

## REGISTRATION OF A PRESSURE FITTING DESIGN

14-May-20

TSSA  
345 Carlingview Drive  
Toronto, Ontario  
M9W 6N9

**Attention: Tanya Francis**

**File Number: 11469 [ 0 F]**

**Re: Manufacturer: Pegler Yorkshire Group Limited**  
**Item: APOLLOXPRESS Wrought Copper Alloy Fittings**  
**Catalog or Drawing: Attachment #1 - List of Fittings - Category A dated 29-Nov-12**

TSASK Codes and Standards Compliance has registered the design listed above in accordance with The Boiler and Pressure Vessel Act and Regulations and CSA B51. The Canadian Registration Number (CRN) is:

**0A15729.53                      Expiry Date: December 27, 2022.**

Please note that every fitting shall be constructed in strict accordance with the registered design.

Fitting registrations are required to be resubmitted for validation after ten (10) years from the registration date in accordance with CSA B51, Clause 4.2.1.

Should you require anything further, please do not hesitate to contact the Codes and Standards Compliance Office at your convenience.

Yours truly,



Adenike Adeoti, P.Eng.  
Codes and Standards Compliance

### Remarks:

A valid quality management system must be maintained at the production facility for the fitting registration to remain valid until the expiry date.

**Statutory Declaration (Registration of Fittings)**

**TSK-1008**

**I. Declaration Information**

I, BERTRAND GUILLET  
PLANT MANAGER  
(company title, e.g. vice president, plant manager, chief engineer)  
(must be in a position of authority in the manufacturing plant where the fitting is produced)

In this space, show facsimile of manufacturer's logo or trademark as it will appear on the fitting.



of: PEGLER YORKSHIRE  
(name of manufacturer)

located at: SEE ATTACHED WORLDWIDE LOCATIONS APPENDIX  
(Plant Address – Apt/Street) (City,Prov) (Postal Code)

do solemnly declare that the fittings listed hereinunder, which are subject to the **Saskatchewan Boiler and Pressure Vessel Safety Act** (check one)

- Comply with the requirements of ASME B16.22, ASME B16.51 which specifies the dimensions, (title of recognized North American Standard) Materials of construction, pressure / temperature ratings and identification marking of the fittings, or
- Are not covered by the provisions of a recognized North American standard and are therefore manufactured to comply with \_\_\_\_\_ as supported by the attached data which identifies the dimensions, materials of construction, pressure / temperature ratings and the basis for such ratings, and the marking of the fittings for identification.

I further declare that the manufacturer of these fittings is controlled by a quality control program which has been verified by the following authority, ISO 9001:2015 bsi as being suitable for the manufacturer of these fittings to the stated standard. The fittings covered by this declaration, for which I seek registration, are CATEGORY A

In support of this application, the following information, calculations and / or test data are attached:

DESIGN CERTIFICATION, APOLLOXPRESS CATALOGUE AXCAT 8/12 6000 CG PAGES 42 TO 54, ATTACHMENT #1

**II. Declaration**

DECLARED before me at JARVEAU COUNTRY of FRANCE  
this 21<sup>st</sup> day of NOVEMBER 2019

Me Frédéric RYDZYNSKI  
(print name)



[Signature]  
(Signature)

[Signature]  
(Signature of Commissioner of Oaths)

**III. Office Use Only**

To the best of my knowledge and belief, the application meets the requirements of CSA B51, Clause 4.2, and is accepted for registration in Category \_\_\_\_\_

\_\_\_\_\_  
(Registration Number)

\_\_\_\_\_  
(Date Registered – Month/Day/Year)  
(For the Administrator)



Registration No. 0A15729.53

File No. 11469

Registered

Date: May 14, 2020

Expiry Date: December 27, 2022

Codes & Standards Compliance Office

## WORLDWIDE LOCATIONS APPENDIX

### **PEGLER YORKSHIRE MANUFACTURING LOCATIONS & CERTIFYING AUTHORITIES**

(rev. November 16, 2019)

#### **Pegler Yorkshire Group Limited**

Belmont Works  
St. Catherines Avenue  
Doncaster  
DN4 8DF  
United Kingdom  
**ISO 9001 Certified by bsi**

#### **Pegler SDH**

46. rue de l'Industrie  
Saint Denis de l'Hotel  
45550  
France  
**ISO 9001 Certified by bsi**

#### **Yorkshire Fittings**

Gyarto Kft  
Maglodi ut 16  
Budapest  
H-1106  
Hungary  
**ISO 9001 Certified by bsi**

|   |   |
|---|---|
|  | <b>Technical<br/>Safety Authority<br/>of Saskatchewan</b> |
| Registration No.  | 0A15729.53  |
| File No.  | 11469   |
|   | <input type="button" value="Registered"/>                 |
| Date:   | May 14, 2020  |
| Expiry Date:  | December 27, 2022   |
| Codes & Standards Compliance Office   |   |

