

STANDARD PACKING LISTS & PRODUCT SPECIFICATIONS

MALLEABLE IRON PIPE FITTINGS
GALVANIZED & BLACK
CLASS 150 lbs. & 300 lbs.

SA
S.A. BRAND

SIAM FITTINGS CO.,LTD.



QUALITY SYSTEM ISO 9001:2000

EN ISO 9001:2000; BS EN ISO 9001:2000; ANSI/ASQ Q9001:2000



Accredited by
Raad voor
Accreditatie

PACKING LISTS and SPECIFICATION STANDARD

STANDARD SPECIFICATIONS MALLEABLE IRON PIPE FITTINGS

CLASS	150 lbs.	300 lbs.
MATERIALS	ASTM A 197/ A 197 M, EQUIVALENT TO EN 1562	ASTM A 197/ A 197 M
DIMENSIONS	ASME B 16.3, ASME B 16.14, DIN EN 10242, EQUIVALENT TO BS 143 & 1256 : 2000	ASME B 16.3, ASME B 16.14
FLANGES DIMENSION	NA	NA
UNION DIMENSIONS	ASME B16.39, DIN EN 10242	ASME B16.39
THREADS	ANSI / ASME B 1.20.1, BS 21, DIN 2999, ISO 7-1	ANSI / ASME B 1.20.1
TENSILE STRENGTH	Min. 40,000 psi (28.4 kgf/mm. ²)	Min. 40,000 psi (28.4 kgf/mm. ²)
ELONGATION	Min. 5%	Min. 5%
ZINC COATING	ASTM A 153/A, 153M	ASTM A 153/A, 153M
WORKING PRESSURE	Class150 psi. at 350°F	Class 300 psi. at 550°F

QUALITY SYSTEM ISO 9001:2000

SA QUALITY POLICY

S = Satisfy Customers.
I = Improvement Continually.
A = At acceptable price and cost.
M = Management Leadership.

All product and services provided by Siam Fittings Co., Ltd. Shall conform to the standard requirements and by our customers. Each employee is responsible for his or her input to the procurement, production, support, delivery service, corporate with supplier of management provided.

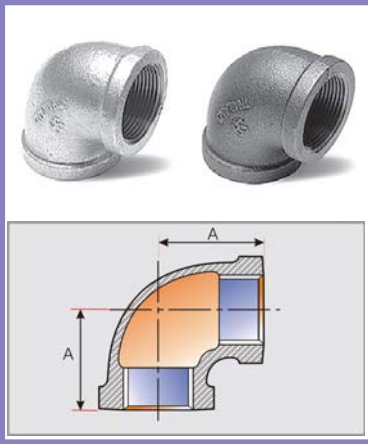
We are committed to continually improving all products and services and to maintain Siam Fittings as Quality Leader in our field, by Involvement of people, Leadership, Process approach, System approach to management and making decision base on fact.

PACKING LISTS and SPECIFICATION STANDARD

MALLEABLE IRON PIPE FITTINGS CLASS 150 lbs.

ELBOWS 90°

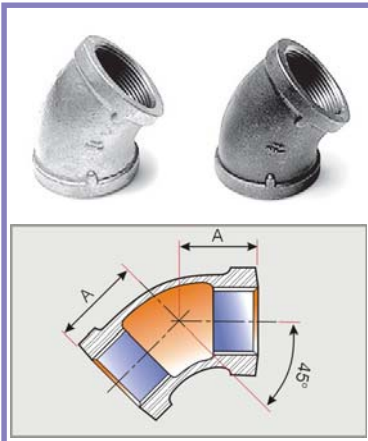
AL 90, BL 90



Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/8	17.5	50	600	12	0.0260	16
1/4	20.6	35	420	12	0.0490	21
3/8	24.1	90	360	4	0.0730	26
1/2	28.4	50	200	4	0.1080	22
3/4	33.3	35	105	3	0.1670	18
1	38.1	20	60	3	0.2660	16
1 1/4	44.5	20	40	2	0.4290	17
1 1/2	49.3	15	30	2	0.5220	16
2	57.2	8	16	2	0.7980	13
2 1/2	68.6		12	1	1.3180	16
3	78.2		8	1	2.4605	20
3 1/2	86.9		4	1	3.1930	13
4	96.3		2	1	4.1205	8
5	114.3		2	1	6.8386	14
6	132.0		1	1	8.6000	9

ELBOWS 45°

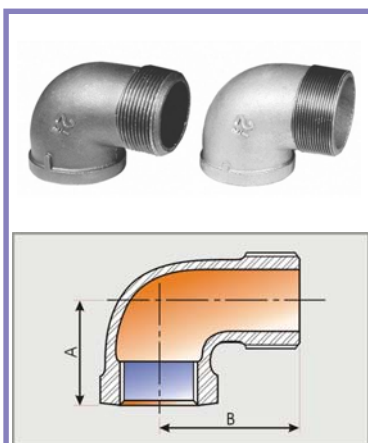
AL 45, BL 45



Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/8	16.0	50	600	12	0.0330	20
1/4	18.5	30	360	12	0.0516	19
3/8	20.3	75	300	4	0.0710	21
1/2	22.3	50	200	4	0.1090	22
3/4	24.9	40	120	3	0.1608	19
1	28.4	20	60	3	0.2530	15
1 1/4	32.8	20	40	2	0.3850	15
1 1/2	36.3	10	30	3	0.5054	15
2	42.7	12	24	2	0.8180	20
2 1/2	49.5		12	1	1.2170	15
3	55.1		10	1	1.9690	20
4	66.3		4	1	3.4248	14
5	77.5		2	1	4.8500	10
6	87.9		1	1	5.8016	6

STREET ELBOWS 90°

ASL 90, BSL 90



Size (inch)	Dimensions A	Dimensions B	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/8	17.5	25.4	60	720	12	0.0290	21
1/4	20.6	30.2	35	420	12	0.0440	18
3/8	24.1	36.6	60	240	4	0.0770	18
1/2	28.4	41.4	60	180	3	0.1150	21
3/4	33.3	48.0	35	105	3	0.1890	20
1	38.1	54.3	45	90	2	0.2590	23
1 1/4	44.5	62.2	25	50	2	0.4566	23
1 1/2	49.3	68.3	9	27	3	0.6000	16
2	57.2	82.8	8	16	2	1.0096	16
2 1/2	68.6	98.0	5	10	2	1.2870	13
3	78.2	114.5		8	1	2.5950	21
4	96.3	144.5		4	1	4.7604	19
5	114.3	174.2		1	1	5.5000	6
6	130.3	204.0		1	1	9.2500	9

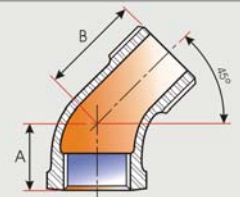
PACKING LISTS and SPECIFICATION STANDARD

MALLEABLE IRON PIPE FITTINGS CLASS 150 lbs.

Size (inch)	Dimensions A B		Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO.of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/8	16.0	21.0	70	840	12	0.0225	19
1/4	18.5	23.9	40	480	12	0.0590	28
3/8	20.3	26.2	100	400	4	0.0600	24
1/2	22.3	33.0	75	225	3	0.1030	23
3/4	24.9	37.5	40	120	3	0.1502	18
1	28.4	43.0	25	75	3	0.2508	19
1 1/4	32.8	47.4	10	40	4	0.3450	14
1 1/2	36.3	51.7	10	30	3	0.5130	15
2	42.7	60.4	12	24	2	0.8014	19
2 1/2	49.5	69.0	6	12	2	1.1660	14
3	55.1	80.2	3	6	2	1.6000	10
4	66.3	99.0		4	1	3.7700	15

STREET ELBOWS 45°

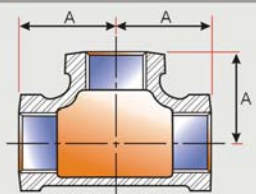
ASL 45, BSL 45



Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO.of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/8	17.5	120	480	4	0.0405	19
1/4	20.6	75	300	4	0.0730	22
3/8	24.1	45	180	4	0.1105	20
1/2	28.4	40	120	3	0.1580	19
3/4	33.3	35	70	2	0.2498	17
1	38.1	20	40	2	0.3840	15
1 1/4	44.5	14	28	2	0.6230	17
1 1/2	49.3	12	24	2	0.7910	19
2	57.2	8	16	2	1.1540	18
2 1/2	68.6	4	8	2	1.7080	14
3	78.2		6	1	2.8910	17
4	96.3	1	2	2	5.3120	11
5	114.3		1	1	7.4630	7
6	132.0		1	1	11.1600	11

TEES

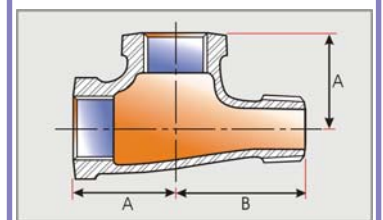
AT, BT

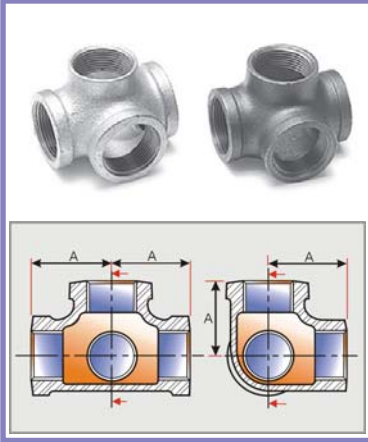


Size (inch)	Dimensions A B		Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO.of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/2	28.4	41.4	40	120	3	0.1400	17
3/4	33.3	48.0	25	75	3	0.2500	19
1	38.1	54.3	20	40	2	0.4040	16
1 1/4	44.5	62.2	15	30	2	0.6460	19
1 1/2	49.3	68.3	12	24	2	0.8120	19
2	57.2	82.8	8	16	2	1.2900	21

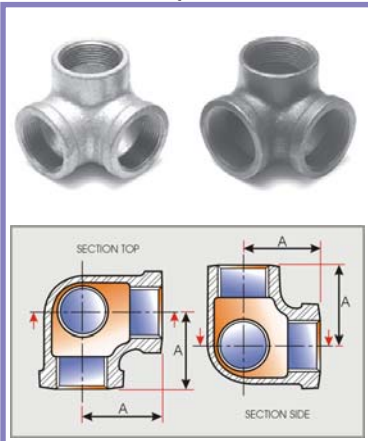
SERVICE TEES

AST, BST

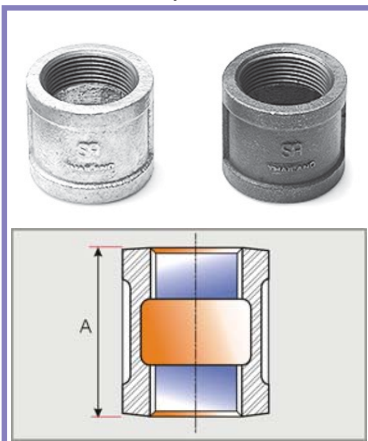


MALLEABLE IRON PIPE FITTINGS CLASS 150 lbs.
SIDE OUTLET TEES
ASOT, BSOT


Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
3/8	24.1	40	160	4	0.1140	18
1/2	28.4	25	100	4	0.1720	17
3/4	33.3	15	60	4	0.2622	16
1	38.1	20	40	2	0.4042	16
1 1/4	44.5	12	24	2	0.6300	15
1 1/2	49.3	8	16	2	0.7500	12
2	57.2	4	8	2	1.1710	9

SIDE OUTLET ELBOWS
ASOL, BSOL


Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/8	17.5	45	540	12	0.0390	21
1/4	20.6	75	300	4	0.0680	20
3/8	24.1	50	200	4	0.1050	21
1/2	28.4	45	135	3	0.1358	18
3/4	33.3	20	80	4	0.2130	17
1	38.1	20	40	2	0.3560	14
1 1/4	44.5	15	30	2	0.5914	18
1 1/2	49.3	12	24	2	0.7060	17
2	57.2	5	10	2	1.1260	11

COUPLINGS
AS, BS


Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/8	24.4	70	840	12	0.0260	22
1/4	26.9	40	480	12	0.0400	19
3/8	29.5	40	480	12	0.0600	29
1/2	34.0	60	240	4	0.0884	21
3/4	38.6	50	150	3	0.1384	21
1	42.4	25	100	4	0.2056	21
1 1/4	49.0	16	64	4	0.2940	19
1 1/2	54.6	18	36	2	0.4104	15
2	64.3	12	24	2	0.6326	15
2 1/2	73.2	8	16	2	1.0988	18
3	80.8		12	1	1.5472	19
4	93.7	3	6	2	2.8326	17
5		1	2	2	3.3000	7
6			2	1	5.0993	10

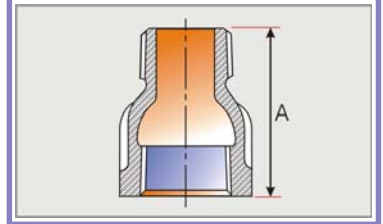
PACKING LISTS and SPECIFICATION STANDARD

MALLEABLE IRON PIPE FITTINGS CLASS 150 lbs.

Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
3/8	32	40	480	12	0.0480	23
1/2	40	75	300	4	0.0720	22
3/4	48	40	160	4	0.1272	20
1	55	30	90	3	0.2000	18
1 1/4	60	30	60	2	0.3000	18
1 1/2	65	20	40	2	0.3970	16
2	70	15	30	2	0.6000	18

EXTENSION PIECES

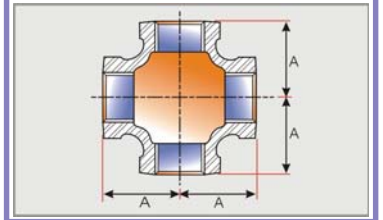
AX, BX



Size (inch)	Dimensions A	Inner Box B	Master Ctn. Pcs./Box	NO. of Pcs./Ctn.	Weight/Pcs. Inner Box	N.W./Ctn. (Kgs.)
1/8	17.5	30	360	12	0.0510	18
1/4	20.6	60	240	4	0.0800	19
3/8	24.1	50	150	3	0.1228	18
1/2	28.4	30	90	3	0.2050	18
3/4	33.3	20	60	3	0.3130	19
1	38.1	15	30	2	0.4838	15
1 1/4	44.5	10	20	2	0.7110	14
1 1/2	49.3	8	16	2	0.8660	14
2	57.2	5	10	2	1.4740	15
2 1/2	68.6	3	6	2	2.0520	12
3	78.2	2	4	2	3.4970	14
4	96.3	1	2	2	6.7000	13
5	114.3	1	1	1	8.0000	8
6	132.0	1	1	1	13.0000	13

CROSSES

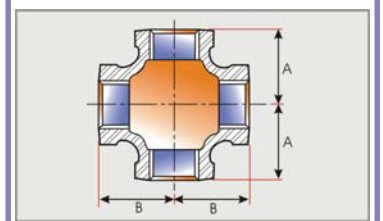
ACR, BCR



Size (inch)	Dimensions A	Dimensions B	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1 1/2 X 1 1/4	46.2	47.8	9	18	2	0.9060	16
2 X 1 1/4	48.3	53.3	5	10	2	1.1380	11
2 1/2 X 1 1/4	52.0	62.0	4	8	2	1.4510	12
2 1/2 X 1 1/2	56.0	63.0	4	8	2	1.5430	12

REDUCING CROSSES

ARCR, BRCR

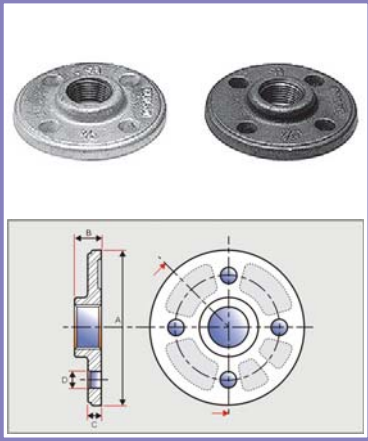


PACKING LISTS and SPECIFICATION STANDARD

MALLEABLE IRON PIPE FITTINGS CLASS 150 lbs.

FLOOR FLANGES, FLANGES "D"

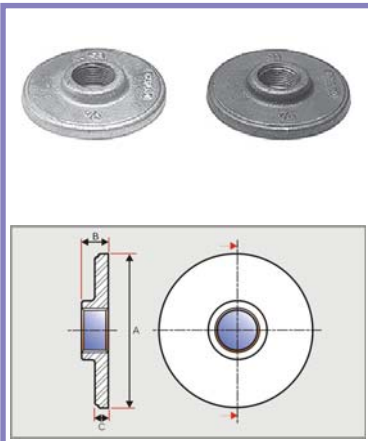
AFF, FD



Size (inch)	Dimensions				Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
A	B	C	D						
3/8	88.9	14.3	7.2	6.4	25	75	3	0.2760	21
1/2	88.9	14.3	7.2	6.4	25	50	2	0.2860	14
3/4	88.9	15.9	7.9	6.4	15	45	3	0.3400	15
1	101.6	17.5	8.7	6.4	15	30	2	0.4830	14
1 1/4	101.6	19.1	8.7	6.4	10	30	3	0.4900	15
1 1/2	114.3	22.2	9.5	8.0	8	24	3	0.6480	16
2	139.7	25.4	10.3	8.0	8	16	2	1.0150	16
2 1/2					4	12	3	1.2400	15
3					4	8	2	1.7100	14
4					3	6	2	2.5890	16
5	255.0	32.5	13.5	19.0		4	1	4.3620	17
6						4	1	5.5786	22

ROUND FLANGES

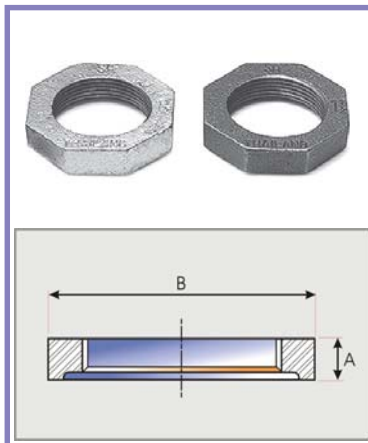
F



Size (inch)	Dimensions			Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
A	B	C						
1/2	95.0	15	5.0	25	50	2	0.2860	14
3/4	102.0	14	5.0	15	45	3	0.3400	15
1	114.0	16	5.0	15	30	2	0.4830	14
1 1/4	120.0	18	6.5	10	30	3	0.4900	15
1 1/2	133.0	19	6.5	8	24	3	0.6480	16
2	152.0	21	8.0	8	16	2	1.0150	16
2 1/2	165.0	24	8.0	4	12	3	1.2400	15
3	-	-	-	4	8	2	1.7100	14
4	-	-	-	3	6	2	2.5890	16
5	254.6	45	15.0		4	1	4.0000	16
6	284.0	50	15.0		4	1	5.5786	22

LOCKNUTS

ALN, LN



Size (inch)	Dimensions		Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
A	B						
1/8	5.0	17.5	250	3000	12	0.0080	24
1/4	6.6	21.3	125	1500	12	0.0117	18
3/8	7.3	25.4	125	1500	12	0.0150	23
1/2	8.1	30.0	150	600	4	0.0380	23
3/4	8.8	36.3	90	360	4	0.0590	21
1	9.9	44.5	60	240	4	0.0880	21
1 1/4	10.9	53.3	45	180	4	0.1220	22
1 1/2	12.1	59.7	45	135	3	0.2150	29
2	13.7	73.2	25	75	3	0.2550	19
2 1/2	15.2	98.0	20	40	2	0.5150	21
3	17.2	117.3	20	40	2	0.6090	24
4	20.5	147.1	7	14	2	1.1660	16
5	-	-	5	10	2	2.1980	22
6	-	-	4	8	2	3.2300	26

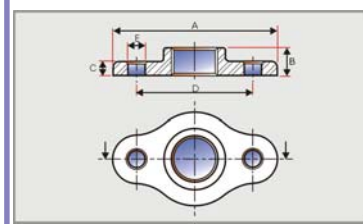
PACKING LISTS and SPECIFICATION STANDARD

MALLEABLE IRON PIPE FITTINGS CLASS 150 lbs.

Size (inch)	Dimensions					Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight. /Pcs	N.W./Ctn. (Kgs.)
	A	B	C	D	E					
1/2	62.0	6.0	4.4	46.0	6.0	90	360	4	0.0540	19
3/4	73.0	10.5	5.0	54.0	7.3	80	240	3	0.0800	19
1	84.1	11.2	4.8	65.1	7.2	50	200	4	0.0960	19
1 1/4	100.0	12.7	5.6	77.8	8.7	30	120	4	0.1450	17
1 1/2	109.5	14.3	6.4	87.3	8.7	50	100	2	0.1890	19
2	130.2	16.0	7.2	104.8	8.7	30	60	2	0.2850	17

WASTENUTS

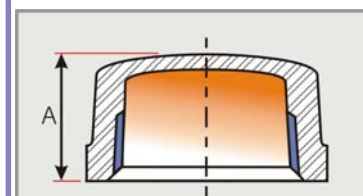
AWN



Size (inch)	Dimensions		Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
	A						
1/8	13.5		120	1440	12	0.0170	24
1/4	16.0		80	960	12	0.0260	25
3/8	18.8		60	720	12	0.0380	27
1/2	22.1		75	300	4	0.0570	17
3/4	24.6		40	160	4	0.0978	16
1	29.5		25	100	4	0.1696	17
1 1/4	32.5		20	80	4	0.2220	18
1 1/2	33.8		18	54	3	0.2934	16
2	36.8		12	36	3	0.4550	16
2 1/2	43.2		20	40	2	0.6580	26
3	45.7			24	1	1.0000	24
3 1/2	48.3		6	12	2	1.5140	18
4	52.8		6	12	2	1.7048	20
5	58.9		5	10	2	2.3782	24
6	64.8		2	4	2	4.0248	16

CAPS

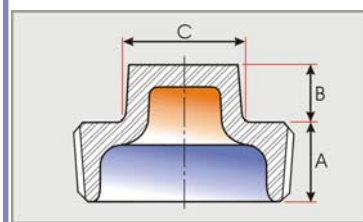
ACA, BCA

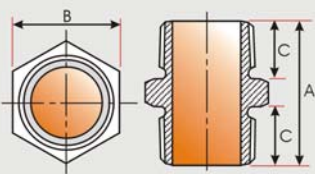


Size (inch)	Dimensions			Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
	A	B	C					
1/8	9.8	6.1	7.1	300	3.600	12	0.0070	25
1/4	11.6	7.1	9.5	150	1.800	12	0.0132	24
3/8	12.6	8.0	11.0	100	1.200	12	0.0230	28
1/2	14.7	9.7	14.3	50	600	12	0.0390	23
3/4	16.5	11.2	15.9	30	360	12	0.0600	22
1	19.1	12.7	20.9	20	240	12	0.1000	24
1 1/4	20.9	14.2	23.8	40	120	3	0.1810	22
1 1/2	21.7	15.8	28.6	30	90	3	0.2096	19
2	23.2	17.3	33.3	20	60	3	0.3360	20
2 1/2	32.0	18.8	38.1	16	32	2	0.5650	18
3	29.4	20.3	42.9	16	32	2	0.7680	25
4	31.0	25.4	58.0	6	12	2	1.2274	15
5	33.3	25.4	-	5	10	2	2.0900	21
6	35.6	31.8	77.0	5	10	2	3.1356	31

