	A	57.2	68.6	78.2	96.3	114.3	130.3	162	

90R

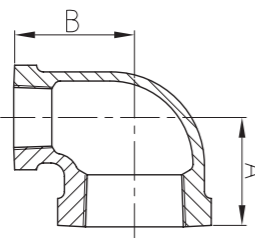
90° Reducing Elbow



Size	Inch	4X1 1/4	4X1 1/2	4X2	4X2 1/2	4X3	3/8X1/8
	mm	100X32	100X40	100X50	100X65	100X80	10X6
Dim. (mm)	A	60	62	69	78	83.8	20.5
	B	85	85	87	90	91.4	21.6
Size	Inch	3/8X1/4	6X4	1/2X1/4	1/2X3/8	3/4X1/4	3/4X3/8
	mm	10X8	150X100	15X8	15X10	20X8	20X10
Dim. (mm)	A	22.4	102	24.6	26.4	26.7	28.5
	B	22.9	125	24.9	26.2	27.4	28.7

90R

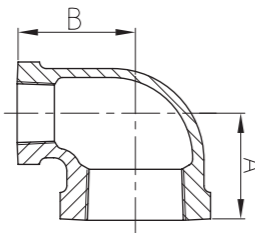
90° Reducing Elbow



Size	Inch	3/4X1/2	1X1/4	1X3/8	1X1/2	1X3/4
	mm	20X15	25X8	25X10	25X15	25X20
Dim. (mm)	A	30.5	27	30	32	34.8
	B	31	31	32.3	35.5	36.8
Size	Inch	1 1/4X3/8	1 1/4X1/2	1 1/4X3/4	1 1/4X1	1 1/2X1/2
	mm	32X10	32X15	32X20	32X25	40X15
Dim. (mm)	A	32	34	36.8	40.1	35
	B	36.5	38.9	41.2	42.4	41.5

90R

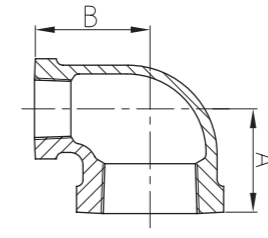
90° Reducing Elbow



Size	Inch	1 1/2X3/4	1 1/2X1	1 1/2X1 1/4	2X1/2	2X3/4
	mm	40X20	40X25	40X32	50X15	50X20
Dim. (mm)	A	38.6	41.9	46.2	37.5	40.6
	B	44.5	45.7	47.8	47.5	50.0
Size	Inch	2X1	2X1 1/4	2X1 1/2	2 1/2X3/4	2 1/2X1
	mm	50X25	50X32	50X40	65X20	65X25
Dim. (mm)	A	43.9	48.3	51.3	42	46
	B	51.3	53.3	54.9	57	58.7

90R

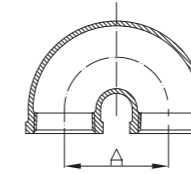
90° Reducing Elbow



Size	Inch	2 1/2X1 1/4	2 1/2X1 1/2	2 1/2X2	3X3/4	3X1
	mm	65X32	65X40	65X50	80X20	80X25
Dim. (mm)	A	50.5	54.9	60.7	45	50
	B	60	63.8	66.0	65	67.5
Size	Inch	3X1 1/4	3X1 1/2	3X2	3X2 1/2	1/4X1/8
	mm	80X32	80X40	80X50	80X65	8X6
Dim. (mm)	A	55	58	64	71.9	18.8
	B	70	72	73.4	75.9	19.3

90U

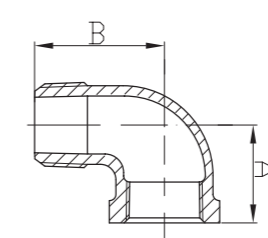
180° Return Elbow



Size	Inch	1/2	2			
	mm	15	50			
Dim. (mm)	A	38.1	101.6			
Size	Inch					
	mm					
Dim. (mm)	A					

92

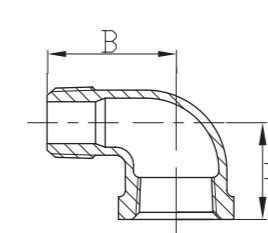
90° Street Elbow



Size	Inch	1/8	1/4	3/8	1/2	3/4	1	1 1/4
	mm	6	8	10	15	20	25	32
Dim. (mm)	A	17.5	20.6	24.1	28.5	33.3	38.1	44.5
	B	25.4	30.2	36.6	41.2	48.0	54.4	62.2
Size	Inch	1 1/2	2	2 1/2	3	4	6	
	mm	40	50	65	80	100	150	
Dim. (mm)	A	49.3	57.2	68.6	78.2	96.3	130.3	
	B	68.3	82.8	98.0	114.6	144.5	204.0	

92R

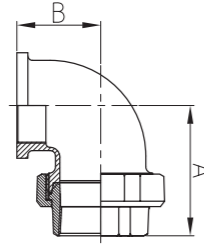
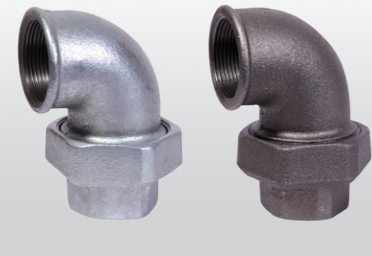
90° Reducing Street Elbow



Size	Inch	3/4X1/2	1X3/4	1 1/4X1	1 1/2X1 1/4	
	mm	20X15	25X20	32X25	40X32	
Dim. (mm)	A	30	35	40		
	B	40	46	56		
Size	Inch					
	mm					
Dim. (mm)	A					
	B					

96A

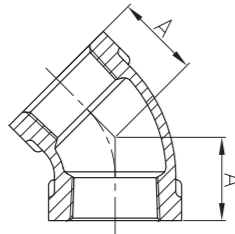
Union Elbow



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	57	59	72	82	88	99
	B	27	29	34	43	47	56
Size	Inch						
	mm						
Dim. (mm)	A						
	B						

120

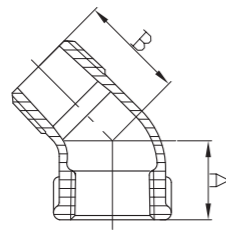
45° Elbow



Size	Inch	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2
	mm	6	8	10	15	20	25	32	40
Dim. (mm)	A	16	18.5	20.3	22.4	24.9	28.5	32.8	36.3
	B								
Size	Inch	2	2 1/2	3	4	5	6	8	
	mm	50	65	80	100	125	150	200	
Dim. (mm)	A	42.7	49.5	55.1	66.3	77.5	87.9	106.7	
	B								

121

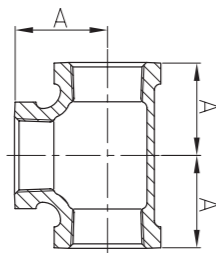
45° Street Elbow



Size	Inch	1/8	1/4	3/8	1/2	3/4	1
	mm	6	8	10	15	20	25
Dim. (mm)	A	16	18.5	20.3	22.4	24.9	28.5
	B	21	23.9	26.2	29.2	32.8	37.3
Size	Inch	1 1/4	1 1/2	2	2 1/2	3	4
	mm	32	40	50	65	80	100
Dim. (mm)	A	32.8	36.3	42.7	49.5	55.1	66.3
	B	43.4	47.8	56.4	65.3	76.2	94.0

130

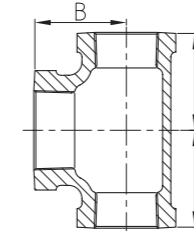
Tee



Size	Inch	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2
	mm	6	8	10	15	20	25	32	40
Dim. (mm)	A	17.5	20.6	24.1	28.5	33.3	38.1	44.5	49.3
	B								
Size	Inch	2	2 1/2	3	4	5	6	8	
	mm	50	65	80	100	125	150	200	
Dim. (mm)	A	57.2	68.6	78.2	96.3	114.3	130.3	162	
	B								

130R

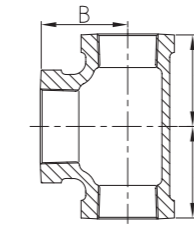
Bull Head Tee



Size	Inch	1/2X1/2X3/4	1/2X1/2X1	3/4X3/4X1	3/4X3/4X1 1/4
	mm	15X15X20	15X15X25	20X20X25	20X20X32
Dim. (mm)	A	31	34.6	36.8	41.2
	B	30.5	32.0	34.8	36.8
Size	Inch	1X1X1 1/4	1X1X1 1/2	1X1X2	1X1X2 1/2
	mm	25X25X32	25X25X40	25X25X50	25X25X65
Dim. (mm)	A	42.4	45.7	51.3	60
	B	40.1	41.9	48.9	48