# APOLLOXPRESS CRN REGISTRATION

29-Nov-12

Attachment #1 - List of Fittings - Category A



Registration No. 0A15729.53

File No. 11469

Registered

Date: May 14, 2020

Expiry Date: December 27, 2022

Codes & Standards Compliance Office

## COUPLING WITH STOP - 800 SERIES

**Design Code: ASME B16.51**  
**Pressure Rating: 200 psig at 200°F**  
**ASME B16.51 Figure 1(c) P x P and Table I-1**  
**Typical Manufacturing Drawing: 800-8-AA**

| Item Number | Description             | Material              | Drawing / ApolloXpress Cat. (AXCAT) - 8/12 |
|-------------|-------------------------|-----------------------|--|
| 10075036    | 800 1/2 CxC CPLG W/ST   | Wrought Copper Alloys | 800-8-AA / 42                              |
| 10075038    | 800 3/4 CxC CPLG W/ST   | Wrought Copper Alloys | 42   |
| 10075040    | 800 1 CxC CPLG W/ST     | Wrought Copper Alloys | 42   |
| 10075138    | 800 1-1/4 CxC CPLG W/ST | Wrought Copper Alloys | 42   |
| 10075140    | 800 1-1/2 CxC CPLG W/ST | Wrought Copper Alloys | 42   |
| 10075142    | 800 2 CxC CPLG W/ST     | Wrought Copper Alloys | 42   |
| 10061947    | 800 2-1/2 CxC CPLG W/ST | Wrought Copper Alloys | 42   |
| 10061952    | 800 3 CxC CPLG W/ST     | Wrought Copper Alloys | 42   |
| 10061957    | 800 4 CxC CPLG W/ST     | Wrought Copper Alloys | 42   |

## COUPLING WITHOUT STOP - 801 SERIES

**Design Code: ASME B16.51**  
**Pressure Rating: 200 psig at 200°F**  
**ASME B16.51 Figure 1(c) P and Table I-1**  
**Typical Manufacturing Drawing: 801S-8**

| Item Number | Description               | Material              | Drawing / ApolloXpress Cat. (AXCAT) - 8/12 |
|-------------|---------------------------|-----------------------|--|
| 10075030    | 801 1/2 CxC CPLG W/O ST   | Wrought Copper Alloys | 801S-8 / 42                                |
| 10075032    | 801 3/4 CxC CPLG W/O ST   | Wrought Copper Alloys | 42   |
| 10075034    | 801 1 CxC CPLG W/O ST     | Wrought Copper Alloys | 42   |
| 10075132    | 801 1-1/4 CxC CPLG W/O ST | Wrought Copper Alloys | 42   |
| 10075134    | 801 1-1/2 CxC CPLG W/O ST | Wrought Copper Alloys | 42   |
| 10075136    | 801 2 CxC CPLG W/O ST     | Wrought Copper Alloys | 42   |
| 10061932    | 801 2-1/2 CxC CPLG W/O ST | Wrought Copper Alloys | 42   |
| 10061937    | 801 3 CxC CPLG W/O ST     | Wrought Copper Alloys | 42   |
| 10061942    | 801 4 CxC CPLG W/O ST     | Wrought Copper Alloys | 42   |

## REDUCER COUPLING - 801R SERIES

**Design Code: ASME B16.51**  
**Pressure Rating: 200 psig at 200°F**  
**ASME B16.51 Figure 1(c) P x P and Table I-1**  
**Typical Manufacturing Drawing: 801R-128**

| Item Number | Description             | Material              | Drawing / ApolloXpress Cat. (AXCAT) - 8/12 |
|-------------|-------------------------|-----------------------|--|
| 10075190    | 800R 3/4 X 1/2 CxC CPLG | Wrought Copper Alloys | 801R-128 / 42                              |
| 10075144    | 800R 1 X 1/2 CxC CPLG   | Wrought Copper Alloys | 42   |



|          |                             |                       |    |
|----------|-----------------------------|-----------------------|----|
| 10075192 | 800R 1 X 3/4 CxC CPLG       | Wrought Copper Alloys | 42 |
| 10066073 | 800R 1-1/4 X 1/2 CxC CPLG   | Wrought Copper Alloys | 42 |
| 10066001 | 800R 1-1/4 X 3/4 CxC CPLG   | Wrought Copper Alloys | 42 |
| 10075194 | 800R 1-1/4 X 1 CxC CPLG     | Wrought Copper Alloys | 42 |
| 10066380 | 800R 1-1/2 X 1/2 CxC CPLG   | Wrought Copper Alloys | 42 |
| 10066381 | 800R 1-1/2 X 3/4 CxC CPLG   | Wrought Copper Alloys | 42 |
| 10066003 | 800R 1-1/2 X 1 CxC CPLG     | Wrought Copper Alloys | 42 |
| 10075128 | 800R 1-1/2 X 1-1/4 CxC CPLG | Wrought Copper Alloys | 42 |
| 10066082 | 800R 2 X 1/2 CxC CPLG       | Wrought Copper Alloys | 42 |
| 10066398 | 800R 2 X 3/4 CxC CPLG       | Wrought Copper Alloys | 42 |
| 10066005 | 800R 2 X 1 CxC CPLG         | Wrought Copper Alloys | 42 |
| 10066072 | 800R 2 X 1-1/4 CxC CPLG     | Wrought Copper Alloys | 42 |
| 10075130 | 800R 2 X 1-1/2 CxC CPLG     | Wrought Copper Alloys | 42 |
| 10066078 | 800R 2-1/2 X 1 CxC CPLG     | Wrought Copper Alloys | 42 |
| 10066103 | 800R 2-1/2 X 1-1/4 CxC CPLG | Wrought Copper Alloys | 42 |
| 10066086 | 800R 2-1/2 X 1-1/2 CxC CPLG | Wrought Copper Alloys | 42 |
| 10066074 | 800R 2-1/2 X 2 CxC CPLG     | Wrought Copper Alloys | 42 |
| 10066124 | 800R 3 X 3/4 CxC CPLG       | Wrought Copper Alloys | 42 |
| 10066087 | 800R 3 X 1-1/2 CxC CPLG     | Wrought Copper Alloys | 42 |
| 10066075 | 800R 3 X 2 CxC CPLG         | Wrought Copper Alloys | 42 |
| 10066076 | 800R 3 X 2-1/2 CxC CPLG     | Wrought Copper Alloys | 42 |
| 10066088 | 800R 4 X 2 CxC CPLG         | Wrought Copper Alloys | 42 |
| 10066151 | 800R 4 X 2-1/2 CxC CPLG     | Wrought Copper Alloys | 42 |
| 10066152 | 800R 4 X 3 CxC CPLG         | Wrought Copper Alloys | 42 |

