

# MALLEABLE IRON THREADED FITTINGS



## STANDARDS

CCTF MALLEABLE IRON FITTINGS are designed to conform with the following industry standards:

MATERIAL:	ASTM A 197 ASTM A 153	Cupola Malleable Iron Zinc Coatings
DIMENSIONS:	ANSI/ASME B 16.3 ASME B 16.14 ASME B 16.39	Malleable Iron Threaded Fittings Ferrous Pipe Plugs, Bushings, etc. Malleable Iron Threaded Pipe Unions
THREADS:	ANSI/ASME B1.20.1	Pipe Threads. See data below. "Threading."

## \*PRESSURE-TEMPERATURE RATINGS

MALLEABLE IRON - ANSI B 16.3					
Temperature		Class 150 psig	Class 300 psi <sup>2</sup>		
Degrees C	Degrees F		Sizes 1/4 - 1	Sizes 1/4 - 2	Sizes 2 1/2 - 3
-29 to 66	-200 to 150	300	2000	1500	1000
93	200	265	1785	1350	910
121	250	225	1575	1200	825
149	300	185	1360	1050	735
177	366 <sup>1</sup>	150 <sup>1</sup>	1150	900	650
204	400		935	750	560
232	450		725	600	475
260	500		510	450	385
333	550		300	300	300

<sup>1</sup> Permissible for service temperature up to 366°F, reflecting the temperature of saturated steam at 150 psig.

<sup>2</sup> 14.5 psi = 1 bar = 100 kPa.

\*All CCTF iron fittings are air pressure tested under water.

## IDENTIFICATION, MARKING

Class 300 Malleable Iron threaded fittings are marked with the numerals "300", the letters "MI", and the size.

Class 150 Malleable Iron threaded fittings have no pressure class markings.

## THREADING

All fittings shall be threaded with American National Standard Pipe Threads (ANSI/ASME B1.20.1) and shall have taper threads, except wrought couplings and wrought caps in sizes 1/8, 1/4, 3/8 and 1/2, which may have straight threads.

## CONVERSION FACTORS

The International System (SI) metric equivalent of British units are shown throughout this catalogue.

NPS (Nominal Pipe Size) = DN\* (Nominal Diameter)

Operating Pressure Class = PN\* (Pressure Number)

1 inch = 25.4 millimetres

1 pound, weight = 0.4536 kilograms

1 pound, pressure = 0.06895 bars

\*From the SI designations, Diamètre Nominal and Pression Nominale.

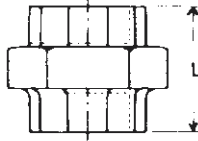
# CLASS 150

## Malleable Iron

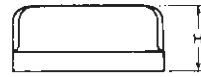
# THREADED

# FITTINGS

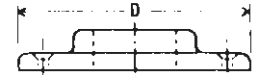
## ASTM A197



\*UNION



CAP



FLOOR FLANGE

*UNIONS				CAPS (ANSI B16.3)				FLOOR FLANGES			
Size		L	Approx. Weight	Size		H MIN	Approx. Weight	Size		D	Approx. Weight
NPS	DN			NPS	DN			NPS	DN		
1/4		1.32	.20	1/8		.53	.04	1/4		2.62	.24
	6	33.5	.09		3	13.5	.02		6	66.5	.11
3/8		1.52	.31	1/4		.63	.04	3/8		2.94	.37
	10	38.5	.14		6	16.0	.02		10	74.7	.17
1/2		1.59	.42	3/8		.74	.09	1/2		3.0	.57
	15	40.5	.19		10	18.8	.04		15	76	.26
3/4		1.91	.56	1/2		.87	.11	3/4		3.3	.68
	20	48.5	.27		15	22.1	.05		20	85	.31
1		2.11	.93	3/4		.97	.18	1		3.8	.82
	25	53.5	.42		20	24.6	.08		25	95	.37
1 1/4		2.32	1.3	1		1.16	.31	1 1/4		4.1	1.2
	32	59.0	.57		25	29.5	.14		32	105	.54
1 1/2		2.58	1.7	1 1/4		1.28	.53	1 1/2		4.5	1.5
	40	65.5	.78		32	32.5	.24		40	115	.66
2		2.85	2.6	1 1/2		1.33	.57	2		5.1	2.1
	50	72.5	1.2		40	33.8	.26		50	130	.96
2 1/2		3.29	4.6	2		1.45	.88	2 1/2		6.75	2.6
	65	83.5	2.1		50	36.8	.40		65	171.5	1.1
3		3.66	5.7	2 1/2		1.70	1.5	3		7.00	3.8
	80	93.0	2.6		65	43.2	.70		80	177.8	1.72
4		4.51	10.1	3		1.80	1.9				
	100	114.5	4.6		80	45.7	.86				
				3 1/2		1.90	-				
					90	48.3	-				
				4		2.08	3.5				
					100	52.8	1.6				
				5		2.32	-				
					125	58.9	-				
				6		2.55	7.3				
					150	64.8	3.29				