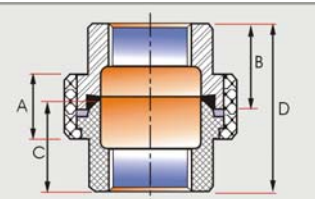
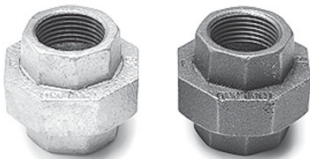
PLUGS

AP, P

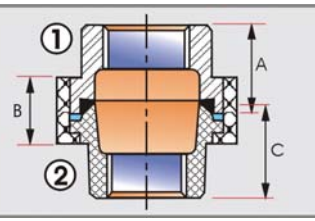


MALLEABLE IRON PIPE FITTINGS CLASS 150 lbs.
NIPPLES
NI


Size (inch)	Dimensions			Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
	A	B	C					
1/8	32	14	11.0	240	960	4	0.0220	21
1/4	34	17	12.0	200	800	4	0.0260	21
3/8	36	21	13.0	150	600	4	0.0410	25
1/2	45	27	18.5	80	320	4	0.0700	22
3/4	48	32	19.5	60	180	3	0.1130	20
1	53	38	21.5	40	120	3	0.1868	22
1 1/4	56	48	23.0	35	70	2	0.2776	19
1 1/2	60	55	24.0	25	50	2	0.3436	17
2	70	70	28.0	18	36	2	0.5434	20
2 1/2	76	85	31.0	10	20	2	0.8890	18
3	84	100	34.0	6	12	2	1.3070	16
4	95	130	38.5	3	6	2	1.8512	11
5	104	145	44.0	2	4	2	2.6390	11
6	116	170	46.0		3	1	3.9510	12

**UNIONS CONICAL
BRASS SEAT**
ACU, BCU


Size (inch)	Dimensions				Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
	A	B	C	D					
1/8	14.0	16.5	17.50	32.0	60	240	4	0.0880	21
1/4	15.5	18.5	20.25	36.6	20	240	12	0.0930	22
3/8	16.0	21.0	22.75	40.9	40	160	4	0.1598	26
1/2	17.0	23.0	25.25	43.7	50	100	2	0.1960	20
3/4	18.5	25.5	27.75	49.3	35	70	2	0.2850	20
1	20.0	27.0	30.00	52.3	20	40	2	0.4130	17
1 1/4	24.0	30.0	35.00	57.4	15	30	2	0.6144	18
1 1/2	25.5	33.0	38.00	61.2	10	20	2	0.7940	16
2	27.0	37.0	41.00	69.8	6	12	2	1.1900	14
2 1/2	29.5	42.0	45.50	81.8	4	8	2	2.0000	16
3	32.5	47.0	50.00	88.9	4	8	2	2.5590	20
4	39.0	58.0	60.50	97.8	2	4	2	4.6874	19

**REDUCING
UNIONS**
ARCU


Size (inch) 1x2	Dimensions			Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
	A	B	C					
3/4 X 1/2	22.5	18.5	27.75	30	90	3	0.3050	27

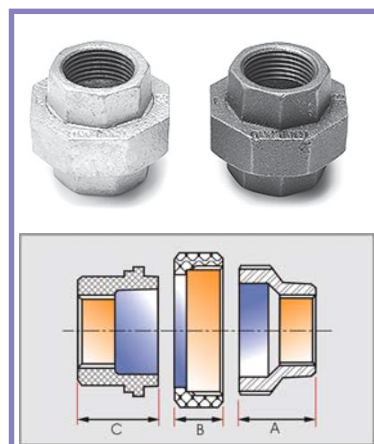
PACKING LISTS and SPECIFICATION STANDARD

MALLEABLE IRON PIPE FITTINGS CLASS 150 lbs.

Size (inch)	Dimensions			Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
	A	B	C					
1/4	18.3	15.5	19.0	20	240	12	0.0930	22
3/8	19.0	16.0	20.5	40	160	4	0.1598	26
1/2	21.0	17.0	24.5	50	100	2	0.1960	20
3/4	24.5	18.5	26.5	35	70	2	0.2850	20
1	27.0	20.0	29.0	20	40	2	0.4130	17
1 1/4	30.0	24.0	34.0	15	30	2	0.6144	18
1 1/2	33.0	25.5	37.5	10	20	2	0.7940	16
2	37.0	37.0	40.0	6	12	2	1.1900	14
2 1/2	42.0	29.5	49.5	4	8	2	2.0000	16
3	47.0	32.5	49.5	4	8	2	2.5590	20
4	58.0	39.0	60.5	2	4	2	4.6874	19
6	73.0	49.0	73.0		2	1	11.1200	22

UNIONS FLAT SEAT WITHOUT GASKET

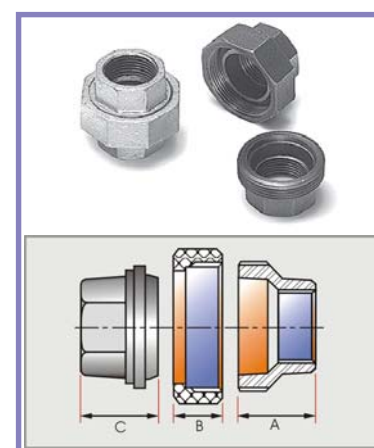
U



Size (inch)	Dimensions			Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
	A	B	C					
1/2	26.0	19.0	30.0	50	100	2	0.1990	20
3/4	28.0	20.0	30.5	35	70	2	0.2860	20
1	31.0	22.0	34.0	20	40	2	0.3480	14
1 1/4	33.0	24.0	40.0	15	30	2	0.6040	18
1 1/2	36.0	25.0	42.5	10	20	2	0.7180	14
2	42.0	27.0	46.0	6	12	2	1.0740	13
2 1/2				4	8	2	2.0000	16

UNIONS CONICAL IRON TO IRON SEAT

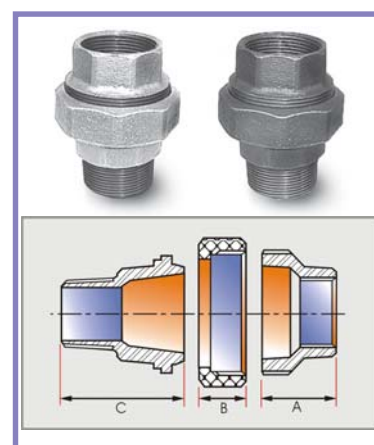
U340



Size (inch)	Dimensions			Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
	A	B	C					
1/2	26.0	19.0	30.0	50	100	2	0.2520	25
3/4	28.0	20.0	30.5	35	70	2	0.3260	23
1	31.0	22.0	34.0	20	40	2	0.4080	16
1 1/4	33.0	24.0	40.0	15	30	2	0.7150	21
1 1/2	36.0	27.0	42.5	10	20	2	0.8720	17
2	42.0	27.0	46.0	6	12	2	1.0130	12

UNIONS CONICAL IRON TO IRON SEAT, M & F

U341

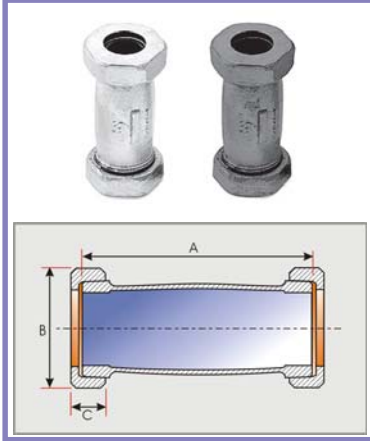


PACKING LISTS and SPECIFICATION STANDARD

MALLEABLE IRON PIPE FITTINGS CLASS 150 lbs.

LONG COMPRESSION, COUPLINGS

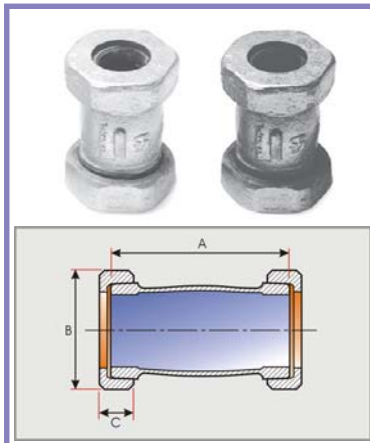
ALCC



Size (inch)	Dimensions			Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
	A	B	C					
1/2	78.0	48.0	15.0	20	40	2	0.4000	16
3/4	86.5	54.0	16.0	15	30	2	0.5200	16
1	97.0	57.0	17.0	10	20	2	0.6720	13
1 1/4	107.0	67.0	18.0	10	20	2	0.9300	19
1 1/2	115.0	76.0	18.0	6	12	2	1.1500	14
2	127.0	89.0	19.0	5	10	2	1.6600	17

SHORT COMPRESSION COUPLINGS

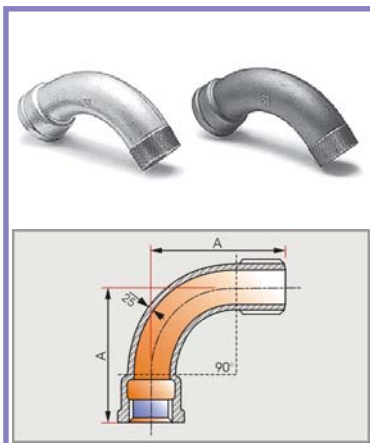
ASLCC



Size (inch)	Dimensions			Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
	A	B	C					
1/2	59.0	48.0	15.0	25	75	3	0.3020	23
3/4	64.5	54.0	16.0	20	60	3	0.4060	24
1	69.0	57.0	17.0	18	36	2	0.5130	18
1 1/4	74.0	67.0	18.0	10	20	2	0.6970	14
1 1/2	79.0	76.0	18.0	12	24	2	0.8650	21
2	84.0	89.0	19.0	6	12	2	1.2000	14
2 1/2	94.0	109.0	26.0	4	8	2	2.0800	17
3	104.0	135.7	26.0	2	4	2	2.7900	11

BENDS M & F 90°

BMF 90



Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO.of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/4	52 65	100	400	4	0.0570	23
3/8		60	240	4	0.0810	19
1/2		40	160	4	0.1190	19
3/4		40	80	2	0.2160	17
1	82	20	40	2	0.3678	15
1 1/4	100	14	28	2	0.6020	17
1 1/2	115	9	18	2	0.7960	14
2	140	5	10	2	1.3528	14
2 1/2	175		6	1	2.6860	16
3	205		3	1	3.4190	10
4	260		1	1	7.4200	7
5	318		1	1	17.2000	17
6	375		1	1	23.0000	23

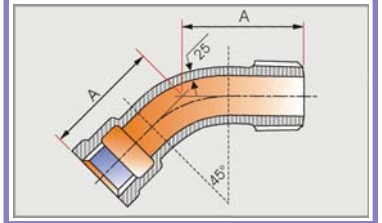
PACKING LISTS and SPECIFICATION STANDARD

MALLEABLE IRON PIPE FITTINGS CLASS 150 lbs.

Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs	N.W./Ctn. (Kgs.)
1/2	38	60	180	4	0.1180	21
3/4	45	30	90	3	0.1950	18
1	55	25	50	2	0.3150	16
1 1/4	63	15	30	2	0.4850	15
1 1/2	70	12	24	2	0.6400	15
2	85	6	12	2	1.1000	13
2 1/2	100	3	6	2	1.7000	10
3	115	2	4	2	2.6500	11
4	145		2	1	6.4000	13
5	170		1	1	8.6000	9
6	195		1	1	13.3300	13

BENDS M & F 45°

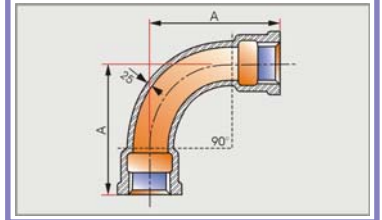
BMF 45



Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/2	52	40	160	4	0.1510	24
3/4	65	40	80	2	0.2700	22
1	82	24	48	2	0.4256	20
1 1/4	100	12	24	2	0.7740	19
1 1/2	115	9	18	2	0.8920	16
2	140		10	1	1.5036	15
2 1/2	175		4	1	2.9200	12
3	205		3	1	4.1662	12
4	260		1	1	9.5000	10
6			1	1	22.0000	22

BENDS FEMALE 90°

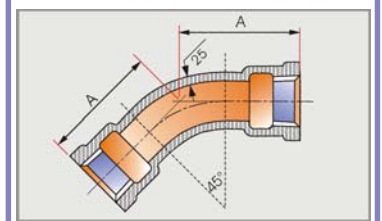
BF 90



Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/2	38	60	180	3	0.1520	27
3/4	45	30	90	3	0.2100	19
1	55	25	50	2	0.3650	18
1 1/4	63	15	30	2	0.5800	17
1 1/2	70	12	24	2	0.7200	17
2	81.5	6	12	2	1.1660	14
2 1/2	100	3	6	2	2.3250	14
3	115	2	4	2	2.9500	12
4	145		2	1	6.4000	13

BENDS FEMALE 45°

BF 45

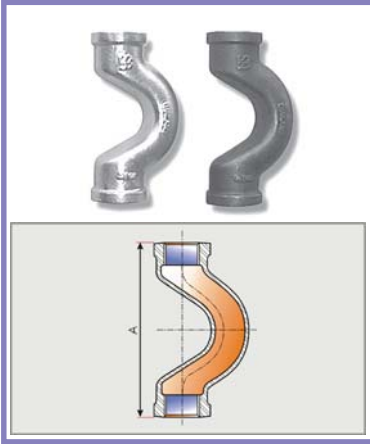


PACKING LISTS and SPECIFICATION STANDARD

MALLEABLE IRON PIPE FITTINGS CLASS 150 lbs.

CROSS OVER

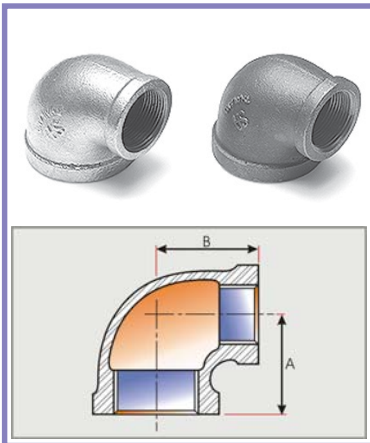
NOS



Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/2	92	20	80	4	0.2090	17
3/4	112	25	50	2	0.3450	17

REDUCING ELBOWS

ARL , BRL



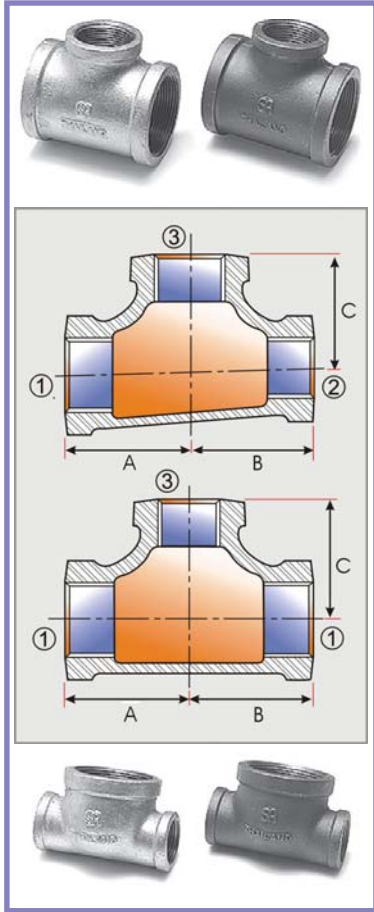
Size (inch)	Dimensions A B	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/4 X 1/8	18.8 19.3	40	480	12	0.0440	21
3/8 X 1/8	20.5 21.6	105	420	4	0.0580	24
3/8 X 1/4	22.4 22.9	90	360	4	0.0640	23
1/2 X 1/8	26.4 26.2	60	240	4	0.0700	17
1/2 X 1/4	24.6 24.9	60	240	4	0.0800	19
1/2 X 3/8	26.4 26.2	60	240	4	0.0970	23
3/4 X 1/8	26.2 25.7	40	160	4	0.1050	17
3/4 X 1/4	26.7 27.4	40	160	4	0.1110	18
3/4 X 3/8	28.5 28.7	40	160	4	0.1250	20
3/4 X 1/2	30.5 31.0	40	160	4	0.1440	23
1 X 1/4	30.0 32.0	25	100	4	0.1580	16
1 X 3/8	30.0 32.3	25	100	4	0.1770	18
1 X 1/2	32.0 35.5	25	100	4	0.2020	20
1 X 3/4	34.8 36.8	50	100	2	0.2360	24
1 1/4 X 1/2	34.0 38.9	20	80	4	0.2890	23
1 1/4 X 3/4	36.8 41.2	15	60	4	0.3190	19
1 1/4 X 1	40.1 42.4	10	40	4	0.3674	15
1 1/2 X 1/2	35.0 42.0	15	60	4	0.4200	25
1 1/2 X 3/4	38.6 44.5	10	40	4	0.3350	13
1 1/2 X 1	41.9 45.7	10	40	4	0.3000	12
1 1/2 X 1 1/4	46.2 47.8	15	30	2	0.5756	17
2 X 1/2	37.6 47.5	10	40	4	0.4520	18
2 X 3/4	40.6 50.0	9	36	4	0.5500	20
2 X 1	43.9 51.3	14	28	2	0.5560	16
2 X 1 1/4	48.3 53.3	10	20	2	0.6490	13
2 X 1 1/2	51.3 54.9	10	20	2	0.6200	12
2 1/2 X 1/2		10	20	2	0.7900	16
2 1/2 X 3/4		10	20	2	0.7900	16
2 1/2 X 1		8	16	2	0.9900	16
2 1/2 X 1 1/4		8	16	2	0.9630	15
2 1/2 X 1 1/2	54.9 63.8	6	12	2	1.0000	12
2 1/2 X 2	60.7 66.0	6	12	2	1.2250	15
3 x 1		4	8	2	1.2360	10
3 X 1 1/2		4	8	2	1.3750	11
3 X 2	64.0 73.4	4	8	2	1.4000	11
3 X 2 1/2	71.9 75.9	4	8	2	1.7600	14
4 X 2	69.1 87.5	2	4	2	2.5300	10
4 X 2 1/2	77.2 89.1	1	2	2	2.5800	5
4 X 3	83.8 91.4	1	2	2	2.7500	6
6 x 4			1	1	7.7800	8

PACKING LISTS and SPECIFICATION STANDARD

MALLEABLE IRON PIPE FITTINGS CLASS 150 lbs.