130R

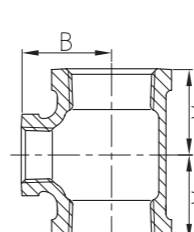
Bull Head Tee



Size	Inch	1 1/4X1 1/4X1 1/2	1 1/4X1 1/4X2	1 1/2X1 1/2X2	1 1/2X1 1/2X2 1/2
	mm	32X32X40	32X32X50	40X40X50	40X40X65
Dim. (mm)	A	47.8	53.3	54.9	62
	B	46.2	48.3	51.3	55
Size	Inch	2X2X2 1/2	2 1/2X2 1/2X3	2 1/2X2 1/2X4	
	mm	50X50X65	65X65X80	65X65X100	
Dim. (mm)	A	66	76	90	
	B	60.7	71.9	78	

130R

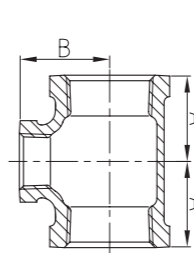
Reducing Tee



Size	Inch	4X1/2	4X3/4	4X1	4X1 1/4	4X1 1/2	4X2
	mm	100X15	100X20	100X25	100X32	100X40	100X50
Dim. (mm)	A	50	53	56	60	63.8	69.6
	B	79	79	82	84	84.3	86.6
Size	Inch	4X2 1/2	4X3	3/8X1 1/4	6X4	6X2	6X3
	mm	100X65	100X80	10X8	150X100	150X50	150X80
Dim. (mm)	A	77.5	83.8	22.4	104.9	78.2	92.5
	B	89.2	91.4	22.9	125.5	115.8	120.7

130R

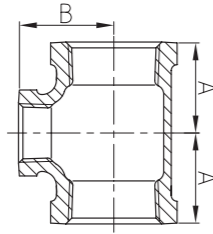
Reducing Tee



Size	Inch	1/2X1/8	1/2X1/4	1/2X3/8	3/4X1/4	3/4X3/8
	mm	15X6	15X8	15X10	20X8	20X10
Dim. (mm)	A	22	24.6	26.4	26.7	28.5
	B	23	24.9	26.2	27.4	28.7
Size	Inch	3/4X1/2	1X1/4	1X3/8	1X1/2	1X3/4
	mm	20X15	25X8	25X10	25X15	25X20
Dim. (mm)	A	30.5	28.2	30	32	34.8
	B	31	31	32.3	35.5	36.8

130R

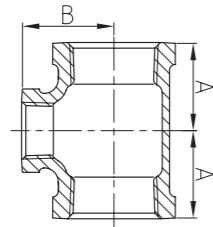
Reducing Tee



Size	Inch	1 1/4 X 3/8	1 1/4 X 1/2	1 1/4 X 3/4	1 1/4 X 1	1 1/2 X 3/8
	mm	32 X 10	32 X 15	32 X 20	32 X 25	40 X 10
Dim. (mm)	A	32	34	36.8	40.1	34
	B	36.6	38.9	41.2	42.4	39
Size	Inch	1 1/2 X 1/2	1 1/2 X 3/4	1 1/2 X 1	1 1/2 X 1 1/4	2 X 3/8
	mm	40 X 15	40 X 20	40 X 25	40 X 32	50 X 10
Dim. (mm)	A	35.8	38.6	41.9	46.2	36
	B	42.2	44.5	45.7	47.8	46

130R

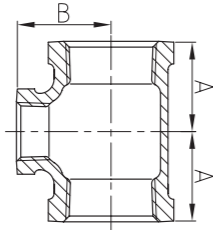
Reducing Tee



Size	Inch	2 X 1/2	2 X 3/4	2 X 1	2 X 1 1/4	2 X 1 1/2
	mm	50 X 15	50 X 20	50 X 25	50 X 32	50 X 40
Dim. (mm)	A	37.9	40.6	43.9	48.3	51.3
	B	47.8	50	51.3	53.3	54.9
Size	Inch	2 1/2 X 1/2	2 1/2 X 3/4	2 1/2 X 1	2 1/2 X 1 1/4	2 1/2 X 1 1/2
	mm	65 X 15	65 X 20	65 X 25	65 X 32	65 X 40
Dim. (mm)	A	41	44.2	47.5	51.8	54.9
	B	57	58.9	60.2	62.2	63.8

130R

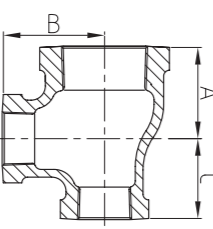
Reducing Tee



Size	Inch	2 1/2 X 2	3 X 1/2	3 X 3/4	3 X 1	3 X 1 1/4
	mm	65 X 50	80 X 15	80 X 20	80 X 25	80 X 32
Dim. (mm)	A	60.7	42	47.5	50.8	55.1
	B	66.0	64	66.3	67.6	69.6
Size	Inch	3 X 1 1/2	3 X 2	3 X 2 1/2	1/4 X 1/8	
	mm	80 X 40	80 X 50	80 X 65	8 X 6	
Dim. (mm)	A	58.2	64.0	71.9	18.8	
	B	71.1	73.4	76	19.3	

130R

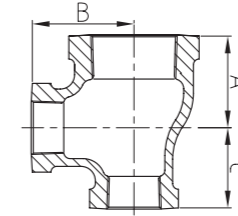
Reducing Tee



Size	Inch	3/4 X 1/2 X 1/2	1 X 1/2 X 1/2	1 X 3/4 X 3/4	1 1/4 X 1/2 X 1/2
	mm	20 X 15 X 15	25 X 15 X 15	25 X 20 X 20	32 X 15 X 15
Dim. (mm)	A	30.5	32	34.8	34
	B	31	35.5	36.8	38
	C	28.5	28.5	33.3	27
Size	Inch	1 1/4 X 3/4 X 3/4	1 1/4 X 1 X 1	1 1/2 X 3/4 X 3/4	1 1/2 X 1 X 1
	mm	32 X 20 X 20	32 X 25 X 25	40 X 20 X 20	40 X 25 X 25
Dim. (mm)	A	36.8	40.1	38	41.9
	B	41.2	42.4	43	45.7
	C	33.3	38.1	32	38.1

130R

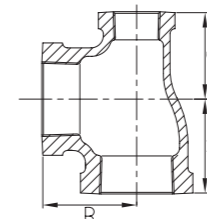
Reducing Tee



Size	Inch	1 1/2 X 1 1/4 X 1 1/4	2 X 1 X 1	2 X 1 1/4 X 1 1/4	2 X 1 1/2 X 1 1/2
	mm	40 X 32 X 32	50 X 25 X 25	50 X 32 X 32	50 X 40 X 40
Dim. (mm)	A	46.2	44	48.3	51.3
	B	47.8	51	53.3	54.9
	C	44.5	38	44.5	49.3
Size	Inch	2 1/2 X 2 X 2	3 X 2 X 2		
	mm	65 X 50 X 50	80 X 50 X 50		
Dim. (mm)	A	60.7	64		
	B	66	73.4		
	C	57.2	57.2		

130R

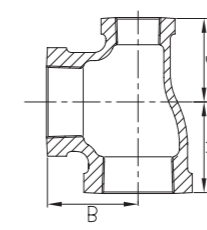
Reducing Tee



Size	Inch	3/4 X 1/2 X 3/4	1 X 1/4 X 1	1 X 1/2 X 1	1 X 3/4 X 1	1 1/4 X 1/2 X 1 1/4
	mm	20 X 15 X 20	25 X 8 X 25	25 X 15 X 25	25 X 20 X 25	32 X 15 X 32
Dim. (mm)	A	33.3	37	38.1	38.1	44.5
	B	33.3	37	38.1	38.1	44.5
	C	31	30	35.5	36.8	38.9
Size	Inch	1 1/4 X 3/4 X 1 1/4	1 1/4 X 1 X 1 1/4	1 1/2 X 1/2 X 1 1/2	1 1/2 X 3/4 X 1 1/2	1 1/2 X 1 X 1 1/2
	mm	32 X 20 X 32	32 X 25 X 32	40 X 15 X 40	40 X 20 X 40	40 X 25 X 40
Dim. (mm)	A	44.5	44.5	49.3	49.3	49.3
	B	44.5	44.5	49.3	49.3	49.3
	C	41.2	42.4	42.2	44.5	45.7