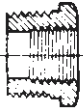
\*Sizes 1" through 4" (DN 25 thru 100) conform to ASME/ANSI B16.39.

INCHES
MILLIMETRES

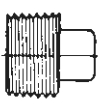
POUNDS
KILOGRAMS



HEX HEAD BUSHING



SQUARE HEAD PLUG



# MALLEABLE IRON THREADED FITTINGS ASTM A197

HEX HEAD BUSHINGS			HEX HEAD BUSHINGS			SQUARE HEAD PLUGS		
Size		Approx. Weight	Size		Approx. Weight	Size		Approx. Weight
NPS	DN		NPS	DN		NPS	DN	
1/4 x 1/8	6 x 3	.02	2 x 1	50 x 25	.81	*1/8	3	.02
3/8 x 1/8	10 x 3	.01	2 x 1 1/2	50 x 40	.32	*1/4	6	.01
3/8 x 1/4	10 x 6	.02	2 1/2 x 1	65 x 25	.70	3/8	10	.04
1/2 x 1/8	15 x 3	.04	2 1/2 x 1 1/4	65 x 32	.70	1/2	15	.02
1/2 x 1/4	15 x 6	.09	2 1/2 x 1 1/2	65 x 40	1.5	3/4	20	.09
1/2 x 3/8	15 x 10	.03	2 1/2 x 2	65 x 50	1.1	1	25	.05
3/4 x 1/8	2 x 3	.07	3 x 1	80 x 25	2.2	1 1/4	32	.13
3/4 x 1/4	20 x 6	.15	3 x 1 1/4	80 x 32	1.0	1 1/2	40	.16
3/4 x 3/8	20 x 10	.07	3 x 1 1/2	80 x 40	2.2	2	50	.55
3/4 x 1/2	20 x 15	.13	3 x 2	80 x 50	.99	2 1/2	65	.26
1 x 1/4	25 x 6	.11	3 x 2 1/2	80 x 65	2.0	3	80	1.4
1 x 3/8	2 x 10	.26	4 x 1	100 x 25	.66	3 1/2	90	.63
1 x 1/2	25 x 15	.24	4 x 1 1/4	100 x 32	4.0	4	100	2.5
1 x 3/4	25 x 20	.10	4 x 1 1/2	100 x 40	1.8	5	125	5.4
1 1/4 x 1/2	32 x 15	.09	4 x 2	100 x 50	1.8	6	150	2.4
1 1/4 x 3/4	32 x 20	.37	4 x 2 1/2	100 x 65	3.7			7.5
1 1/4 x 1	32 x 25	.17	4 x 3	100 x 80	1.7			3.4
1 1/2 x 3/4	40 x 20	.29			3.3			
1 1/2 x 1	40 x 25	.53			1.5			
1 1/2 x 1 1/4	40 x 32	.24			3.1			
2 x 1/2	50 x 15	.49			1.4			
2 x 3/4	50 x 20	.22						
		.31						
		.14						
		.84						
		.38						
		.86						
		.39						

\*Sizes NPS 1/8 & 1/4 (DN 3 & 6) are solid, all other sizes cored.

INCHES
MILLIMETRES

POUNDS
KILOGRAMS