### EXTENDED LENGTH COUPLING WITHOUT STOP - 801 SERIES

**Design Code: ASME B16.51**

**Pressure Rating: 200 psig at 200° F**

**ASME B16.51 Figure 1(c) P and Table I-1**

**Typical Manufacturing Drawing: 801S-8**

| Item Number | Description     | Material              | Drawing / ApolloXpress Cat. (AXCAT) - 8/12 |
|-------------|-----------------|-----------------------|--|
| 10075030    | 801 1/2 C x C   | Wrought Copper Alloys | 801S-8 / 43                                |
| 10075032    | 801 3/4 C x C   | Wrought Copper Alloys | 43   |
| 10075034    | 801 1 C x C     | Wrought Copper Alloys | 43   |
| 10075521    | 801 1-1/4 C x C | Wrought Copper Alloys | 43   |
| 10075523    | 801 1-1/2 C x C | Wrought Copper Alloys | 43   |
| 10075527    | 801 2 C x C     | Wrought Copper Alloys | 43   |

### FEMALE ADAPTER - 803 SERIES

**Design Code: ASME B16.51**

**Pressure Rating: 200 psig at 200° F**

**ASME B16.51 Figure 1(a) P x F and Table I-1**

**Typical Manufacturing Drawing: 803-8, 803R-86**

| Item Number            | Description         | Material              | Drawing / ApolloXpress Cat. (AXCAT) - 8/12 |
|------------------------|---------------------|-----------------------|--|
| <b>Female Adapters</b> |                     |                       |  |
| 10075200               | 803 1/2 C X F ADAPT | Wrought Copper Alloys | 803-8 / 43                                 |
| 10075206               | 803 3/4 C X F ADAPT | Wrought Copper Alloys | 43   |

|                                 |                                |                       |              |
|---------------------------------|--------------------------------|-----------------------|--------------|
| 10075212                        | 803 1 C X F ADAPT              | Wrought Copper Alloys | 43           |
| 10075218                        | 803 1-1/4 C X F ADAPT          | Wrought Copper Alloys | 43           |
| 10075226                        | 803 1-1/2 C X F ADAPT          | Wrought Copper Alloys | 43           |
| 10075228                        | 803 1-1/2 C X F ADAPT          | Wrought Copper Alloys | 43           |
| <b>Female Reducing Adapters</b> |                                |                       |              |
| 10075196                        | 803R 1/2 x 3/8 C X F ADAPT     | Wrought Copper Alloys | 803R-86 / 43 |
| 10075202                        | 803R 1/2 x 3/8 C X F ADAPT     | Wrought Copper Alloys | 43           |
| 10075204                        | 803R 1/2 x 3/4 C X F ADAPT     | Wrought Copper Alloys | 43           |
| 10075208                        | 803R 1 x 1/2 C X F ADAPT       | Wrought Copper Alloys | 43           |
| 10075210                        | 803R 1 x 3/4 C X F ADAPT       | Wrought Copper Alloys | 43           |
| 10075214                        | 803R 1 x 1-1/4 C X F ADAPT     | Wrought Copper Alloys | 43           |
| 10075217                        | 803R 1-1/4 x 1/2 C X F ADAPT   | Wrought Copper Alloys | 43           |
| 10075216                        | 803R 1-1/4 x 1 C X F ADAPT     | Wrought Copper Alloys | 43           |
| 10075220                        | 803R 1-1/4 x 1-1/2 C X F ADAPT | Wrought Copper Alloys | 43           |
| 10075222                        | 803R 1-1/2 x 3/4 C X F ADAPT   | Wrought Copper Alloys | 43           |
| 10075224                        | 803R 1-1/2 x 1-1/4 C X F ADAPT | Wrought Copper Alloys | 43           |

### FEMALE STREET ADAPTER - 803-2 SERIES

**Design Code: ASME B16.22**

**Pressure Rating: 200 psig at 200°F minimum. See Table II1 of ASME B16.22.**

**ASME B16.22 Figure 1 FTG x F Adapter and Table II3.**

**Typical Manufacturing Drawing: 803-2-8, 803R-2-86**

| Item Number                            | Description                     | Material              | Drawing / ApolloXpress Cat. (AXCAT) - 8/12 |
|--|---------------------------------|-----------------------|--|
| <b>Female Street Adapters</b>          |                                 |                       |  |
| 10075260                               | 803-2 1/2 FTG x F ADAPT         | Wrought Copper Alloys | 803-2-8 / 43                               |
| 10075266                               | 803-2 3/4 FTG x F ADAPT         | Wrought Copper Alloys | 43   |
| 10075268                               | 803-2 1 FTG x F ADAPT           | Wrought Copper Alloys | 43   |
| 10075270                               | 803-2 1-1/4 FTG x F ADAPT       | Wrought Copper Alloys | 43   |
| 10075272                               | 803-2 1-1/2 FTG x F ADAPT       | Wrought Copper Alloys | 43   |
| 10075274                               | 803-2 1-1/2 FTG x F ADAPT       | Wrought Copper Alloys | 43   |
| <b>Female Reducing Street Adapters</b> |                                 |                       |  |
| 10075258                               | 803-2 1/2 x 3/8 FTG x F ADAPT   | Wrought Copper Alloys | 803R-2-86 / 43                             |
| 10075262                               | 803-2 1/2 x 3/4 FTG x F ADAPT   | Wrought Copper Alloys | 43   |
| 10075264                               | 803-2 3/4 x 1/2 FTG x F ADAPT   | Wrought Copper Alloys | 43   |
| 10075267                               | 803-2 1 x 1/2 FTG x F ADAPT     | Wrought Copper Alloys | 43   |
| 10075271                               | 803-2 1-1/4 x 1/2 FTG x F ADAPT | Wrought Copper Alloys | 43   |