130R

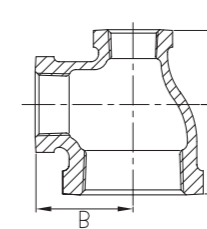
Reducing Tee



Size	Inch	1 1/2 X 1 1/4 X 1 1/2	2 X 1/2 X 2	2 X 3/4 X 2	2 X 1 X 2
	mm	40 X 32 X 40	50 X 15 X 50	50 X 20 X 50	50 X 25 X 50
Dim. (mm)	A	49.3	57.2	57.2	57.2
	B	49.3	57.2	57.2	57.2
	C	47.8	47.8	50	51.3
Size	Inch	2 X 1 1/4 X 2	2 X 1 1/2 X 2	2 1/2 X 1 1/2 X 2 1/2	2 1/2 X 2 X 2 1/2
	mm	50 X 32 X 50	50 X 40 X 50	65 X 40 X 65	65 X 50 X 65
Dim. (mm)	A	57.2	57.2	68.6	68.6
	B	57.2	57.2	68.6	68.6
	C	53.3	54.8	63.8	66

130R

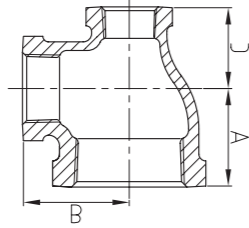
Reducing Tee



Size	Inch	4 X 3 X 2	3/4 X 1/2 X 1	1 X 1/2 X 3/4	1 1/4 X 1/2 X 3/4	1 1/4 X 1/2 X 1 1/4
	mm	100 X 80 X 50	20 X 15 X 25	25 X 15 X 20	32 X 15 X 20	32 X 15 X 25
Dim. (mm)	A	67	38	34.8	35	40.1
	B	83.5	34	36.8	38	42.4
	C	60	33	31	29	34.5
Size	Inch	1 1/4 X 3/4 X 1/2	1 1/4 X 3/4 X 1	1 1/4 X 1 X 1/2	1 1/4 X 1 X 3/4	1 1/2 X 1 X 1
	mm	32 X 20 X 15	32 X 20 X 25	32 X 25 X 15	32 X 25 X 20	40 X 15 X 25
Dim. (mm)	A	40	40.1	34.0	36.8	44
	B	42.5	42.4	38.9	41.2	46
	C	37	36.8	32	34.8	34

130R

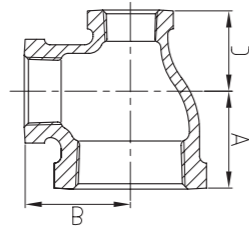
Reducing Tee



Size	Inch	1 1/2X3/4X1	1 1/2X3/4X1 1/4	1 1/2X1X1/2	1 1/2X3/4X1 1/4	1 1/2X1 1/4X1/2
	mm	40X20X25	40X20X32	40X25X15	40X25X32	40X32X15
Dim. (mm)	A	44	46	37	45	35.8
	B	46	48	41	47	42.2
	C	35	41	32	41.5	34.0
Size	Inch	1 1/2X1 1/4X3/4	1 1/2X1 1/4X1	1 1/2X1 1/4X2	2X1X1 1/2	2X1 1/4X1
	mm	40X32X20	40X32X25	40X32X50	50X25X40	50X32X25
Dim. (mm)	A	38.6	41.9	55	51.3	40
	B	44.5	45.7	51.5	54.9	51
	C	36.3	40.1	53.5	45.7	44

130R

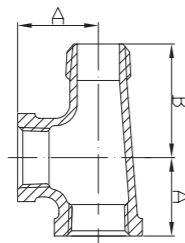
Reducing Tee



Size	Inch	2X1 1/4X1 1/2	2X1 1/2X1/2	2X1 1/2X3/4	2X1 1/2X1	2X1 1/2X1 1/4
	mm	50X32X40	50X40X15	50X40X20	50X40X25	50X40X32
Dim. (mm)	A	51.3	38	39.5	43.9	48.3
	B	54.9	48	49	51.3	53.3
	C	47.8	36	37.5	41.9	46.2
Size	Inch	2 1/2X2X1/2	2 1/2X2X1	2 1/2X2X1 1/4	3X2 1/2X2	
	mm	65X50X15	65X50X25	65X50X32	80X65X50	
Dim. (mm)	A	57	53	57	64.0	
	B	64	60	64	73.4	
	C	52	53	52	60.7	

134

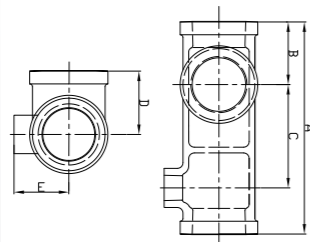
Service Tee



Size	Inch	1/4	1/2	3/4	1	1 1/4	1 1/2
	mm	8	15	20	25	32	40
Dim. (mm)	A	20.6	28.5	33.3	38.1	44.5	49.3
	B	30.2	41.2	48.0	54.4	62.2	68.3
Size	Inch	2	3				
	mm	50	80				
Dim. (mm)	A	57.2	78.2				
	B	82.8	114.6				

135

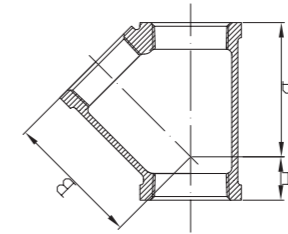
Side Outlet Four-Way



Size	Inch	1 1/4X1/2				
	mm	32X15				
Dim. (mm)	A	149				
	B	44.5				
	C	72.6				
	D	44.5				
	E	38				

165

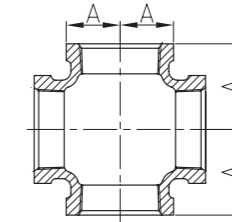
45° Lateral Y Branch



Size	Inch	3/8	1/2	3/4	1	1 1/4	1 1/2
	mm	10	15	20	25	32	40
Dim. (mm)	A	12.7	15.5	18.3	21.6	25.9	27.9
	B	36.3	43.4	52.1	61.7	74.2	83.3
Size	Inch	2	2 1/2	3	4		
	mm	50	65	80	100		
Dim. (mm)	A	37.5	38.6	43.4	51.1		
	B	99.8	120.1	141	177		

180

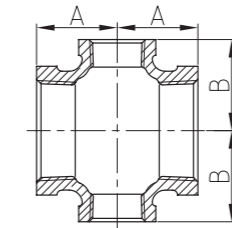
Cross



Size	Inch	1/8	1/4	3/8	1/2	3/4	1
	mm	6	8	10	15	20	25
Dim. (mm)	A	17.5	20.6	24.1	28.5	33.3	38.1
	B						
Size	Inch	1 1/4	1 1/2	2	2 1/2	3	4
	mm	32	40	50	65	80	100
Dim. (mm)	A	44.5	49.3	57.2	68.6	78.2	96.3
	B						

180R

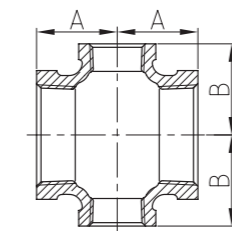
Reducing Cross



Size	Inch	4X1	4X1 1/4	4X1 1/2	4X2	4X2 1/2	4X3
	mm	100X25	100X32	100X40	100X50	100X65	100X80
Dim. (mm)	A	56	60	62	70	84	82
	B	82	85	85	86	92	90
Size	Inch	3/4X1/2	1X1/2	1X3/4	1 1/4X1/2	1 1/4X3/4	1 1/4X1
	mm	20X15	25X15	25X20	32X15	32X20	32X25
Dim. (mm)	A	30.5	32	34.8	33	36.8	40.1
	B	31.0	35.5	36.8	37.5	41.2	42.4

180R

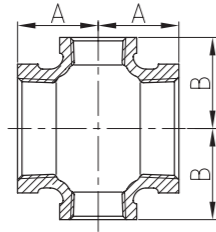
Reducing Cross



Size	Inch	1 1/2X1/2	1 1/2X3/4	1 1/2X1	1 1/2X1 1/4	2X3/4
	mm	40X15	40X20	40X25	40X32	50X20
Dim. (mm)	A	34.5	38.6	41.9	46.2	40.6
	B	41	44.5	45.7	47.8	50
Size	Inch	2X1	2X1 1/4	2X1 1/2	2 1/2X3/4	2 1/2X1
	mm	50X25	50X32	50X40	65X20	65X25
Dim. (mm)	A	43.9	48.3	51.3	43	47
	B	51.3	53.3	54.9	57	60