REDUCING TEES

ART, BRT



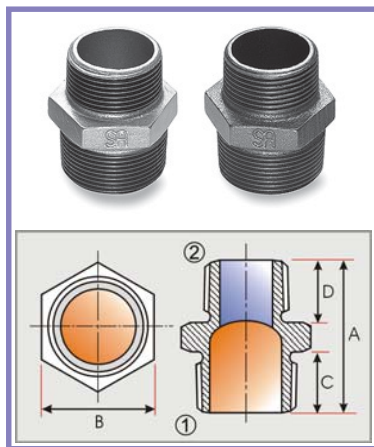
Size 1 x 2 x 3 (inch)	Dimensions			Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
	A	B	C					
1/4 X 1/8	18.8	18.8	19.3	25	300	12	0.0600	18
3/8 X 1/8	22.4	20.6	21.6	90	360	4	0.0730	26
3/8 X 1/4	22.4	22.4	22.9	60	240	4	0.0820	20
1/2 X 1/8	21.9	21.9	23.5	40	160	4	0.1120	18
1/2 X 1/4	24.6	24.6	24.9	40	160	4	0.1160	19
1/2 X 3/8	25.9	25.9	25.7	40	160	4	0.1300	21
3/4 X 1/8	24.0	24.0	25.7	32	128	4	0.1520	19
3/4 X 1/4	26.7	26.7	27.4	25	100	4	0.1600	16
3/4 X 3/8	27.9	27.9	28.1	25	100	4	0.1830	18
3/4 X 1/2	29.9	29.9	30.4	20	80	4	0.2150	17
1 X 1/4	27.6	27.6	30.4	20	80	4	0.2380	19
1 X 3/8	30.0	30.0	32.3	15	60	4	0.2730	16
1 X 1/2	31.4	31.4	34.8	15	60	4	0.3190	19
1 X 3/4	34.8	34.8	36.8	12	48	4	0.3510	17
1 1/4 X 1/4	30.0	30.0	36.6	20	40	2	0.3450	14
1 1/4 X 3/8	32.0	32.0	36.6	20	40	2	0.3850	15
1 1/4 X 1/2	34.0	34.0	38.9	20	40	2	0.4400	18
1 1/4 X 3/4	36.8	36.8	41.2	20	40	2	0.4560	18
1 1/4 X 1	40.1	40.1	42.2	20	40	2	0.4990	20
1 1/2 X 3/8	40.1	40.1	40.2	18	36	2	0.4450	16
1 1/2 X 1/2	35.8	35.8	42.2	18	36	2	0.4670	17
1 1/2 X 3/4	35.8	35.8	44.5	15	30	2	0.5670	17
1 1/2 X 1	41.9	41.9	45.7	10	30	3	0.6390	19
1 1/2 X 1 1/4	41.9	41.9	47.8	12	24	2	0.7160	17
2 X 3/8	46.2	46.2	-	10	20	2	0.6600	13
2 X 1/2	37.9	37.9	47.8	10	20	2	0.7320	15
2 X 3/4	40.6	40.6	50.0	10	20	2	0.8060	16
2 X 1	43.9	43.9	51.3	10	20	2	0.8960	18
2 X 1 1/4	47.3	47.3	52.2	8	16	2	0.8730	14
2 X 1 1/2	50.3	50.3	53.8	8	16	2	0.9440	15
2 1/2 X 1/2	40.2	40.2	55.9	6	12	2	1.1830	14
2 1/2 X 3/4	44.2	44.2	58.9	6	12	2	1.2940	16
2 1/2 X 1	46.5	46.5	59.0	5	10	2	1.3340	13
2 1/2 X 1 1/4	47.5	47.5	62.2	5	10	2	1.3420	13
2 1/2 X 1 1/2	54.9	54.9	63.8	5	10	2	1.5370	15
2 1/2 X 2	60.7	60.7	66.0	4	8	2	1.7680	14
3 X 1/2	46.5	46.5	65.0	4	8	2	1.2800	10
3 X 3/4	45.5	45.5	65.3	3	6	2	1.4400	9
3 X 1	50.8	50.8	67.6	3	6	2	1.5860	10
3 X 1 1/4	55.1	55.1	69.6	3	6	2	1.7400	10
3 X 1 1/2	58.2	58.2	71.1	3	6	2	2.1800	13
3 X 2	64.0	64.0	73.4	3	6	2	2.0650	12
3 X 2 1/2	71.9	71.9	76.0	3	6	2	2.3300	14
4 X 1/2	53.5	53.5	79.2	2	4	2	2.5000	10
4 X 3/4	53.5	53.5	79.2	2	4	2	2.7500	11
4 X 1	-	-	-	2	4	2	2.6310	11
4 X 1 1/4	61.0	61.0	86.5	2	4	2	2.9550	12
4 X 1 1/2	62.5	62.5	82.6	2	4	2	3.0100	12
4 X 2	68.2	68.2	84.9	1	3	1	3.1650	9
4 X 2 1/2	77.5	77.5	89.2	1	3	1	4.1200	12
4 X 3	82.1	82.1	89.6	1	2	2	3.7080	7
5 X 3	89.2	89.2	107.2	1	2	2	5.1000	10
5 X 4	100.0	100.0	111.0	1	1	1	6.1000	6
6 X 1/2	-	86.1	-	1	1	1	5.8000	6
6 X 2	78.2	78.2	115.8	1	1	1	7.0000	7
6 X 2 1/2	86.1	86.1	118.4	1	1	1	7.3500	7
6 X 3	92.5	92.5	120.7	1	1	1	8.5880	9
6 X 4	104.9	104.9	125.5	1	1	1	8.8852	9
6 X 5	116.0	116.0	128.0	1	1	1	10.5000	11
1/2 X 1/4 X 1/2	28.4	24.9	28.4	30	120	4	0.1430	17
1/2 X 1/2 X 3/4	31.0	31.0	30.5	30	120	4	0.1950	23
1/2 X 1/2 X 1	34.6	34.6	32.0	25	100	4	0.2200	22
3/4 X 1/2 X 1/2	29.9	27.9	30.4	25	100	4	0.1940	19
3/4 X 1/2 X 3/4	32.6	30.4	32.6	20	80	4	0.2300	18
3/4 X 1/2 X 1	36.1	34.8	34.1	18	72	4	0.2900	21
3/4 X 3/4 X 1	36.8	36.8	34.8	40	80	2	0.3030	24
3/4 X 3/4 X 1 1/4	-	-	-	20	60	3	0.3500	21
3/4 X 3/4 X 1 1/2	-	-	-	12	36	3	0.4050	15
1 X 1/2 X 1/2	31.4	27.9	34.8	20	80	4	0.2200	18
1 X 1/2 X 3/4	34.1	30.4	36.1	20	80	4	0.2700	22
1 X 1/2 X 1	37.3	34.8	37.3	15	60	4	0.3362	20
1 X 3/4 X 1/2	31.4	29.9	34.8	20	80	4	0.2790	22
1 X 3/4 X 3/4	34.1	32.6	36.1	15	60	4	0.3014	18
1 X 3/4 X 1	38.1	36.8	38.1	30	60	2	0.3590	22
1 X 1 X 1 1/4	42.4	42.4	40.1	11	44	4	0.4150	18
1 X 1 X 1 1/2	45.7	45.7	41.9	9	36	4	0.5250	19
1 X 1 X 2	50.3	50.3	47.9	12	24	2	0.6600	16
1 1/4 X 1/2 X 1/2	34.0	32.0	38.9	25	50	2	0.3000	15
1 1/4 X 1/2 X 3/4	37.0	32.0	39.5	25	50	2	0.3600	18
1 1/4 X 1/2 X 1	40.1	34.5	42.4	20	40	2	0.4240	17
1 1/4 X 1/2 X 1 1/4	43.6	38.1	43.6	20	40	2	0.4900	20
1 1/4 X 3/4 X 1/2	36.1	32.6	40.3	10	40	4	0.3460	14
1 1/4 X 3/4 X 3/4	36.1	32.6	40.4	10	40	4	0.3200	13
1 1/4 X 3/4 X 1	39.3	36.1	41.5	10	40	4	0.4390	18
1 1/4 X 3/4 X 1 1/4	44.5	41.2	44.5	20	40	2	0.5260	21
1 1/4 X 1 X 1/2	33.3	31.4	38.1	20	40	2	0.3400	14

PACKING LISTS and SPECIFICATION STANDARD

MALLEABLE IRON PIPE FITTINGS CLASS 150 lbs.

REDUCING TEES	Siz 1X2X3 (inch)	Dimensions			Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO.of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
		A	B	C					
ART, BRT	1 1/4 X 1 X 3/4	36.1	34.1	40.4	20	40	2	0.4110	16
	1 1/4 X 1 X 1	39.3	37.3	41.5	20	40	2	0.4400	18
	1 1/4 X 1 X 1 1/4	44.5	42.4	44.5	15	30	2	0.5200	16
	1 1/4 X 1 X 1 1/2	49.3	42.4	49.3	18	36	2	0.5300	19
	1 1/4 X 1 1/4 X 1 1/2	47.8	47.8	46.2	12	24	2	0.6590	16
	1 1/4 X 1 1/4 X 2	53.3	53.3	48.3	12	24	2	0.7900	19
	1 1/2 X 1 1/2 X 3/4	41.9	38.6	49.3	12	48	4	0.3250	16
	1 1/2 X 1 1/2 X 1	41.9	38.6	49.3	18	36	2	0.5400	19
	1 1/2 X 1 1/2 X 1 1/4	41.9	38.6	49.3	15	30	2	0.6540	20
	1 1/2 X 1 1/2 X 1 1/2	49.3	42.2	49.3	12	24	2	0.6510	16
	1 1/2 X 3/4 X 1 1/2	41.9	38.6	49.3	15	30	2	0.3470	10
	1 1/2 X 3/4 X 3/4	41.9	38.6	49.3	15	30	2	0.3850	12
	1 1/2 X 3/4 X 1 1/4	45.5	40.0	49.0	12	24	2	0.5000	12
	1 1/2 X 3/4 X 1 1/2	48.3	43.6	48.3	12	24	2	0.6090	15
	1 1/2 X 1 X 1 1/2	41.9	38.6	49.3	15	30	2	0.4100	12
	1 1/2 X 1 X 3/4	37.8	34.2	44.0	15	30	2	0.4540	14
	1 1/2 X 1 X 1	41.9	38.1	45.7	15	30	2	0.5240	16
	1 1/2 X 1 X 1 1/4	46.2	42.4	47.8	12	24	2	0.5740	14
	1 1/2 X 1 X 1 1/2	49.3	45.7	49.3	12	24	2	0.6200	15
	1 1/2 X 1 1/4 X 1 1/2	35.8	34.0	42.2	12	24	2	0.4710	11
	1 1/2 X 1 1/4 X 3/4	38.6	36.3	44.5	12	24	2	0.4700	11
	1 1/2 X 1 1/4 X 1	41.1	39.3	44.8	12	24	2	0.5460	13
	1 1/2 X 1 1/4 X 1 1/4	46.2	44.5	47.8	12	24	2	0.6300	15
	1 1/2 X 1 1/4 X 1 1/2	48.3	46.8	48.3	12	24	2	0.6530	16
	1 1/2 X 1 1/4 X 2	55.5	51.5	53.4	8	16	2	0.8500	14
	1 1/2 X 1 1/2 X 2	53.8	53.8	50.3	8	16	2	0.9000	14
	2 X 1 1/2 X 2	56.1	46.8	56.1	8	16	2	0.9240	15
	2 X 3/4 X 3/4	41.5	33.0	49.0	12	24	2	0.5000	12
	2 X 3/4 X 2	57.2	50.0	57.2	8	16	2	0.9000	14
	2 X 1 X 1	44.0	40.0	53.0	12	24	2	0.6440	15
	2 X 1 X 1 1/2	50.3	44.8	53.8	10	20	2	0.8020	16
	2 X 1 X 2	56.1	50.3	56.1	8	16	2	0.8860	14
	2 X 1 1/4 X 1	46.0	40.0	51.5	8	16	2	0.6800	11
	2 X 1 1/4 X 1 1/4	47.3	43.6	52.2	8	16	2	0.7000	11
	2 X 1 1/4 X 1 1/2	53.1	47.8	54.9	8	16	2	0.7700	12
	2 X 1 1/4 X 2	57.2	53.3	57.2	8	16	2	1.0000	16
	2 X 1 1/2 X 1 1/2	48.3	38.9	-	10	20	2	0.7400	15
	2 X 1 1/2 X 3/4	41.5	37.1	50.3	10	20	2	0.6240	12
	2 X 1 1/2 X 1	43.9	41.9	51.3	10	20	2	0.7130	14
	2 X 1 1/2 X 1 1/4	47.3	45.3	52.2	8	16	2	0.7700	12
	2 X 1 1/2 X 1 1/2	50.3	48.3	53.8	8	16	2	0.8220	13
	2 X 1 1/2 X 2	56.1	53.7	56.1	8	16	2	1.0330	17
	2 X 2 X 2 1/2	64.7	64.7	59.5	6	12	2	1.4830	18
	2 1/2 X 2 X 2	59.5	56.0	64.7	5	10	2	1.4480	14
	2 1/2 X 2 X 2 1/2	68.6	66.0	68.6	4	8	2	1.8502	15

REDUCING NIPPLES	Size (inch)	Dimensions				Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO.of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
		A	B	C	D					
RNI	3/8 X 1/4	38.0	19.0	15.0	14.0	105	210	2	0.0450	9
	1/2 X 1/4	44.0	22.0	19.0	16.0	90	180	2	0.0650	12
	1/2 X 3/8	44.0	22.0	19.0	16.0	170	340	2	0.0710	24
	3/4 X 1/2	47.0	30.0	20.5	17.5	50	200	4	0.0860	17
	1 X 1/2	53.0	36.0	24.5	18.5	50	150	3	0.1530	23
	1 X 3/4	53.0	36.0	22.5	20.5	45	135	3	0.1320	18
	1 1/4 X 1/2	40	80	20	17	40	80	2	0.2170	17
	1 1/4 X 3/4	57.0	46.0	26.0	21.0	40	80	2	0.2000	16
	1 1/4 X 1	57.0	46.0	25.0	22.0	40	80	2	0.2220	18
	1 1/2 X 1/2	30	60	20	18	30	60	2	0.2960	18
	1 1/2 X 3/4	59.0	50.0	26.0	21.0	30	60	2	0.3230	19
	1 1/2 X 1	59.0	50.0	25.0	22.0	25	50	2	0.3028	15
	1 1/2 X 1 1/4	59.0	50.0	25.0	22.0	25	50	2	0.3138	16
	2 X 1/2	68.0	65.0	33.0	21.0	25	50	2	0.4100	21
	2 X 3/4	68.0	65.0	32.0	22.0	25	50	2	0.4100	21
	2 X 1	68.0	65.0	30.0	24.0	25	50	2	0.4250	21
	2 X 1 1/4	68.0	65.0	30.0	24.0	20	40	2	0.4216	17
	2 X 1 1/2	68.0	65.0	30.0	24.0	18	36	2	0.4490	16
	2 1/2 X 1	75.0	80.0	35.0	24.0	10	20	2	0.8000	16
	2 1/2 X 1 1/4	75.0	80.0	33.0	26.0	10	20	2	0.5600	11
	2 1/2 X 1 1/2	75.0	80.0	33.0	26.0	10	20	2	0.9000	18
	2 1/2 X 2	75.0	80.0	31.0	28.0	16	32	2	0.7200	23
	3 X 1 1/2	83.0	95.0	39.0	28.0	6	12	2	1.2000	14
	3 X 2	83.0	95.0	37.0	30.0	6	12	2	1.0682	13
	3 X 2 1/2	83.0	95.0	35.0	32.0	6	12	2	1.0200	12
	4 X 2	95.0	130.0	47.0	31.0	4	8	2	2.1400	17
	4 X 2 1/2	95.0	130.0	47.0	31.0	4	8	2	2.0200	16
	4 X 3	95.0	130.0	42.0	36.0	4	8	2	1.8848	15



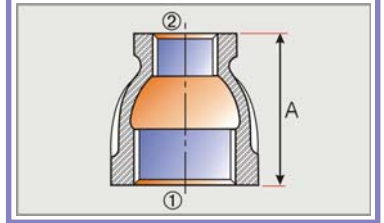
PACKING LISTS and SPECIFICATION STANDARD

MALLEABLE IRON PIPE FITTINGS CLASS 150 lbs.