### MALE ADAPTER - 804 SERIES

**Design Code: ASME B16.51**

**Pressure Rating: 200 psig at 200°F**

**ASME B16.51 Figure 1(a) P x M and Table I-1**

**Typical Manufacturing Drawing: 804-8, 804R-86**

| Item Number          | Description         | Material              | Drawing / ApolloXpress Cat. (AXCAT) - 8/12 |
|----------------------|---------------------|-----------------------|--|
| <b>Male Adapters</b> |                     |                       |  |
| 10075232             | 804 1/2 C X M ADAPT | Wrought Copper Alloys | 804-8 / 44                                 |
| 10075238             | 804 3/4 C X M ADAPT | Wrought Copper Alloys | 44   |
| 10075242             | 804 1 C X M ADAPT   | Wrought Copper Alloys | 44   |

| 10075248               | 804 1-1/4 C X M ADAPT          | Wrought Copper Alloys | 44           |
|------------------------|--------------------------------|-----------------------|--------------|
| 10075254               | 804 1-1/2 C X M ADAPT          | Wrought Copper Alloys | 44           |
| 10075256               | 804 2 C X M ADAPT              | Wrought Copper Alloys | 44           |
| 10061982               | 804 2-1/2 C X M ADAPT          | Wrought Copper Alloys | 44           |
| 10061987               | 804 3 C X M ADAPT              | Wrought Copper Alloys | 44           |
| 10061992               | 804 4 C X M ADAPT              | Wrought Copper Alloys | 44           |
| Male Reducing Adapters |                                |                       |              |
| 10075230               | 804R 1/2 x 3/8 C X M ADAPT     | Wrought Copper Alloys | 804R-86 / 44 |
| 10075234               | 804R 1/2 x 3/4 C X M ADAPT     | Wrought Copper Alloys | 44           |
| 10075236               | 804R 3/4 x 1/2 C X M ADAPT     | Wrought Copper Alloys | 44           |
| 10075237               | 804R 3/4 x 1 C X M ADAPT       | Wrought Copper Alloys | 44           |
| 10075240               | 804R 1 x 3/4 C X M ADAPT       | Wrought Copper Alloys | 44           |
| 10075244               | 804R 1 x 1-1/4 C X M ADAPT     | Wrought Copper Alloys | 44           |
| 10075246               | 804R 1-1/4 x 1 C X M ADAPT     | Wrought Copper Alloys | 44           |
| 10075250               | 804R 1-1/4 x 1-1/2 C X M ADAPT | Wrought Copper Alloys | 44           |
| 10075252               | 804R 1-1/2 x 1-1/4 C X M ADAPT | Wrought Copper Alloys | 44           |
| 10075253               | 804R 1-1/4 x 2 C X M ADAPT     | Wrought Copper Alloys | 44           |
| 10075257               | 804R 2 x 1-1/2 C X M ADAPT     | Wrought Copper Alloys | 44           |

### MALE STREET ADAPTER - 804-2 SERIES

Design Code: ASME B16.22

Pressure Rating: 200 psig at 200° F minimum. See Table II1 of ASME B16.22.

ASME B16.22 Figure 1 FTG x M Adapter and Table II3.

Typical Manufacturing Drawing: 804-2-8, 803R-2-86

| Item Number                   | Description                   | Material              | Drawing / ApolloXpress Cat. (AXCAT) - 8/12 |
|-------------------------------|-------------------------------|-----------------------|--|
| Male Street Adapters          |                               |                       |  |
| 10075280                      | 804-2 1/2 FTG x M ADAPT       | Wrought Copper Alloys | 803-2-8 / 44                               |
| 10075286                      | 804-2 3/4 FTG x M ADAPT       | Wrought Copper Alloys | 44   |
| 10075288                      | 804-2 1 FTG x M ADAPT         | Wrought Copper Alloys | 44   |
| 10075290                      | 804-2 1-1/4 FTG x M ADAPT     | Wrought Copper Alloys | 44   |
| 10075292                      | 804-2 1-1/2 FTG x M ADAPT     | Wrought Copper Alloys | 44   |
| 10075294                      | 804-2 2 FTG x M ADAPT         | Wrought Copper Alloys | 44   |
| Male Reducing Street Adapters |                               |                       |  |
| 10075278                      | 804-2 1/2 x 3/8 FTG x M ADAPT | Wrought Copper Alloys | 803R-2-86 / 44                             |
| 10075282                      | 804-2 1/2 x 3/4 FTG x M ADAPT | Wrought Copper Alloys | 44   |
| 10075284                      | 804-2 3/4 x 1/2 FTG x M ADAPT | Wrought Copper Alloys | 44   |
| 10075289                      | 804-2 1 x 3/4 FTG x M ADAPT   | Wrought Copper Alloys | 44   |

### 45 DEGREE ELBOW - 806 SERIES

Design Code: ASME B16.51

Pressure Rating: 200 psig at 200° F

ASME B16.51 Figure 1(e) P x P and Table I-1

Typical Manufacturing Drawing: 806-8

| Item Number | Description         | Material              | Drawing / ApolloXpress Cat. (AXCAT) - 8/12 |
|-------------|---------------------|-----------------------|--|
| 10075060    | 806 1/2 C X C 45 EL | Wrought Copper Alloys | 806-8 / 44                                 |
| 10075062    | 806 3/4 C X C 45 EL | Wrought Copper Alloys | 44   |
| 10075064    | 806 1 C X C 45 EL   | Wrought Copper Alloys | 44   |

|          |                       |                       |    |
|----------|-----------------------|-----------------------|----|
| 10075090 | 806 1-1/4 C X C 45 EL | Wrought Copper Alloys | 44 |
| 10075092 | 806 1-1/2 C X C 45 EL | Wrought Copper Alloys | 44 |
| 10075094 | 806 2 C X C 45 EL     | Wrought Copper Alloys | 44 |
| 10075052 | 806 2-1/2 C X C 45 EL | Wrought Copper Alloys | 44 |
| 10075057 | 806 3 C X C 45 EL     | Wrought Copper Alloys | 44 |
| 10075062 | 806 4 C X C 45 EL     | Wrought Copper Alloys | 44 |