180R

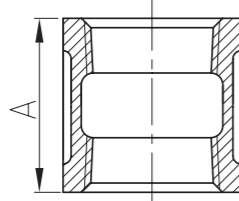
Reducing Cross



Size	Inch	2 1/2X1 1/4	2 1/2X1 1/2	2 1/2X2	3X3/4	3X1
	mm	65X32	65X40	65X50	80X20	80X25
Dim. (mm)	A	52	55	60.7	45	49
	B	62	63	66.0	65	66
Size	Inch	3X1 1/4	3X1 1/2	3X2	3X2 1/2	
	mm	80X32	80X40	80X50	80X65	
Dim. (mm)	A	53	56.5	64	72	
	B	68	69.5	73.4	76	

220

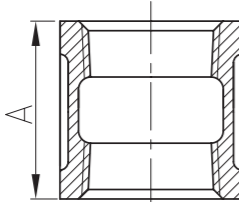
Coupling



Size	Inch	1/8	1/4	3/8	1/2	3/4	1	1 1/4
	mm	6	8	10	15	20	25	32
Dim. (mm)	A	24.2	26.9	29.5	34.0	38.6	42.4	49
Size	Inch	1 1/2	2	2 1/2	3	4	5	6
	mm	40	50	65	80	100	125	150
Dim. (mm)	A	54.6	64.3	73.2	80.8	93.7	95	105

220S

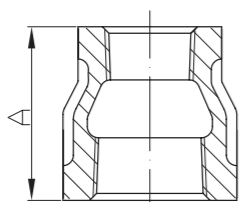
Left & Right Coupling



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	34.0	38.6	42.4	49	54.6	64.3
Size	Inch						
	mm						
Dim. (mm)	A						

240

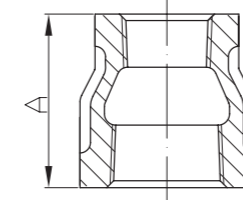
Reducing Coupling



Size	Inch	4X1	4X1 1/4	4X1 1/2	4X2	4X2 1/2
	mm	100X25	100X32	100X40	100X50	100X65
Dim. (mm)	A	111.3	111.3	111.3	111.3	111.3
Size	Inch	4X3	3/8X1/8	3/8X1/4	5X4	6X4
	mm	100X80	10X6	10X8	125X100	150X100
Dim. (mm)	A	111.3	28.7	28.7	122	105

240

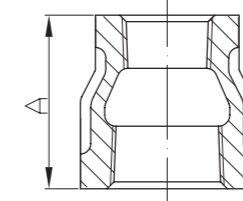
Reducing Coupling



Size	Inch	6X2	6X3	1 1/2X1/8	1 1/2X1/4	1 1/2X3/8	3/4X1/8
	mm	150X50	150X80	15X6	15X8	15X10	20X6
Dim. (mm)	A	105	105	31.8	31.8	31.8	36.6
Size	Inch	3/4X1/4	3/4X3/8	3/4X1/2	1X1/4	1X3/8	1X1/2
	mm	20X8	20X10	20X15	25X8	25X10	25X15
Dim. (mm)	A	36.6	36.6	36.6	42.9	42.9	42.9

240

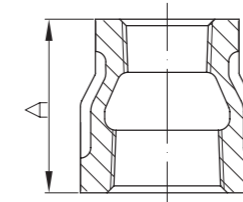
Reducing Coupling



Size	Inch	1X3/4	1 1/4X1/4	1 1/4X3/8	1 1/4X1/2	1 1/4X3/4	1 1/4X1
	mm	25X20	32X8	32X10	32X15	32X20	32X25
Dim. (mm)	A	42.9	52.3	52.3	52.3	52.3	52.3
Size	Inch	1 1/2X1/4	1 1/2X3/8	1 1/2X1/2	1 1/2X3/4	1 1/2X1	2X1/2
	mm	40X8	40X10	40X15	40X20	40X25	50X15
Dim. (mm)	A	58.7	58.7	58.7	58.7	58.7	71.4

240

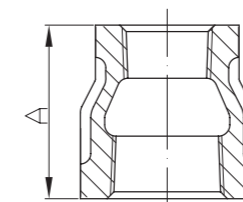
Reducing Coupling



Size	Inch	1 1/2X1 1/4	2X3/4	2X1	2X1 1/4	2X1 1/2
	mm	40X32	50X20	50X25	50X32	50X40
Dim. (mm)	A	58.7	71.4	71.4	71.4	71.4
Size	Inch	2 1/2X1/2	2 1/2X3/4	2 1/2X1	2 1/2X1 1/4	2 1/2X1 1/2
	mm	65X15	65X20	65X25	65X32	65X40
Dim. (mm)	A	82.6	82.6	82.6	82.6	82.6

240

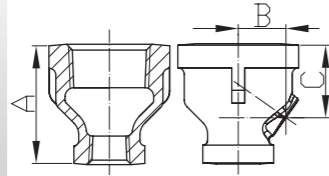
Reducing Coupling



Size	Inch	2 1/2X2	3X1/2	3X3/4	3X1	3X1 1/4
	mm	65X50	80X15	80X20	80X25	80X32
Dim. (mm)	A	82.6	93.7	93.7	93.7	93.7
Size	Inch	3X1 1/2	3X2	3X2 1/2	1/4X1/8	8X6
	mm	80X40	80X50	80X65	8X6	200X150
Dim. (mm)	A	93.7	93.7	93.7	25.4	131

240T

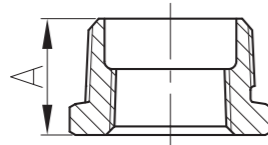
Tapped Reducing Coupling



Size	Inch	3/4X1/4X1/8					
	mm	20X8X6					
Dim. (mm)	A	36.5					
	B	14.8					
	C	22.5					
Size	Inch						
	mm						
Dim. (mm)	A						
	B						
	C						

241

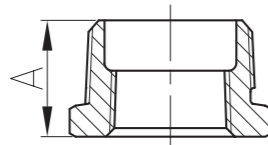
Outside Hex Bushing



Size	Inch	4X3	3/8X1/8	3/8X1/4	5X4	6X5	1/2X1/8	1/2X1/4
	mm	100X80	10X6	10X8	125X100	150X125	15X6	15X8
Dim. (mm)	A	43.7	16.3	16.3	46	51.6	19	19
Size	Inch	1/2X3/8	3/4X1/8	3/4X1/4	3/4X3/8	3/4X1/2	1X1/2	1X3/4
	mm	15X10	20X6	20X8	20X10	20X15	25X15	25X20
Dim. (mm)	A	19	21.6	21.6	21.6	21.6	25.5	25.5

241

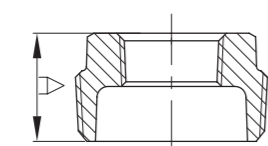
Outside Hex Bushing



Size	Inch	1 1/4X3/4	1 1/4X1	1 1/2X1	1 1/2X1 1/4	2X1 1/4	2X1 1/2
	mm	32X20	32X25	40X25	40X32	50X32	50X40
Dim. (mm)	A	27.4	27.4	29	29	31	31
Size	Inch	2 1/2X2	2 1/2X2	3X2	3X2 1/2	1 1/4X1/8	8X6
	mm	65X40	65X50	80X50	80X65	8X6	200X150
Dim. (mm)	A	38.4	36.6	40.9	38.9	14.8	70

241N

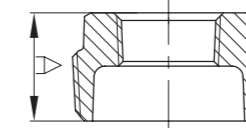
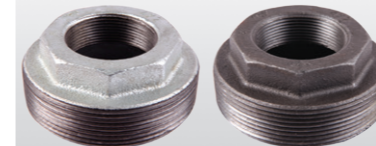
Inside Hex Bushing



Size	Inch	4X3/4	4X1	4X1 1/4	4X1 1/2	4X1 1/2	4X1 1/2
	mm	100X20	100X25	100X32	100X40	100X50	100X65
Dim. (mm)	A	46.2	46.2	46.2	46.2	46.2	46.2
Size	Inch	6X2 1/2	6X2 1/2	6X2 1/2	6X2 1/2	1X1/4	1X1/4
	mm	150X50	150X65	150X80	150X100	25X6	25X8
Dim. (mm)	A	54.7	54.7	54.7	54.7	26.7	26.7