Size (inch) 1 X 2	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO.of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/4 X 1/8	25.4	50	600	12	0.0350	21
3/8 X 1/8	28.7	35	420	12	0.0460	19
3/8 X 1/4	28.7	30	360	12	0.0530	19
1/2 X 1/8	31.8	75	300	4	0.0754	23
1/2 X 1/4	31.2	75	300	4	0.0700	21
1/2 X 3/8	31.2	60	240	4	0.0740	18
3/4 X 1/8	36.6	70	210	3	0.0900	19
3/4 X 1/4	36.6	45	180	4	0.0960	17
3/4 X 3/8	35.9	45	180	4	0.1010	18
3/4 X 1/2	35.9	60	180	3	0.1300	23
1 X 1/4	42.0	45	135	3	0.1680	23
1 X 3/8	42.0	30	120	4	0.1580	19
1 X 1/2	42.0	30	120	4	0.1678	20
1 X 3/4	42.0	25	100	4	0.1840	18
1 1/4 X 3/8	52.3	25	75	3	0.2250	17
1 1/4 X 1/2	52.3	25	75	3	0.2520	19
1 1/4 X 3/4	52.3	25	75	3	0.2740	21
1 1/4 X 1	52.3	15	60	4	0.2996	18
1 1/2 X 3/8	58.7	30	60	2	0.2670	16
1 1/2 X 1/2	57.5	20	60	3	0.3500	21
1 1/2 X 3/4	57.5	15	60	4	0.3580	21
1 1/2 X 1	57.5	25	50	2	0.3836	19
1 1/2 X 1 1/4	57.5	12	48	4	0.3920	19
2 X 3/8	71.4	12	36	3	0.4400	16
2 X 1/2	70.0	12	36	3	0.5090	18
2 X 3/4	70.0	12	36	3	0.5050	18
2 X 1	70.0	12	36	3	0.5808	21
2 X 1 1/4	70.0	9	27	3	0.5926	16
2 X 1 1/2	70.0	9	27	3	0.6388	17
2 1/2 X 1/2	82.6	10	20	2	0.7780	16
2 1/2 X 3/4	80.9	10	20	2	0.7260	15
2 1/2 X 1	80.9	10	20	2	0.8340	17
2 1/2 X 1 1/4	82.6	10	20	2	0.8280	17
2 1/2 X 1 1/2	82.6	7	14	2	0.7900	11
2 1/2 X 2	82.6	7	14	2	0.8132	11
3 X 1/2	91.8	7	14	2	1.0100	14
3 X 3/4	91.8	7	14	2	1.0000	14
3 X 1	91.8	6	12	2	0.9344	11
3 X 1 1/4	91.8	6	12	2	0.9100	11
3 X 1 1/2	91.8	6	12	2	0.9900	12
3 X 2	93.7	6	12	2	1.0282	12
3 X 2 1/2	93.7	5	10	2	1.5948	16
4 X 1/2	109.1	3	6	2	1.7000	10
4 X 3/4	109.1	3	6	2	1.7000	10
4 X 1	111.3	3	6	2	1.8000	11
4 X 1 1/4	111.3	3	6	2	1.6600	10
4 X 1 1/2	111.3	3	6	2	1.7400	10
4 X 2	111.3	3	6	2	2.2540	14
4 X 2 1/2	111.3	3	6	2	1.8200	11
4 X 3	111.3	3	6	2	1.8490	11
5 X 2	129.0		4	1	2.9000	12
5 X 3	129.0		2	1	3.1000	6
5 X 4	129.0		2	1	3.5000	7
6 X 2	147.5		2	1	4.0000	8
6 X 2 1/2	147.5		2	1	4.4500	9
6 X 3	147.5		2	1	3.2000	6
6 X 4	147.5	1	2	2	4.9270	10
6 X 5	147.5	1	2	2	4.5000	9

REDUCING COUPLINGS

ARS, BRS

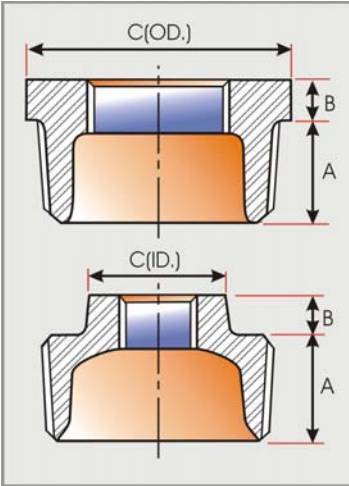


PACKING LISTS and SPECIFICATION STANDARD

MALLEABLE IRON PIPE FITTINGS CLASS 150 lbs.

BUSHINGS

ABU, BU



Size (inch)	Dimensions				Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
A	B	C(id)	C(od)						
1/4 X 1/8	13.2	3.8	-	16.3	120	1440	12	0.0110	16
3/8 X 1/8	12.2	4.1	-	21.6	75	900	12	0.0170	15
3/8 X 1/4	12.2	4.1	-	21.1	75	900	12	0.0190	17
1/2 X 1/8	16.4	4.8	-	26.2	150	600	4	0.0435	26
1/2 X 1/4	14.2	4.8	-	26.2	150	600	4	0.0340	20
1/2 X 3/8	14.2	4.8	-	26.2	150	600	4	0.0300	18
3/4 X 1/8	16.0	5.6	-	29.2	75	300	4	0.0750	23
3/4 X 1/4	16.0	5.6	-	29.2	75	300	4	0.0730	22
3/4 X 3/8	16.0	5.6	-	29.2	75	300	4	0.0650	20
3/4 X 1/2	18.0	5.6	-	29.2	75	300	4	0.0450	14
1 X 1/8	19.1	9.6	28.5	-	50	200	4	0.0960	19
1 X 1/4	19.1	9.6	28.5	-	50	200	4	0.0860	17
1 X 3/8	19.1	9.6	28.5	-	50	200	4	0.1080	22
1 X 1/2	21.6	6.4	-	36.1	50	200	4	0.0944	19
1 X 3/4	21.6	6.4	-	36.1	50	200	4	0.0780	16
1 1/4 X 1/4	22.8	8.6	28.5	-	30	120	4	0.1390	17
1 1/4 X 3/8	22.8	8.6	28.5	-	30	120	4	0.1960	24
1 1/4 X 1/2	22.8	8.6	31.5	-	30	120	4	0.1320	16
1 1/4 X 3/4	20.3	7.1	-	44.7	30	120	4	0.1610	19
1 1/4 X 1	20.3	7.1	-	44.7	30	120	4	0.1330	16
1 1/2 X 1/8	-	-	-	-	25	75	3	0.2950	22
1 1/2 X 1/4	23.6	9.4	28.5	-	25	75	3	0.2930	22
1 1/2 X 3/8	23.6	9.4	28.5	-	25	75	3	0.2900	22
1 1/2 X 1/2	23.6	9.4	34.0	-	25	75	3	0.1800	14
1 1/2 X 3/4	23.6	9.4	36.5	-	25	75	3	0.1750	13
1 1/2 X 1	23.3	7.9	-	50.8	25	75	3	0.2100	16
1 1/2 X 1 1/4	23.3	7.9	-	50.8	25	75	3	0.1460	11
2 X 1/4	21.8	10.6	28.5	-	20	60	3	0.2770	17
2 X 3/8	22.4	10.0	28.5	-	20	60	3	0.4300	26
2 X 1/2	24.9	10.4	34.0	-	20	60	3	0.3800	23
2 X 3/4	24.9	10.4	41.4	-	20	60	3	0.2860	17
2 X 1	24.9	10.4	45.0	-	20	60	3	0.3040	18
2 X 1 1/4	27.0	11.0	-	63.0	20	60	3	0.3320	20
2 X 1 1/2	27.0	11.0	-	63.0	20	60	3	0.3198	19
2 1/2 X 1/2	27.2	11.2	34.0	-	15	30	2	0.7130	21
2 1/2 X 3/4	27.2	11.2	41.4	-	15	30	2	0.7000	21
2 1/2 X 1	27.2	11.2	49.5	-	15	30	2	0.6870	21
2 1/2 X 1 1/4	27.2	11.2	60.7	-	15	30	2	0.6420	19
2 1/2 X 1 1/2	27.2	11.2	-	75.7	15	30	2	0.6240	19
2 1/2 X 2	29.7	9.4	-	75.7	15	30	2	0.5034	15
3 X 1/2	28.7	12.2	34.0	-	12	24	2	1.0100	24
3 X 3/4	28.7	12.2	41.4	-	12	24	2	1.0360	25
3 X 1	28.7	12.2	49.5	-	12	24	2	0.6650	16
3 X 1 1/4	28.7	12.2	60.7	-	12	24	2	1.0100	24
3 X 1 1/2	28.7	12.2	68.1	-	12	24	2	0.8900	21
3 X 2	28.7	12.2	-	98.0	12	24	2	0.8700	21
3 X 2 1/2	28.7	12.2	-	98.0	12	24	2	0.6820	16
3 1/2 X 1 1/2	30.0	13.2	70.0	-	8	16	2	1.0000	16
3 1/2 X 2	33.0	13.2	83.3	-	8	16	2	1.2000	19
3 1/2 X 3	30.0	10.9	-	117.3	8	16	2	0.8250	13
4 X 1/2	39.8	14.2	-	121.0	5	10	2	1.6600	17
4 X 3/4	38.0	13.0	-	121.0	5	10	2	1.5000	15
4 X 1	31.0	15.2	-	-	5	10	2	1.1740	12
4 X 1 1/4	31.0	15.2	-	-	5	10	2	1.6440	16
4 X 1 1/2	31.0	15.2	-	-	5	10	2	1.7760	18
4 X 2	36.0	15.2	-	-	5	10	2	1.3140	13
4 X 2 1/2	31.0	15.2	-	-	5	10	2	1.2582	13
4 X 3	37.0	14.0	-	126.0	5	10	2	1.3760	14
5 X 2	33.3	15.2	-	-	2	4	2	2.8300	11
5 X 3	42.5	15.5	-	-	2	4	2	2.5000	10
5 X 4	41.7	15.5	-	146.8	2	4	2	2.1000	8
6 X 2	35.6	19.1	-	-	2	4	2	4.4710	18
6 X 2 1/2	35.6	19.1	-	-	2	4	2	3.8770	16
6 X 3	35.6	19.1	-	-	2	4	2	2.5510	10
6 X 4	40.0	19.1	-	-	2	4	2	2.5880	10
6 X 5	35.6	19.1	-	179.1	2	4	2	3.0700	12

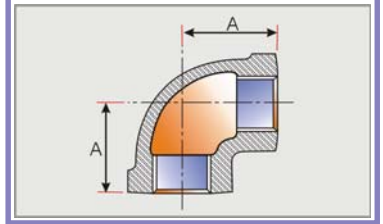
PACKING LISTS and SPECIFICATION STANDARD

MALLEABLE IRON PIPE FITTINGS CLASS 300 lbs.

Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/4	23.9	180	360	2	0.0930	33
3/8	26.9	120	240	2	0.1350	32
1/2	31.7	40	80	2	0.2030	16
3/4	36.6	30	60	2	0.3280	20
1	41.4	20	40	2	0.5260	21
1 1/4	49.3	12	24	2	0.7700	18
1 1/2	54.1	8	16	2	1.1120	18
2	63.5	6	12	2	1.7060	20
2 1/2	74.7	4	8	2	2.8260	23
3	85.8	2	4	2	4.2660	17
4	105.0	1	2	2	6.3880	13

ELBOWS 90°

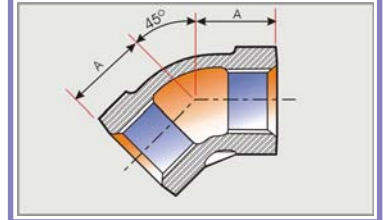
AXHL 90, BXHL 90



Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/4	20.6	180	360	2	0.0870	31
3/8	22.3	120	240	2	0.1290	31
1/2	25.4	40	80	2	0.1920	15
3/4	28.7	30	60	2	0.3100	19
1	33.3	20	40	2	0.4720	19
1 1/4	38.1	12	24	2	0.7670	18
1 1/2	42.9	8	16	2	1.0200	16
2	50.8	6	12	2	1.6420	20
2 1/2	57.1	4	8	2	2.5140	20
3	63.5	2	4	2	3.9390	16
4	71.0	1	2	2	5.3170	11

ELBOWS 45°

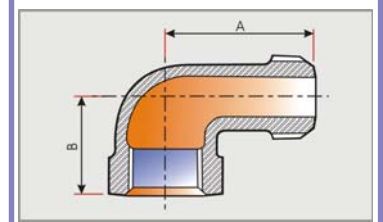
AXHL 45, BXHL 45

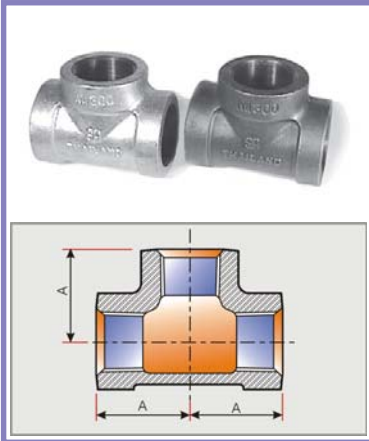


Size (inch)	Dimensions A	Dimensions B	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/4	36.6	23.9	180	360	2	0.0780	28
3/8	41.4	26.9	120	240	2	0.1170	28
1/2	50.8	31.7	40	80	2	0.1770	14
3/4	55.6	36.6	30	60	2	0.2850	17
1	65.0	41.4	20	40	2	0.4630	19
1 1/4	73.1	49.3	12	24	2	0.7610	18
1 1/2	79.5	54.1	8	16	2	0.7830	13
2	93.7	63.5	6	12	2	1.6480	20
4	148.0	105.0	1	2	2	6.1730	12

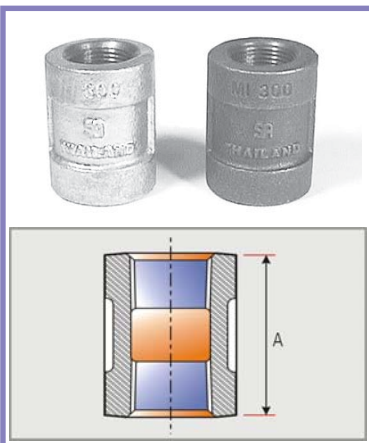
STREET ELBOWS 90°

AXHSL 90, BXHSL 90

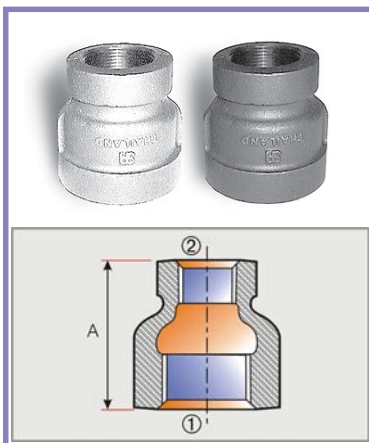


MALLEABLE IRON PIPE FITTINGS CLASS 300 lbs.
TEES
AXHT, BXHT


Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/4	23.9	120	240	2	0.1310	31
3/8	26.9	90	180	2	0.1930	35
1/2	31.7	30	60	2	0.2970	18
3/4	36.6	20	40	2	0.4760	19
1	41.4	12	24	2	0.7120	17
1 1/4	49.3	10	20	2	1.1540	23
1 1/2	54.1	6	12	2	1.5040	18
2	63.5	4	8	2	2.4050	19
2 1/2	74.7	2	4	2	3.7700	15
3	85.8	1	2	2	5.7660	12
4	105.0	1	2	2	8.6020	17

COUPLINGS
AXHS, BXHS


Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/4	34.8	200	400	2	0.0740	30
3/8	41.1	150	300	2	0.1200	36
1/2	47.5	40	80	2	0.1870	15
3/4	53.8	30	60	2	0.2960	18
1	60.2	20	40	2	0.4600	18
1 1/4	72.9	12	24	2	0.7510	18
1 1/2	72.9	12	24	2	0.9140	22
2	91.9	6	12	2	1.5800	19
2 1/2	104.6	4	8	2	2.4230	19
3	104.6	2	4	2	3.3070	13
4	108.0	2	4	2	4.7390	19

REDUCING COUPLING
AXHRS, BXHRS


Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/2 x 1/4	42.9	100	200	2	0.1410	28
1/2 x 3/8	42.9	100	200	2	0.1540	31
3/4 x 3/8	44.5	60	120	2	0.2080	25
3/4 x 1/2	44.5	60	120	2	0.2250	27
1 x 1/2	50.8	50	100	2	0.3500	35
1 x 3/4	50.8	40	80	2	0.3870	31
1 1/4 x 1/2	60.5	24	48	2	0.5080	24
1 1/4 x 3/4	60.5	20	40	2	0.5460	22
1 1/4 x 1	60.5	20	40	2	0.5650	23
1 1/2 x 1/2	68.3	24	48	2	0.6690	32
1 1/2 x 3/4	68.3	20	40	2	0.6980	28
1 1/2 x 1	68.3	18	36	2	0.7390	27
1 1/2 x 1 1/4	68.3	18	36	2	0.8230	30
2 x 1/2	81.0	12	24	2	1.1160	27
2 x 3/4	81.0	12	24	2	1.0920	26
2 x 1	81.0	12	24	2	1.1170	27
2 x 1 1/4	81.0	8	16	2	1.2290	20
2 x 1 1/2	81.0	8	16	2	1.2510	20
2 1/2 x 1 1/2	93.7	4	8	2	1.7040	14
2 1/2 x 2	93.7	6	12	2	1.9850	24
3 x 2	103.1	4	8	2	2.6520	21
3 x 2 1/2	103.1	4	8	2	2.8520	23
4 x 3	112.0	2	4	2	4.0820	16

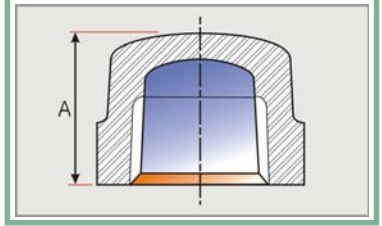
PACKING LISTS and SPECIFICATION STANDARD

MALLEABLE IRON PIPE FITTINGS CLASS 300 lbs.

Size (inch)	Dimensions A	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
3/8	21.1	120	240	2	0.0620	15
1/2	24.9	80	160	2	0.1010	16
3/4	27.4	50	100	2	0.1550	16
1	32.0	30	60	2	0.2420	15
1 1/4	35.0	20	40	2	0.3690	15
1 1/2	36.3	15	30	2	0.4900	15
2	42.7	10	20	2	0.8370	17
2 1/2	56.0	8	16	2	1.3260	21
3	60.0	5	10	2	1.9820	20
4	70.0	3	6	2	3.1370	19

CAPS

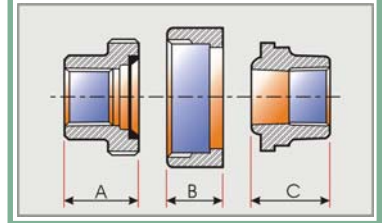
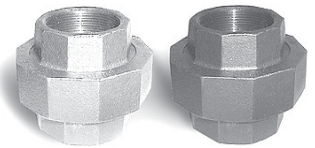
AXHCA, BXHCA



Size (inch)	Dimensions A B C	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
1/8		200	400	2	0.1310	52
1/4		120	240	2	0.1500	36
3/8		90	180	2	0.2100	38
1/2	24.5 20.0 27.0	40	80	2	0.2720	22
3/4	27.5 21.0 29.0	30	60	2	0.3830	23
1	29.0 23.0 32.5	18	36	2	0.6500	23
1 1/4	33.0 26.0 38.0	12	24	2	0.9500	23
1 1/2	35.5 29.0 41.5	10	20	2	1.1290	23
2	42.0 32.0 45.0	6	12	2	1.8580	22
2 1/2	43.5 37.0 51.0	4	8	2	2.9730	24
3	55.5 43.0 58.0	3	6	2	4.8020	29
4	61.5 54.0 64.5	1	2	2	8.4740	17

UNION CONICAL BRASS SEAT

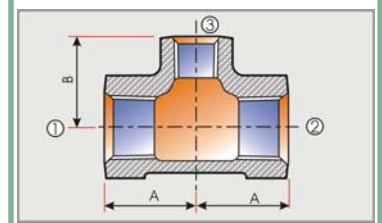
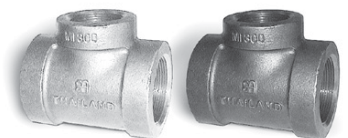
AXHCU, BXHCU



Size 1 x 2 x 3 (inch)	Dimensions A B C	Inner Box Pcs./Box	Master Ctn. Pcs./Ctn.	NO. of Inner Box	Weight/Pcs.	N.W./Ctn. (Kgs.)
3/4 x 3/4 x 1/2	33.3 33.3 35.0	30	60	2	0.5660	34
1 x 1 x 1/2	36.6 36.6 38.1	16	32	2	0.5760	18
1 x 1 x 3/4	38.1 38.1 39.6	15	30	2	0.6200	19
1 1/4 x 1 1/4 x 1/2	38.1 38.1 42.9	12	24	2	0.9170	22
1 1/4 x 1 1/4 x 3/4	41.4 41.4 44.4	12	24	2	0.9040	22
1 1/4 x 1 1/4 x 1	44.4 44.4 46.0	12	24	2	1.0060	24
1 1/2 x 1 1/2 x 1/2	41.4 41.4 46.0	10	20	2	1.1900	24
1 1/2 x 1 1/2 x 3/4	42.9 42.9 47.7	10	20	2	1.2300	25
1 1/2 x 1 1/2 x 1	46.0 46.0 50.8	10	20	2	1.2090	24
1 1/2 x 1 1/2 x 1 1/4	50.8 50.8 52.3	8	16	2	1.3810	22
2 x 2 x 1/2	44.4 44.4 52.3	6	12	2	1.7720	21
2 x 2 x 3/4	46.0 46.0 54.1	6	12	2	1.7820	21
2 x 2 x 1	50.8 50.8 57.1	5	10	2	2.0170	20
2 x 2 x 1 1/4	54.1 54.1 60.4	5	10	2	1.9790	20
2 x 2 x 1 1/2	57.1 57.1 58.7	5	10	2	2.0930	21
2 1/2 x 2 1/2 x 2	68.3 68.3 69.8	4	8	2	1.5060	12
3 x 3 x 2	71.4 71.4 79.5	2	4	2	4.3860	18