### 45 DEGREE STREET ELBOW - 806-2 SERIES

Design Code: ASME B16.51

Pressure Rating: 200 psig at 200° F

ASME B16.51 Figure 1(e) FTG x P and Table I-1

Typical Manufacturing Drawing: 806-2-8-AA

| Item Number | Description                  | Material              | Drawing / ApolloXpress Cat. (AXCAT) - 8/12 |
|-------------|------------------------------|-----------------------|--|
| 10075054    | 806-2 1/2 FTG x C 45 ST EL   | Wrought Copper Alloys | 806-2-8-AA / 45                            |
| 10075056    | 806-2 3/4 FTG x C 45 ST EL   | Wrought Copper Alloys | 45   |
| 10075058    | 806-2 1 FTG x C 45 ST EL     | Wrought Copper Alloys | 45   |
| 10075084    | 806-2 1-1/4 FTG x C 45 ST EL | Wrought Copper Alloys | 45   |
| 10075086    | 806-2 1-1/2 FTG x C 45 ST EL | Wrought Copper Alloys | 45   |
| 10075088    | 806-2 2 FTG x C 45 ST EL     | Wrought Copper Alloys | 45   |
| 10062037    | 806-2 2-1/2 FTG x C 45 ST EL | Wrought Copper Alloys | 45   |
| 10062042    | 806-2 3 FTG x C 45 ST EL     | Wrought Copper Alloys | 45   |
| 10062047    | 806-2 4 FTG x C 45 ST EL     | Wrought Copper Alloys | 45   |

### 90 DEGREE ELBOW - 807 SERIES

Design Code: ASME B16.51

Pressure Rating: 200 psig at 200° F

ASME B16.51 Figure 1(f) P x P, Figure 1(g) P x P and Table I-1

Typical Manufacturing Drawing: 807-8

| Item Number                                       | Description               | Material              | Drawing / ApolloXpress Cat. (AXCAT) - 8/12 |
|---|---------------------------|-----------------------|--|
| <b>90 Degree Elbow</b>                            |                           |                       |  |
| 10075048  | 807-1/2 C x C 90 EL       | Wrought Copper Alloys | 807-8 / 45                                 |
| 10075050  | 807-3/4 C x C 90 EL       | Wrought Copper Alloys | 45   |
| 10075052  | 807-1 C x C 90 EL         | Wrought Copper Alloys | 45   |
| 10075078  | 807-1-1/4 C x C 90 EL     | Wrought Copper Alloys | 45   |
| 10075080  | 807-1-1/2 C x C 90 EL     | Wrought Copper Alloys | 45   |
| 10075082  | 807-2 C x C 90 EL         | Wrought Copper Alloys | 45   |
| <b>Reducing Elbow</b>                             |                           |                       |  |
| 10066101  | 807-3/4 x 1/2 C x C 90 EL | Wrought Copper Alloys | 45   |
| 10066099  | 807-1 x 1/2 C x C 90 EL   | Wrought Copper Alloys | 45   |
| 10066083  | 807-1 x 3/4 C x C 90 EL   | Wrought Copper Alloys | 45   |
| <b>Close Turn Elbow - Large Diameter</b>          |                           |                       |  |
| 10062021  | 807-C 2-1/2 C x C 90 EL   | Wrought Copper Alloys | 45   |
| 10062027  | 807-C 3 C x C 90 EL       | Wrought Copper Alloys | 45   |
| 10062032  | 807-C 4 C x C 90 EL       | Wrought Copper Alloys | 45   |
| <b>Close Turn Reducing Elbow - Large Diameter</b> |                           |                       |  |
| 10066168  | 807 3x2 C x C 90 EL       | Wrought Copper Alloys | 45   |
| 10066141  | 807 3x2-1/2 C x C 90 EL   | Wrought Copper Alloys | 45   |



| Long Turn Elbow - Large Diameter |                         |                       |    |
|----------------------------------|-------------------------|-----------------------|----|
| 10062066                         | 807-L 2-1/2 C x C 90 EL | Wrought Copper Alloys | 45 |
| 10062067                         | 807-L 3 C x C 90 EL     | Wrought Copper Alloys | 45 |
| 10062069                         | 807-L 4 C x C 90 EL     | Wrought Copper Alloys | 45 |