241N

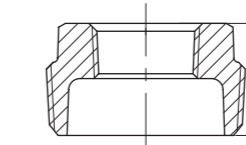
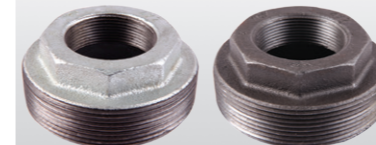
Inside Hex Bushing



Size	Inch	1X3/8	1 1/4X3/8	1 1/4X1/2	1 1/2X1/4	1 1/2X3/8
	mm	25X10	32X8	32X10	40X8	40X10
Dim. (mm)	A	26.7	28.9	28.9	30.5	30.5
Size	Inch	1 1/2X1/2	1 1/2X3/4	2X1	2X1	2X1
	mm	40X15	40X20	50X8	50X10	50X15
Dim. (mm)	A	30.5	30.5	32.8	32.8	32.8

241N

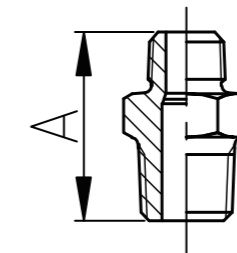
Inside Hex Bushing



Size	Inch	2X1	2X1	2 1/2X1/2	2 1/2X3/4	2 1/2X1/2	2 1/2X3/4
	mm	50X20	50X25	65X15	65X20	65X25	65X32
Dim. (mm)	A	32.8	32.8	38.4	38.4	38.4	38.4
Size	Inch	3X2	3X2 1/2	3X2	3X2 1/2	3X2	
	mm	80X15	80X20	80X25	80X32	80X40	
Dim. (mm)	A	40.9	40.9	40.9	40.9	40.9	

245

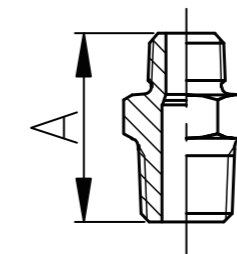
Reducing Hexagon Nipple



Size	Inch	4X2	4X2 1/2	4X3	3/8X1/4	1/2X1/4	1/2X3/8
	mm	100X50	100X65	100X80	10X8	15X8	15X10
Dim. (mm)	A	87	87	87	38	44	44
Size	Inch	3/4X1/4	3/4X3/8	3/4X1/2	1X1/2	1X3/4	1 1/4X1/2
	mm	20X8	20X10	20X15	25X15	25X20	32X15
Dim. (mm)	A	47	47	47	53	53	57

245

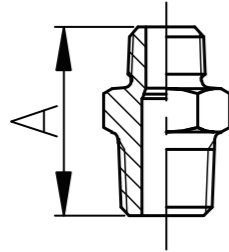
Reducing Hexagon Nipple



Size	Inch	1 1/4X3/4	1 1/4X1	1 1/2X1/2	1 1/2X3/4	1 1/2X1
	mm	32X20	32X25	40X15	40X20	40X25
Dim. (mm)	A	57	57	59	59	59
Size	Inch	1 1/2X1 1/4	2X1/2	2X3/4	2X1	2X1 1/4
	mm	40X32	50X15	50X20	50X25	50X32
Dim. (mm)	A	59	68	68	68	68

245

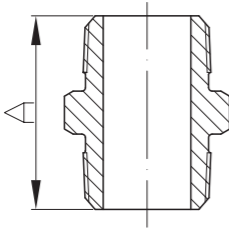
Reducing Hexagon Nipple



Size	Inch	2X1 1/2	2 1/2X1	2 1/2X1 1/4	2 1/2X1 1/2	2 1/2X2
	mm	50X40	65X25	65X32	65X40	65X50
Dim. (mm)	A	68	75	75	75	75
Size	Inch	3X1 1/2	3X2	3X2 1/2	1/4X1/8	
	mm	80X40	80X50	80X65	8X6	
Dim. (mm)	A	83	83	83	31	

280

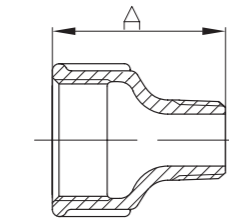
Hexagon Nipple



Size	Inch	1/8	1/4	3/8	1/2	3/4	1	1 1/4
	mm	6	8	10	15	20	25	32
Dim. (mm)	A	29	36	38	44	47	53	57
Size	Inch	1 1/2	2	2 1/2	3	4	5	6
	mm	40	50	65	80	100	125	150
Dim. (mm)	A	59	68	75	83	95	103	110

246

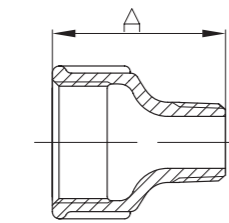
Reducing Extension Piece



Size	Inch	3/8X1/4	1/2X1/4	1/2X3/8	3/4X3/8
	mm	10X8	15X8	15X10	20X10
Dim. (mm)	A	35	43	43	48
Size	Inch	3/4X1/2	1X1/2	1X3/4	1 1/4X1/2
	mm	20X15	25X15	25X20	32X15
Dim. (mm)	A	48	55	55	60

246

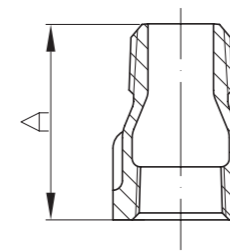
Reducing Extension Piece



Size	Inch	1 1/4X3/4	1 1/4X1	1 1/2X3/4	1 1/2X1
	mm	32X20	32X25	40X20	40X25
Dim. (mm)	A	60	60	63	63
Size	Inch	1 1/2X1 1/4	2X1	2X1 1/4	2X1 1/2
	mm	40X32	50X25	50X32	50X40
Dim. (mm)	A	63	70	70	70

529A

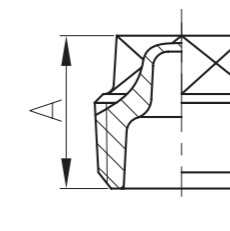
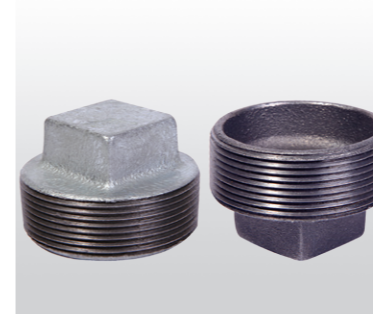
Extension Piece



Size	Inch	3/8	1/2	3/4	1	1 1/4	1 1/2
	mm	10	15	20	25	32	40
Dim. (mm)	A	35	43	48	55	60	63
Size	Inch	2	2 1/2	3	4		
	mm	50	65	80	100		
Dim. (mm)	A	70	76	83	97		

291

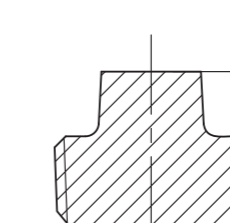
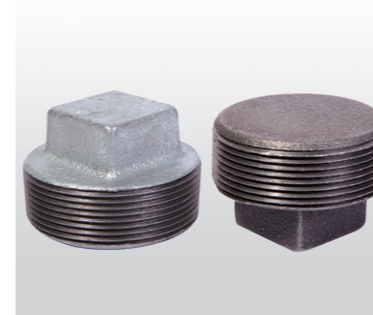
Cored Plug



Size	Inch	1/8	1/4	3/8	1/2	3/4	1	1 1/4
	mm	6	8	10	15	20	25	32
Dim. (mm)	A	15.5	18.3	20.1	23.9	27.2	31.8	34.5
Size	Inch	1 1/2	2	2 1/2	3	4	6	
	mm	40	50	65	80	100	150	
Dim. (mm)	A	36.9	39.7	46	49	64.5	71.5	

291S

Solid Plug



Size	Inch	1/8	1/4	3/8	1/2	3/4	1
	mm	6	8	10	15	20	25
Dim. (mm)	A	15.5	18.3	20.1	23.9	27.2	31.8
Size	Inch	1 1/4	1 1/2	2	2 1/2	3	4
	mm	32	40	50	65	80	100
Dim. (mm)	A	34.5	36.9	39.7	46	49	64.5

291N

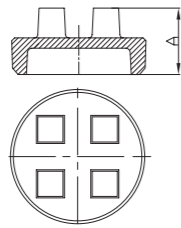
Countersunk Plug



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	14.2	16	19.1	20.3	21.1	22.4
Size	Inch	2 1/2	3	4			
	mm	65	80	100			
Dim. (mm)	A	27.2	28.7	31.0			