REDUCING TEES

AXHRT, BXHRT



Appendix A. Basic Dimension, for American Standard Pipe Threads

This information is selected from the *International Standard for Pipe Threads, ANSI B1.20.1-1983 Table 2.*

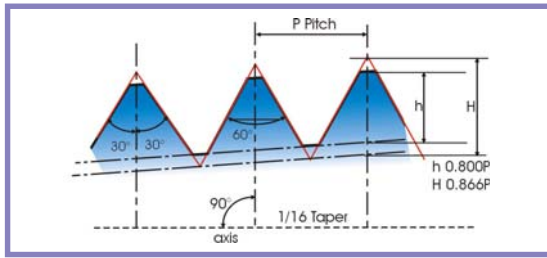


Fig. 4 (Taper)
 $H = 0.866025 P$
 $h = 0.800000 P$

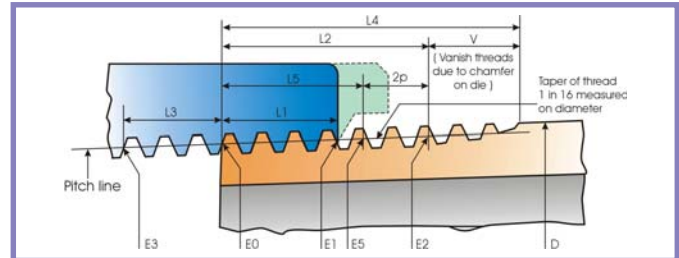


Fig. 5 (Taper)

Nominal Pipe Size (inches)	O.D. of Pipe (D)	Threads /in. (N)	Pitch of Thread (P)	Pitch Dia. at Beginning of External Thread (E ₀)	Handtight Engagement			Effective Thread. Extenal			Depth of Thread
					Length ² (L ₁)		Diam ³ . (E ₁)	Length ⁴ (L ₂)		Diam. (E ₂)	
					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	0.6828	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	1.1375	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 (inchs)	Length, L_1 Plane to L_2 Plane External Thread (L_2-L_1)		Wrench Makeup Length for Internal Thread ⁷			Vanish Thread (V)		Overall ⁸ Length External Thread (L_4)	Nominal Complete External Threads ⁵		Height of Thread (h)	Increase in Diam./ Thread (0.0625 /n)	Basic ⁶ Minor Diam. At Small End of Pipe (K_0)
			Length (L_3)		Diam. (E_3)				Length (L_5)	Diam. (E_5)			
	Inch	Thread	Inch	Thread		Inch	Thread						
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	0.3339
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

Appendix B. Basic Dimensions for Pipe Threads

This information is selected from the International Standard Pipe Threads ISO 7-1 1994

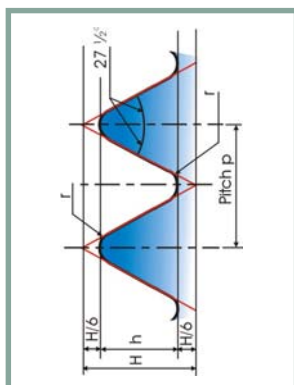


Fig 1 parallel Thread Fig 2 (Taper)
H = 0.960491 x p H
h = 0.640327 x p h
r = 0.137329 x p r

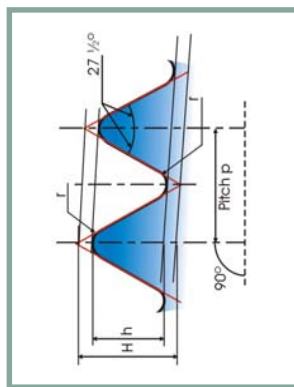
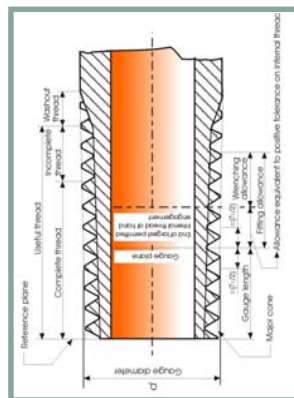


Fig. 3 Taper Thread (Taper 1 in 16 on dia.)
= 0.960237 x p (Shown exaggerated)
= 0.640327 x p (in diagram)
= 0.137278 x p Axis of screw



Designation of thread size	Number of threads in 25.4 mm.	Pitch <i>P</i>	Height (gauge diameter) <i>h</i>	Diameters at gauge plane			Gauge length (external thread)					Tolerance on position of gauge plane on internal thread	Length of useful external thread not less than			Fitting allowance			Diametral tolerance on parallel internal threads
				Major (gauge diameter) <i>d</i>	Pitch <i>d₂</i>	Minor <i>d₁</i>	Nominal	Tolerance $\square T_1/2$		max.	min.		Tolerance $\square T_2/2$	For nominal gauge length	For maximum gauge length	For minimum gauge length	2)	Turns of thread	
								2)	Turns of thread										
1/8	28	0.907	0.581	9.728	9.147	8.566	4.0	0.9	1	4.9	3.1	1.1	1	6.5	7.4	5.6	2.5	2 3/4	$\square 0.071$
1/4	19	1.337	0.856	13.157	12.301	11.445	6.0	1.3	1	7.3	4.7	1.7	1	9.7	11.0	8.4	3.7	2 3/4	$\square 0.104$
3/8	19	1.337	0.856	16.662	15.806	14.950	6.4	1.3	1	7.7	5.1	1.7	1	10.1	11.4	8.8	3.7	2 3/4	$\square 0.104$
1/2	14	1.814	1.162	20.955	19.793	18.631	8.2	1.8	1	10.0	6.4	2.3	1	13.2	15.0	11.4	5.0	2 3/4	$\square 0.142$
3/4	14	1.814	1.162	26.441	25.279	24.117	9.5	1.8	1	11.3	7.7	2.3	1	14.5	16.3	12.7	5.0	2 3/4	$\square 0.142$
1	11	2.309	1.479	33.249	31.770	30.291	10.4	2.3	1	12.7	8.1	2.9	1	16.8	19.1	14.5	6.4	2 3/4	$\square 0.180$
1 1/4	11	2.309	1.479	41.910	40.431	38.952	12.7	2.3	1	15.0	10.4	2.9	1	19.1	21.4	16.8	6.4	2 3/4	$\square 0.180$
1 1/2	11	2.309	1.479	47.803	46.324	44.845	12.7	2.3	1	15.0	10.4	2.9	1	19.1	21.4	16.8	6.4	2 3/4	$\square 0.180$
2	11	2.309	1.479	59.614	58.135	56.656	15.9	2.3	1	18.2	13.6	2.9	1	23.4	25.7	21.1	7.5	3 3/4	$\square 0.180$
2 1/2	11	2.309	1.479	75.184	73.705	72.226	17.5	3.5	1	21.0	14.0	3.5	1	26.7	30.2	23.2	9.2	4	$\square 0.216$
3	11	2.309	1.479	87.884	86.405	84.926	20.6	3.5	1	24.1	17.1	3.5	1	29.8	33.3	26.3	9.2	4	$\square 0.216$
4	11	2.309	1.479	113.030	111.551	110.072	25.4	3.5	1	28.9	21.9	3.5	1	35.8	39.3	32.3	10.4	4 1/2	$\square 0.216$
5	11	2.309	1.479	138.430	136.951	135.472	28.6	3.5	1	32.1	25.1	3.5	1	40.1	43.6	36.6	11.5	5	$\square 0.216$
6	11	2.309	1.479	163.830	162.351	160.872	28.6	3.5	1	32.1	25.1	3.5	1	40.1	43.6	36.6	11.5	5	$\square 0.216$

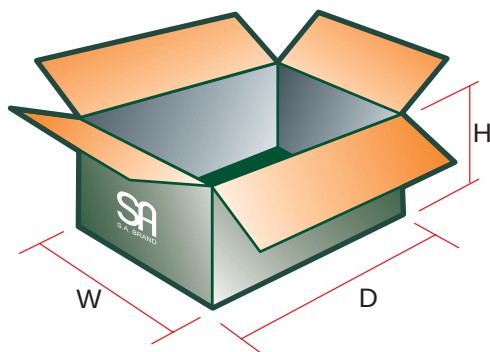
Appendix E.

Metric System Table with English Equivalents

Inches Millimeters

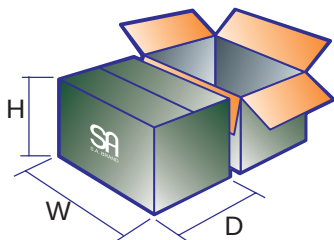
1/8	=	4
1/4	=	8
3/8	=	10
1/2	=	15
3/4	=	20
1	=	25
1 1/4	=	32
1 1/2	=	40
2	=	50
2 1/2	=	65
3	=	80
4	=	100
5	=	125
6	=	150

MASTER BOX



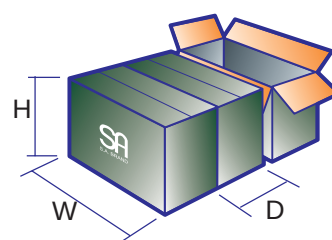
SIZE WxDxH 10 x 13 x 9 3/8"
PAPER A185/ 150 BC

B2 INNER BOX



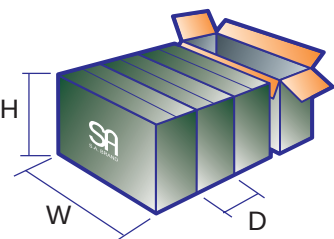
SIZE WxDxH 6 1/4 x 9 5/8 x 8 1/2"
PAPER AS125/ AS125 C

B3 INNER BOX



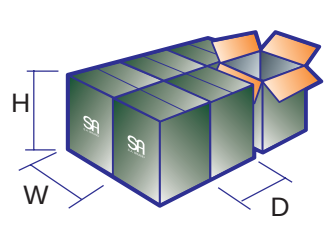
SIZE WxDxH 4 x 9 7/16 x 8 1/2"
PAPER AS125/ AS125 C

B4 INNER BOX



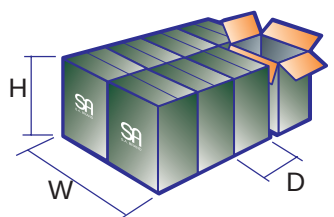
SIZE WxDxH 4 5/8 x 6 1/8 x 8 1/2"
PAPER AS125/ AS125 C

B6 INNER BOX



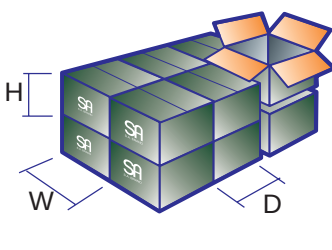
SIZE WxDxH 4 x 4 5/8 x 8 1/2"
PAPER AS125/ AS125 C

B8 INNER BOX



SIZE WxDxH 4 5/8 x 6 1/8 x 4 1/8"
PAPER AS125/ AS125 C

B12 INNER BOX



SIZE WxDxH 4 x 4 5/8 x 4 1/8"
PAPER AS125/ AS125 C

WHATEVER ...

your size & shape we have it !!!



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Mechanical Engineers



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STANDARD

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