### 90 DEGREE STREET ELBOW - 807-2 SERIES

Design Code: ASME B16.51

Pressure Rating: 200 psig at 200° F

ASME B16.51 Figure 1(f) FTG x P, Figure 1(g) FTG x P and Table I-1

Typical Manufacturing Drawing: 807-2-8

| Item Number  | Description                  | Material              | Drawing / ApolloXpress Cat. (AXCAT) - 8/12 |
|--|------------------------------|-----------------------|--|
| <b>90 Degree Elbow</b>                                 |                              |                       |  |
| 10075042   | 807-2 1/2 FTG x C 90 ST EL   | Wrought Copper Alloys | 807-2-8 / 46                               |
| 10075044   | 807-2 3/4 FTG x C 90 ST EL   | Wrought Copper Alloys | 46   |
| 10075046   | 807-2 1 FTG x C 90 ST EL     | Wrought Copper Alloys | 46   |
| 10075072   | 807-2 1-1/4 FTG x C 90 ST EL | Wrought Copper Alloys | 46   |
| 10075074   | 807-2 1-1/2 FTG x C 90 ST EL | Wrought Copper Alloys | 46   |
| 10075076   | 807-2 2 FTG x C 90 ST EL     | Wrought Copper Alloys | 46   |
| <b>Close Turn Street Elbow - Large Diameter Copper</b> |                              |                       |  |
| 10062007   | 807-C-2 2-1/2 FTG X C 90 EL  | Wrought Copper Alloys | 46   |
| 10062012   | 807-C-2 3 FTG X C 90 EL      | Wrought Copper Alloys | 46   |
| 10062017   | 807-C-2 4 FTG X C 90 EL      | Wrought Copper Alloys | 46   |
| <b>Long Turn Street Elbow - Large Diameter Copper</b>  |                              |                       |  |
| 10062071   | 807-L-2 2-1/2 FTG X C 90 EL  | Wrought Copper Alloys | 46   |
| 10062073   | 807-L-2 3 FTG X C 90 EL      | Wrought Copper Alloys | 46   |
| 10062074   | 807-L-2 4 FTG X C 90 EL      | Wrought Copper Alloys | 46   |

### 90 DEGREE FEMALE ELBOW - 8707-3-2 SERIES

Design Code: ASME B16.51, B16.22

Pressure Rating: 200 psig at 200° F

ASME B16.51 Figure 1(f) P x P, Figure 1(g) P x P and Table I-1

ASME B16.22 Figure 1 FTG x F Adapter and Table II3.

Typical Manufacturing: 807 Series Elbow with 803-2 Series Female Street Adapter Attached

| Item Number                 | Description                | Material              | Drawing / ApolloXpress Cat. (AXCAT) - 8/12 |
|-----------------------------|----------------------------|-----------------------|--|
| <b>90 Degree Male Elbow</b> |                            |                       |  |
| 10066418                    | 8707-3-2 1/2 FTG x F 90 EL | Wrought Copper Alloys | 46   |

### 90 DEGREE DROP EAR ELBOW - 8707-3-5 SERIES

Design Code: ASME B16.51, B16.22

Pressure Rating: 200 psig at 200° F

ASME B16.51 Figure 1(b) FTG X P and Table I-1

ASME B16.22 Figure 1 C x F Short Radius Elbow and Table II3.

Typical Manufacturing: C x F Short Radius Elbow with 818 Series fitting Reducer Attached

| Item Number | Description | Material | Drawing / ApolloXpress Cat. (AXCAT) - 8/12 |
|-------------|-------------|----------|--|
|-------------|-------------|----------|--|

| <b>90 Degree Drop ear Elbow</b> |  |                       |    |
|---------------------------------|--|-----------------------|----|
| 10075366                        | 8707-3-5 1/2 C X F 90 DRP EAR EL       | Wrought Copper Alloys | 46 |
| 10075368                        | 8707-3-5 3/4 C X F 90 DRP EAR EL       | Wrought Copper Alloys | 46 |
| 10075369                        | 8707-3-5 1 C X F 90 DRP EAR EL         | Wrought Copper Alloys | 46 |
| <b>Reducing Drop Ear Elbow</b>  |  |                       |    |
| 10075367                        | 8707-3-5 1/2 x 3/8 C X F 90 DRP EAR EL | Wrought Copper Alloys | 46 |

### **90 DEGREE FEMALE ELBOW - 8707-3 SERIES**

**Design Code: ASME B16.51, B16.22**

**Pressure Rating: 200 psig at 200° F**

**ASME B16.51 Figure 1(f) P x P, Figure 1(g) P x P and Table I-1**

**ASME B16.22 Figure 1 FTG x F Adapter and Table II.3.**

**Typical Manufacturing: 807 Series Elbow with 803-2 Series Female Street Adapter Attached**

| Item Number                            | Description                  | Material              | Drawing / ApolloXpress Cat. (AXCAT) - 8/12 |
|--|------------------------------|-----------------------|--|
| <b>90 Degree Female Elbow</b>          |                              |                       |  |
| 10066133                               | 8707-3 1/2 C X F 90 EL       | Wrought Copper Alloys | 47   |
| 10066412                               | 8707-3 3/4 C X F 90 EL       | Wrought Copper Alloys | 47   |
| 10066414                               | 8707-3 1 C X F 90 EL         | Wrought Copper Alloys | 47   |
| 10066415                               | 8707-3 1-1/4 C X F 90 EL     | Wrought Copper Alloys | 47   |
| 10066416                               | 8707-3 1-1/2 C X F 90 EL     | Wrought Copper Alloys | 47   |
| 10066417                               | 8707-3 2 C X F 90 EL         | Wrought Copper Alloys | 47   |
| <b>90 Degree Reducing Female Elbow</b> |                              |                       |  |
| 10066166                               | 8707-3 1/2 x 3/8 C X F 90 EL | Wrought Copper Alloys | 47   |
| 10066411                               | 8707-3 1/2 x 3/4 C X F 90 EL | Wrought Copper Alloys | 47   |
| 10066413                               | 8707-3 3/4 x 1/2 C X F 90 EL | Wrought Copper Alloys | 47   |
| 10066167                               | 8707-3 1 x 1/2 C X F 90 EL   | Wrought Copper Alloys | 47   |