291-4

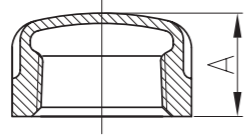
Bar Head Plug



Size	Inch	4	5	6			
	mm	100	125	150			
Dim. (mm)	A	56.4	58.7	67.4			
Size	Inch						
	mm						
Dim. (mm)	A						

300

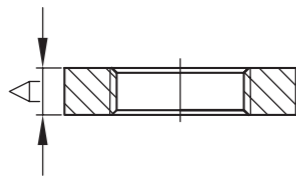
Cap



Size	Inch	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2
	mm	6	8	10	15	20	25	32	40
Dim. (mm)	A Min	13.5	16.0	18.8	22.1	24.6	29.5	32.5	33.8
Size	Inch	2	2 1/2	3	4	5	6	8	
	mm	50	65	80	100	125	150	200	
Dim. (mm)	A	36.8	43.2	45.7	52.8	58.9	64.8	76.2	

310

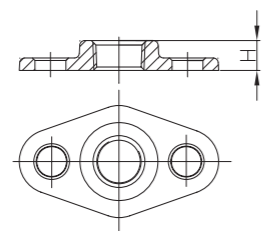
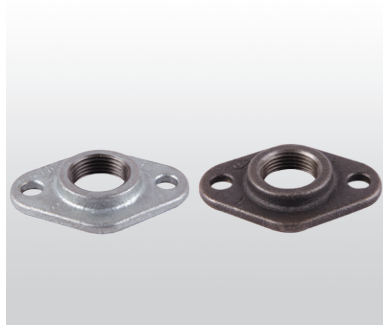
Locknut



Size	Inch	1/8	1/4	3/8	1/2	3/4	1
	mm	6	8	10	15	20	25
Dim. (mm)	A Min	4.8	6.4	7.1	7.9	8.6	9.7
Size	Inch	1 1/4	1 1/2	2	2 1/2	3	4
	mm	32	40	50	65	80	100
Dim. (mm)	A Min	10.7	11.9	13.5	15	17	20.3

320

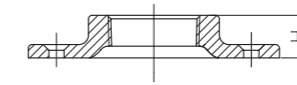
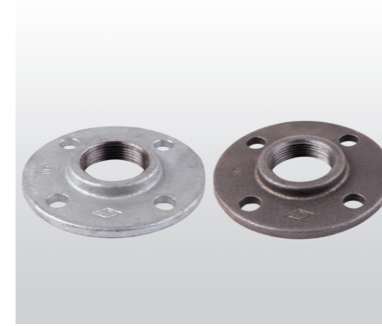
Wastnut



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A Min	12	13	13.5	15	16	18
Size	Inch	2 1/2					
	mm	65					
Dim. (mm)	A Min	20					

321

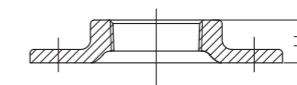
Floor Flange



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
	mm	8	10	15	20	25	32
Dim. (mm)	A Min	12	14	14	16	17	19
Size	Inch	1 1/2	2	2 1/2	3	4	
	mm	40	50	65	80	100	
Dim. (mm)	A Min	22	25	26.2	27.3	30.5	

321W

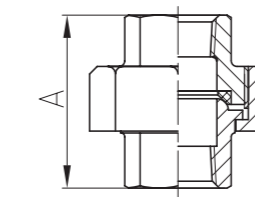
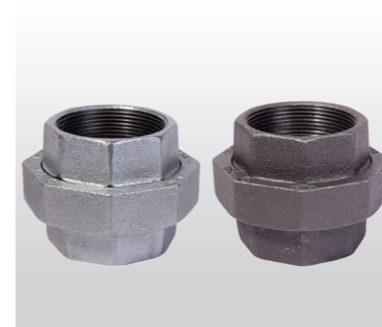
Floor Flange without Bolt Hole



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A Min	14	16	17	19	22	25
Size	Inch						
	mm						
Dim. (mm)	A Min						

342

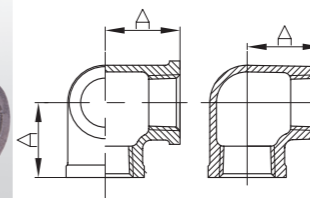
Union with Brass Seat



Size	Inch	1/8	1/4	3/8	1/2	3/4	1	1 1/4
	mm	6	8	10	15	20	25	32
Dim. (mm)	A Min	32	36.5	41	43.5	49.5	52.5	57.5
Size	Inch	1 1/2	2	2 1/2	3	4	6	
	mm	40	50	65	80	100	150	
Dim. (mm)	A Min	61	70	82	89	98	145	

1221

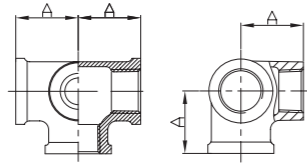
Side Outlet Elbow



Size	Inch	1/2	3/4	1	1 1/2	2	
	mm	15	20	25	40	50	
Dim. (mm)	A	28	33	38	50	58	
Size	Inch						
	mm						
Dim. (mm)	A						

1223

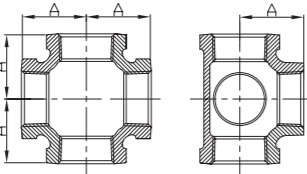
Side Outlet Tee



Size	Inch	1/2	3/4	1	1 1/4		
	mm	15	20	25	32		
Dim. (mm)	A	28	33	38	45		
Size	Inch						
	mm						
Dim. (mm)	A						

1224

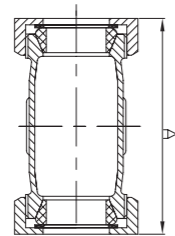
Side Outlet Cross



Size	Inch	1	1 1/4	1 1/2		
	mm	25	32	40		
Dim. (mm)	A	38	45	50		
Size	Inch					
	mm					
Dim. (mm)	A					

LCC

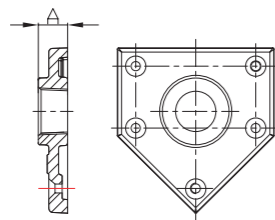
Long Compression Coupling



Size	Inch	1/2	3/4	1	1 1/4	1 1/2	2
	mm	15	20	25	32	40	50
Dim. (mm)	A	93	101	109	114	118	121
Size	Inch	2 1/2	3	4			
	mm	65	80	100			
Dim. (mm)	A	137	145	155			

WJFL

Tee Flange



Size	Inch	1				
	mm	25				
Dim. (mm)	A	18				
Size	Inch					
	mm					
Dim. (mm)	A					

Malleable Iron Pipe Fittings

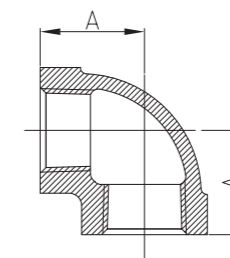
American Standard Class 300

Material: ASTM A197/A197M
 Dimensions: ASME B16.3, B16.14
 Union Dimensions: B16.39
 Threads: ASME B1.20.1
 Size Available: 1/4" - 4"

 90 90° Elbow	 90R 90° Reducing Elbow	 92 90° Street Elbow	 120 45° Elbow	 121 45° Street Elbow	 130 Tee
 130R Reducing Tee	 220 Coupling	 240 Reducing Coupling	 300 Cap	 342 Union with Brass Seat	

90

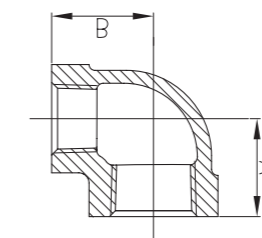
90° Elbow



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	23.9	26.9	31.8	35.6	41.4	49.3
Size	Inch	1 1/2	2	2 1/2	3	4	
	mm	40	50	65	80	100	
Dim. (mm)	A	54.1	63.5	74.7	85.9	114	

90R

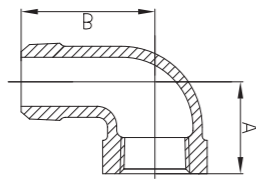
90° Reducing Elbow



Size	Inch	1/2X3/8	1X3/4	1 1/4X1/2		
	mm	15X10	25X20	32X15		
Dim. (mm)	A	30.2	38.1	36.5		
	B	30.2	39.6	42		
Size	Inch					
	mm					
Dim. (mm)	A					
	B					

