

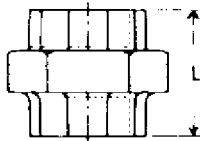
# CLASS 150

## Malleable Iron

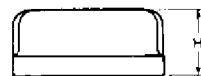
# THREADED

# FITTINGS

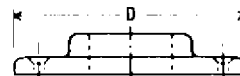
## ASTM A197



\*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.

## STANDARDS

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

|             |                                                  |                                                                  |
|-------------|--------------------------------------------------|------------------------------------------------------------------|
| MATERIAL:   | ASTM A 197<br>ASTM A 153                         | Cupola Malleable Iron<br>Zinc Coatings                           |
| DIMENSIONS: | ANSI/ASME B 16.3<br>ASME B 16.14<br>ASME B 16.39 | Malleable Iron Threaded Fittings<br>Flanges, etc.<br>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<br>150<br>psig | Class 300 psi <sup>2</sup> |                  |                    |
| Degrees C                    | Degrees F        |                      | Sizes<br>1/4 - 1           | Sizes<br>1/4 - 2 | Sizes<br>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.

# INDEX MALLEABLE IRON THREADED FITTINGS

|                                                                                     | PAGE                                                                              |                                                                                      | PAGE                                                                   |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------|
|    | <b><u>90° ELBOWS</u></b><br>CLASS 150 M.I. ....4<br>CLASS 300 M.I. ....12         |    | <b><u>90° STREET ELBOWS</u></b><br>CLASS 150 M.I. ....8                |
|    | <b><u>90° REDUCING ELBOWS</u></b><br>CLASS 150 M.I. ....4                         |    | <b><u>45° STREET ELBOWS</u></b><br>CLASS 150 M.I. ....8                |
|    | <b><u>45° ELBOWS</u></b><br>CLASS 150 M.I. ....4<br>CLASS 300 M.I. ....12         |    | <b><u>CAPS</u></b><br>CLASS 150 M.I. ....10<br>CLASS 300 M.I. ....14   |
|   | <b><u>CROSSES</u></b><br>CLASS 150 M.I. ....4<br>CLASS 300 M.I. ....12            |    | <b><u>UNIONS</u></b><br>CLASS 150 M.I. ....10<br>CLASS 300 M.I. ....14 |
|  | <b><u>TEES</u></b><br>CLASS 150 M.I. ....5<br>CLASS 300 M.I. ....12               |  | <b><u>FLOOR FLANGES</u></b><br>CLASS 150 M.I. ....10                   |
|  | <b><u>REDUCING TEES</u></b><br>CLASS 150 M.I. ....6                               |  | <b><u>SQUARE HEAD PLUGS</u></b><br>.....11                             |
|  | <b><u>COUPLINGS</u></b><br>CLASS 150 M.I. ....9<br>CLASS 300 M.I. ....12          |  | <b><u>HEXAGON BUSHINGS</u></b><br>.....11                              |
|  | <b><u>REDUCING COUPLINGS</u></b><br>CLASS 150 M.I. ....9<br>CLASS 300 M.I. ....12 |                                                                                      |                                                                        |