### **90 DEGREE MALE ELBOW - 8707-4 SERIES**

**Design Code: ASME B16.51, B16.22**

**Pressure Rating: 200 psig at 200° F**

**ASME B16.51 Figure 1(f) P x P, Figure 1(g) P x P and Table I-1**

**ASME B16.22 Figure 1 FTG x M Adapter and Table II.3.**

**Typical Manufacturing: 807 Series Elbow with 804-2 Series Male Street Adapter Attached**

| Item Number                            | Description                  | Material              | Drawing / ApolloXpress Cat. (AXCAT) - 8/12 |
|--|------------------------------|-----------------------|--|
| <b>90 Degree Male Elbow</b>            |                              |                       |  |
| 10066134                               | 8707-4 1/2 C X M 90 EL       | Wrought Copper Alloys | 47   |
| 10066421                               | 8707-4 3/4 C X M 90 EL       | Wrought Copper Alloys | 47   |
| 10066134                               | 8707-4 1 C X M 90 EL         | Wrought Copper Alloys | 47   |
| 10066134                               | 8707-4 1-1/4 C X M 90 EL     | Wrought Copper Alloys | 47   |
| 10066134                               | 8707-4 1-1/2 C X M 90 EL     | Wrought Copper Alloys | 47   |
| 10066134                               | 8707-4 2 C X M 90 EL         | Wrought Copper Alloys | 47   |
| <b>90 Degree Reducing Female Elbow</b> |                              |                       |  |
| 10066420                               | 8707-4 1/2 x 3/4 C X F 90 EL | Wrought Copper Alloys | 47   |
| 10066411                               | 8707-4 3/4 x 1/2 C X F 90 EL | Wrought Copper Alloys | 47   |

### **REDUCING OUTLET TEE - 811 SERIES**

**Design Code: ASME B16.51**

**Pressure Rating: 200 psig at 200° F**

**ASME B16.51 Figure 1(h) P x P x P and Table I-1**

**Typical Manufacturing Drawing: 811-12128V**

| Item Number | Description                             | Material              | Drawing /<br>ApolloXpress Cat.<br>(AXCAT) - 8/12 |
|-------------|---|-----------------------|--|
| 10075374    | 811 3/4 X 3/4 X 1/2 C X C X C TEE       | Wrought Copper Alloys | 811-12128V / 48                                  |
| 10066430    | 811 3/4 X 3/4 X 1/2 C X C X C TEE       | Wrought Copper Alloys | 48   |
| 10075378    | 811 1 X 1 X 1/2 C X C X C TEE           | Wrought Copper Alloys | 48   |
| 10066431    | 811 1 X 1 X 1/2 C X C X C TEE           | Wrought Copper Alloys | 48   |
| 10075376    | 811 1 X 1 X 3/4 C X C X C TEE           | Wrought Copper Alloys | 48   |
| 10066432    | 811 1 X 1 X 3/4 C X C X C TEE           | Wrought Copper Alloys | 48   |
| 10075106    | 811 1-1/4 X 1-1/4 X 1/2 C X C X C TEE   | Wrought Copper Alloys | 48   |
| 10075102    | 811 1-1/4 X 1-1/4 X 3/4 C X C X C TEE   | Wrought Copper Alloys | 48   |
| 10075104    | 811 1-1/4 X 1-1/4 X 1 C X C X C TEE     | Wrought Copper Alloys | 48   |
| 10066015    | 811 1-1/2 X 1-1/2 X 1/2 C X C X C TEE   | Wrought Copper Alloys | 48   |
| 10075108    | 811 1-1/2 X 1-1/2 X 3/4 C X C X C TEE   | Wrought Copper Alloys | 48   |
| 10075110    | 811 1-1/2 X 1-1/2 X 1 C X C X C TEE     | Wrought Copper Alloys | 48   |
| 10075112    | 811 1-1/2 X 1-1/2 X 1-1/4 C X C X C TEE | Wrought Copper Alloys | 48   |
| 10066385    | 811 2 X 2 X 1/2 C X C X C TEE           | Wrought Copper Alloys | 48   |
| 10075114    | 811 2 X 2 X 3/4 C X C X C TEE           | Wrought Copper Alloys | 48   |
| 10075116    | 811 2 X 2 X 1 C X C X C TEE             | Wrought Copper Alloys | 48   |
| 10075118    | 811 2 X 2 X 1-1/4 C X C X C TEE         | Wrought Copper Alloys | 48   |
| 10075120    | 811 2 X 2 X 1-1/2 C X C X C TEE         | Wrought Copper Alloys | 48   |
| 10066387    | 811 2-1/2 X 2-1/2 X 1/2 C X C X C TEE   | Wrought Copper Alloys | 48   |
| 10066386    | 811 2-1/2 X 2-1/2 X 3/4 C X C X C TEE   | Wrought Copper Alloys | 48   |
| 10066028    | 811 2-1/2 X 2-1/2 X 1 C X C X C TEE     | Wrought Copper Alloys | 48   |
| 10066027    | 811 2-1/2 X 2-1/2 X 1-1/4 C X C X C TEE | Wrought Copper Alloys | 48   |
| 10066026    | 811 2-1/2 X 2-1/2 X 1-1/2 C X C X C TEE | Wrought Copper Alloys | 48   |
| 10066176    | 811 2-1/2 X 2-1/2 X 2 C X C X C TEE     | Wrought Copper Alloys | 48   |
| 10066185    | 811 3 X 3 X 1/2 C X C X C TEE           | Wrought Copper Alloys | 48   |
| 10066035    | 811 3 X 3 X 3/4 C X C X C TEE           | Wrought Copper Alloys | 48   |
| 10066034    | 811 3 X 3 X 1 C X C X C TEE             | Wrought Copper Alloys | 48   |
| 10066033    | 811 3 X 3 X 1-1/4 C X C X C TEE         | Wrought Copper Alloys | 48   |
| 10066032    | 811 3 X 3 X 1-1/2 C X C X C TEE         | Wrought Copper Alloys | 48   |
| 10066186    | 811 3 X 3 X 2 C X C X C TEE             | Wrought Copper Alloys | 48   |
| 10062079    | 811 3 X 3 X 2-1/2 C X C X C TEE         | Wrought Copper Alloys | 48   |
| 10066104    | 811 4 X 4 X 1/2 C X C X C TEE           | Wrought Copper Alloys | 48   |
| 10066098    | 811 4 X 4 X 3/4 C X C X C TEE           | Wrought Copper Alloys | 48   |
| 10066118    | 811 4 X 4 X 1 C X C X C TEE             | Wrought Copper Alloys | 48   |
| 10066114    | 811 4 X 4 X 1-1/4 C X C X C TEE         | Wrought Copper Alloys | 48   |
| 10066036    | 811 4 X 4 X 1-1/2 C X C X C TEE         | Wrought Copper Alloys | 48   |
| 10066187    | 811 4 X 4 X 2 C X C X C TEE             | Wrought Copper Alloys | 48   |
| 10062078    | 811 4 X 4 X 2-1/2 C X C X C TEE         | Wrought Copper Alloys | 48   |
| 10062076    | 811 4 X 4 X 3 C X C X C TEE             | Wrought Copper Alloys | 48   |