92

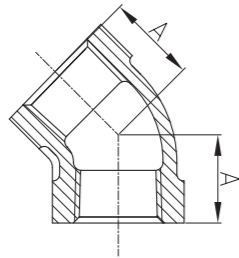
90° Street Elbow



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	23.9	26.9	31.8	36.6	41.4	49.3
	B	36.6	41.4	50.8	55.6	65.0	73.2
Size	Inch	1 1/2	2	2 1/2	3		
	mm	40	50	65	80		
Dim. (mm)	A	54.1	63.5	74.7	85.9		
	B	79.5	93.7	114.3	130.3		

120

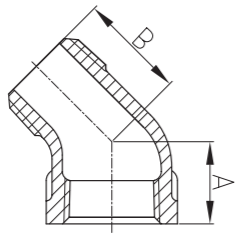
45° Elbow



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	20.6	22.4	25.4	28.7	33.3	38.1
	B						
Size	Inch	1 1/2	2	2 1/2	3	4	8
	mm	40	50	65	80	100	200
Dim. (mm)	A	42.9	50.8	57.2	63.5	71	106.7
	B						

121

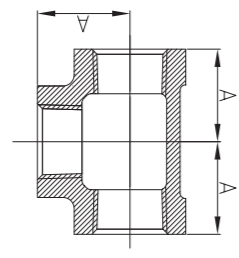
45° Street Elbow



Size	Inch	3/4	1	1 1/4	1 1/2		
	mm	20	25	32	40		
Dim. (mm)	A	28.7	33.3	38.1	42.9		
	B	39.6	46.0	54.1	58.7		
Size	Inch						
	mm						
Dim. (mm)	A						
	B						

130

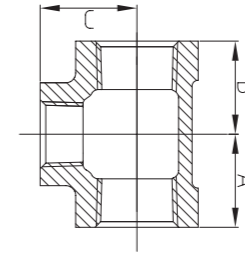
Tee



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	23.9	26.9	31.8	35.6	41.4	49.3
	B						
Size	Inch	1 1/2	2	2 1/2	3	4	8
	mm	40	50	65	80	100	200
Dim. (mm)	A	54.1	63.5	74.7	85.9	114	162
	B						

130R

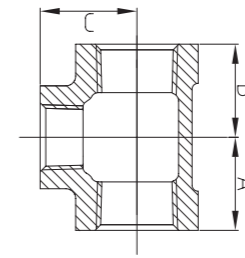
Reducing Tee



Size	Inch	1/2X3/8	3/4X1/2	1X1/2	1X3/4	1 1/4X1/2
	mm	15X10	20X15	25X15	25X20	32X15
Dim. (mm)	A	30.2	33.3	36.6	38.1	38.1
	B	30.2	33.3	36.6	38.1	38.1
	C	30.2	35.1	38.1	39.6	42.9
Size	Inch	1 1/4X3/4	1 1/4X1	1 1/2X1/2	1 1/2X3/4	1 1/2X1
	mm	32X20	32X25	40X15	40X20	40X25
Dim. (mm)	A	41.4	44.5	41.4	42.9	46.0
	B	41.4	44.5	41.4	42.9	46.0
	C	44.5	46.0	46.0	47.6	50.8

130R

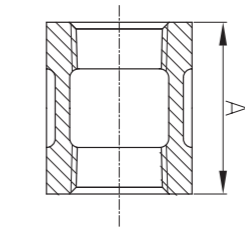
Reducing Tee



Size	Inch	1 1/2X1 1/4	2X1/2	2X3/4	2X1	2X1 1/4
	mm	40X32	50X15	50X20	50X25	50X32
Dim. (mm)	A	50.8	44.5	46.0	50.8	54.1
	B	50.8	44.5	46.0	50.8	54.1
	C	52.3	52.3	54.1	57.2	58.7
Size	Inch	2X1 1/2	2 1/2X2	3X2	4X2 1/2	4X3
	mm	50X40	65X50	80X50	100X65	100X80
Dim. (mm)	A	57.2	68.3	71.4	94	101.5
	B	57.2	68.3	71.4	94	101.5
	C	60.5	70.0	79.5	101.5	108

220

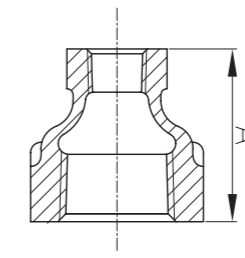
Coupling



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
	mm	8	10	15	20	25	32
Dim. (mm)	A	35.1	41.4	47.8	54.1	60.5	73.2
	B						
Size	Inch	1 1/2	2	2 1/2	3	4	
	mm	40	50	65	80	100	
Dim. (mm)	A	73.2	92.2	104.9	104.9	117	
	B						

240

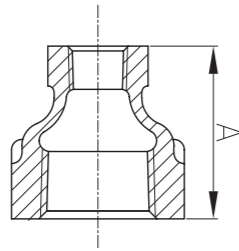
Reducing Coupling



Size	Inch	3/8X1/4	1/2X1/4	1/2X3/8	3/4X1/4	3/4X3/8	3/4X1/2	1X3/8
	mm	10X8	15X8	15X10	20X8	20X10	20X15	25X10
Dim. (mm)	A	36.6	42.9	42.9	44.5	44.5	44.5	50.8
	B							
Size	Inch	1X1/2	1X3/4	1 1/4X1/2	1 1/4X3/4	1 1/4X1	1 1/2X1/2	1 1/2X3/4
	mm	25X15	25X20	32X15	32X20	32X25	40X15	40X20
Dim. (mm)	A	50.8	50.8	60.5	60.5	60.5	68.3	68.3
	B							

240

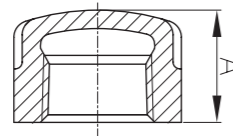
Reducing Coupling



Size	Inch	11/2X1	11/2X11/4	2X1/2	2X3/4	2X1	2X11/4	2X11/2
	mm	40X25	40X32	50X15	50X20	50X25	50X32	50X40
Dim. (mm)	A	68.3	68.3	81.0	81.0	81.0	81.0	81.0
Size	Inch	21/2X11/2	21/2X2	3X2	3X21/2	4X3	8X6	
	mm	65X40	65X50	80X50	80X65	100X80	200X150	
Dim. (mm)	A	93.7	93.7	103.1	103.1	110	131	

300

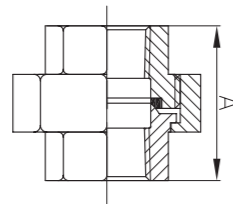
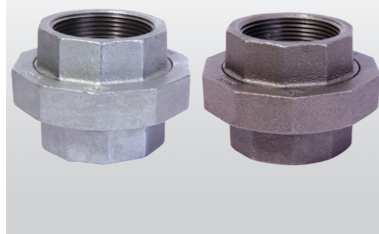
Cap



Size	Inch	1/4	3/8	1/2	3/4	1	1 1/4
	mm	8	10	15	20	25	32
Dim. (mm)	A Min	19.8	21.1	24.9	27.4	32.0	35.1
Size	Inch	1 1/2	2	2 1/2	3	4	8
	mm	40	50	65	80	100	200
Dim. (mm)	A Min	36.3	42.7	52.3	55.1	60.5	76.2

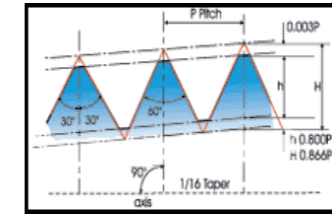
342

Union with Brass Seat

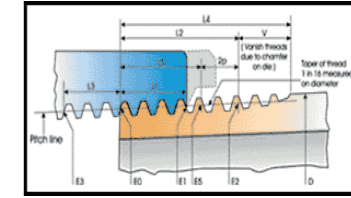


Size	Inch	1/8	1/4	3/8	1/2	3/4	1
	mm	6	8	10	15	20	25
Dim. (mm)	A	32	39.5	43.5	46	54	58.5
Size	Inch	1 1/4	1 1/2	2	2 1/2	3	4
	mm	32	40	50	65	80	100
Dim. (mm)	A	67.5	72.5	82	84.5	104	113.5

Basic Dimension for American Standard Pipe Threads



Taper thread
 $H = 0.866025 p$ $p = 0.866025/n$
 $h = 0.800 p = 0.800/n$



Taper thread
 $L2 = (0.8D + 6.8) l/n = (0.80D + 6.8)p$

Nominal Pipe Size (inches)	O.D. of Pipe (D)	Threads /in (N)	Pitch of Thread (P)	Pitch Dia. at Beginning of External Thread (E0)	Handtight Engagement		Effective Thread, External			Depth of Thread h	
					Length ² (L1)		Diam. ² (E1)	Length ² (L2)			Diam. (E2)
					Inch	Thread		Inch	Thread		
1/8	0.405	27.0	0.03704	0.36351	0.1615	4.36	0.37360	0.2639	7.12	0.38000	0.029
1/4	0.540	18.0	0.05556	0.47739	0.2278	4.10	0.49163	0.4018	7.23	0.50250	0.044
3/8	0.675	18.0	0.05556	0.61201	0.2400	4.32	0.62701	0.4078	7.34	0.63750	0.044
1/2	0.840	14.0	0.07143	0.75843	0.3200	4.48	0.77843	0.5337	7.47	0.79179	0.057
3/4	1.050	14.0	0.07143	0.96768	0.3390	4.75	0.98887	0.5457	7.64	1.00179	0.057
1	1.315	11.5	0.08696	1.21363	0.4000	4.60	1.23863	0.6826	7.85	1.25630	0.069
1 1/4	1.660	11.5	0.08696	1.55713	0.4200	4.83	1.58338	0.7068	8.13	1.60130	0.069
1 1/2	1.900	11.5	0.08696	1.79609	0.4200	4.83	1.82234	0.7235	8.32	1.84130	0.069
2	2.375	11.5	0.08696	2.26902	0.4360	5.01	2.29627	0.7565	8.70	2.31630	0.069
2 1/2	2.875	8.0	0.12500	2.71953	0.6820	5.46	2.76216	1.31375	9.10	2.79062	0.100
3	3.500	8.0	0.12500	3.34062	0.7660	6.13	3.38850	1.2000	9.60	3.41562	0.100
3 1/2	4.000	8.0	0.12500	3.83750	0.8210	6.57	3.88881	1.2500	10.00	3.91562	0.100
4	4.500	8.0	0.12500	4.33438	0.8440	6.75	4.38712	1.3000	10.40	4.41562	0.100
5	5.563	8.0	0.12500	5.39073	0.9370	7.50	5.44929	1.4063	11.25	5.47862	0.100
6	6.625	8.0	0.12500	6.44609	0.9580	7.66	6.50597	1.5125	12.10	6.54062	0.100

Nominal Pipe Size (inches)	Length, L1 Plane to L2 Plane External Thread (L2-L1)		Wrench Makeup Length for Internal Thread ⁷		Diam. (E3)	Vanish Thread (V)		Overall ⁸ Length External Thread (L4)	Nominal Complete External Thread ⁵		Height of Thread (h)	Increase in Diam./Thread (0.0625/n)	Basic ⁶ Minor Diam. At Small End of Pipe (K0)
	Inch	Thread	Inch	Thread		Inch	Thread		Length (L5)	Diam. (E5)			
	1/8	0.1024	2.76	0.1111	3	0.35656	0.1285	3.47	0.3924	0.1898	0.37537	0.02963	0.00231
1/4	0.1740	3.13	0.1667	3	0.46697	0.1928	3.47	0.5946	0.2907	0.49556	0.04444	0.00347	0.4329
3/8	0.1678	3.02	0.1667	3	0.60160	0.1928	3.47	0.6006	0.2967	0.63056	0.04444	0.00347	0.5676
1/2	0.2137	2.99	0.2143	3	0.74504	0.2478	3.47	0.7815	0.3909	0.78286	0.05714	0.00446	0.7013
3/4	0.2067	2.89	0.2143	3	0.95429	0.2478	3.47	0.7935	0.4029	0.99286	0.05714	0.00446	0.9105
1	0.2828	3.25	0.2609	3	1.19733	0.3017	3.47	0.9845	0.5089	1.24543	0.06957	0.00543	1.1441
1 1/4	0.2868	3.30	0.2609	3	1.54083	0.3017	3.47	1.0085	0.5329	1.59043	0.06957	0.00543	1.4876
1 1/2	0.3035	3.49	0.2609	3	1.77978	0.3017	3.47	1.0252	0.5496	1.83043	0.06957	0.00543	1.7265
2	0.3205	3.69	0.2609	3	2.25272	0.3017	3.47	1.0582	0.5826	2.30543	0.06957	0.00543	2.1995
2 1/2	0.4555	3.64	0.2500	2	2.70391	0.4337	3.47	1.5712	0.8875	2.77500	0.10000	0.00781	2.6195
3	0.4340	3.47	0.2500	2	3.32500	0.4337	3.47	1.6337	0.9500	3.40000	0.10000	0.00781	3.2406
3 1/2	0.4290	3.43	0.2500	2	3.82188	0.4337	3.47	1.6837	1.0000	3.90000	0.10000	0.00781	3.7375
4	0.4560	3.65	0.2500	2	4.31875	0.4337	3.47	1.7337	1.0500	4.40000	0.10000	0.00781	4.2344
5	0.4693	3.75	0.2500	2	5.37511	0.4337	3.47	1.8400	1.1563	5.46300	0.10000	0.00781	5.2907
6	0.5545	4.44	0.2500	2	6.43047	0.4337	3.47	1.9462	1.2625	6.52500	0.10000	0.00781	6.3461

Note: This information is selected from the International Standard for Pipe Threads, ASME B1.20.1.

Technical Standard For Malleable Steel Pipe Fitting

1) Product standards

BS EN 10242:1995, DIN EN 10242:1995
ASME B16.3-2016, ASME B16.14-2013, ASME B16.39-2014

2) Material

BS EN 1562, DIN EN 1562, EN-GJMB-350-10
ASTM A197/A197M-2015, ASTM A47/A47M-2014

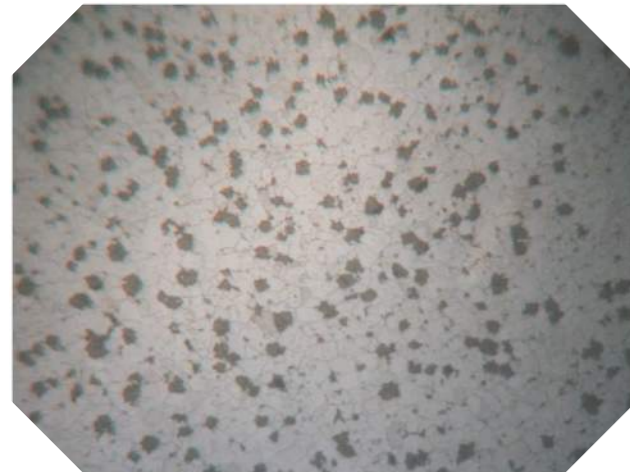
3) Thread

ISO7-1:1994 (BS/DIN)
ANSI/ASME B1.20.1 (NPT)

4) Chemical and Mechanical Properties

CHEMICAL PROPERTIES					PHYSICAL PROPERTIES	
C %	Si %	Mn %	P%	S%	TENSILE STRENGTH	ELONGATION
2.4-2.9	1.4-1.9	0.4-0.65	<0.1	<0.2	>=350 Mpa	>=10%

HARDNESS: <150HB



5) Dimensions

Fittings Size (inch)	1/8	1/4	3/8	1/2	3/4	1	1-1/4
DN (mm)	6	8	10	15	20	25	32

Fittings Size (inch)	1-1/2	2	2-1/2	3	4	5	6
DN (mm)	40	50	65	80	100	125	150

6) Pressure-Temperature Ratings

Temperature, °C	Class 150, psig	Class 300, psig		
		Size 1/4-1	Size 1 1/4-2	Size 2 1/2-3
-29 to 66	300	2000	1500	1000
100	265	1785	1350	910
125	225	1575	1200	825
150	185	1360	1050	735
175	150 Note(1)	1150	900	650
200	20 to 150	935	750	580
225	20 to 150	725	600	475
250	20 to 150	510	450	585
275	20 to 150	300	300	300

7) Tolerances

BS&DIN

Dimension	Tolerance(mm)	Tolerance(in)
≤30	±1.5	±0.06
30-50	±2.0	±0.08
50-75	±2.5	±0.10
75-100	±3	±0.12
100-150	±3.5	±0.14
150-200	±4	±0.16

American

NPS	Tolerance(mm)	Tolerance(in)
1/8	±0.76	±0.03
1/4	±1	±0.04
3/8	±1.27	±0.05
1/2, 3/4	±1.52	±0.06
1, 1-1/4	±1.77	±0.07
1-1/2, 2	±2	±0.08
2-1/2, 3, 3-1/2	±2.54	±0.10
4, 5	±3	±0.12
6	±3.55	±0.14