**REDUCING RUN/OUTLET TEE SMALL DIAMETER - 811 SERIES**

**Design Code: ASME B16.51**

**Pressure Rating: 200 psig at 200° F**

**ASME B16.51 Figure 1(h) P x P x P and Table I-1**

**Typical Manufacturing Drawing: 811-201612-II3**

| Item Number | Description                            | Material              | Drawing / ApolloXpress Cat. (AXCAT) - 8/12 |
|-------------|--|-----------------------|--|
| 10066045    | 811 3/4 X 3/4 X 1/2 C X C X C TEE      | Wrought Copper Alloys | 49/50                                      |
| 10066039    | 811 3/4 X 3/4 X 3/4 C X C X C TEE      | Wrought Copper Alloys | 49/50                                      |
| 10066391    | 811 1 X 1/2 X 1/2 C X C X C TEE        | Wrought Copper Alloys | 49/50                                      |
| 10066007    | 811 1 X 1/2 X 3/4 C X C X C TEE        | Wrought Copper Alloys | 49/50                                      |
| 10066066    | 811 1 X 1/2 X 1 C X C X C TEE          | Wrought Copper Alloys | 49/50                                      |
| 10066389    | 811 1 X 3/4 X 1/2 C X C X C TEE        | Wrought Copper Alloys | 49/50                                      |
| 10066390    | 811 1 X 3/4 X 3/4 C X C X C TEE        | Wrought Copper Alloys | 49/50                                      |
| 10066040    | 811 1 X 3/4 X 1 C X C X C TEE          | Wrought Copper Alloys | 49/50                                      |
| 10066102    | 811 1 X 3/4 X 1-1/4 C X C X C TEE      | Wrought Copper Alloys | 49/50                                      |
| 10066049    | 811 1-1/4X 1/2 X 1/2 C X C X C TEE     | Wrought Copper Alloys | 49/50                                      |
| 10066080    | 811 1-1/4X 1/2 X 1 C X C X C TEE       | Wrought Copper Alloys | 49/50                                      |
| 10066392    | 811 1-1/4X 1/2 X 1-1/4 C X C X C TEE   | Wrought Copper Alloys | 49/50                                      |
| 10066051    | 811 1-1/4X 3/4 X 1/2 C X C X C TEE     | Wrought Copper Alloys | 49/50                                      |
| 10066052    | 811 1-1/4X 3/4 X 3/4 C X C X C TEE     | Wrought Copper Alloys | 49/50                                      |
| 10066053    | 811 1-1/4X 3/4 X 1 C X C X C TEE       | Wrought Copper Alloys | 49/50                                      |
| 10066054    | 811 1-1/4X 3/4 X 1-1/4 C X C X C TEE   | Wrought Copper Alloys | 49/50                                      |
| 10066044    | 811 1-1/4X 3/4 X 1-1/2 C X C X C TEE   | Wrought Copper Alloys | 49/50                                      |
| 10066055    | 811 1-1/4X 1 X 1/2 C X C X C TEE       | Wrought Copper Alloys | 49/50                                      |
| 10075122    | 811 1-1/4X 1 X 3/4 C X C X C TEE       | Wrought Copper Alloys | 811-201612-II3/49/50                       |
| 10075124    | 811 1-1/4X 1 X 1 C X C X C TEE         | Wrought Copper Alloys | 49/50                                      |
| 10066056    | 811 1-1/4X 1 X 1-1/4 C X C X C TEE     | Wrought Copper Alloys | 49/50                                      |
| 10066395    | 811 1-1/4X 1 X 1-1/2 C X C X C TEE     | Wrought Copper Alloys | 49/50                                      |
| 10066394    | 811 1-1/2X 1/2 X 1-1/4 C X C X C TEE   | Wrought Copper Alloys | 49/50                                      |
| 10066009    | 811 1-1/2X 1/2 X 1-1/2 C X C X C TEE   | Wrought Copper Alloys | 49/50                                      |
| 10066195    | 811 1-1/2X 3/4 X 1/2 C X C X C TEE     | Wrought Copper Alloys | 49/50                                      |
| 10066383    | 811 1-1/2X 3/4 X 3/4 C X C X C TEE     | Wrought Copper Alloys | 49/50                                      |
| 10066397    | 811 1-1/2X 3/4 X 1 C X C X C TEE       | Wrought Copper Alloys | 49/50                                      |
| 10066058    | 811 1-1/2X 3/4 X 1-1/4 C X C X C TEE   | Wrought Copper Alloys | 49/50                                      |
| 10066043    | 811 1-1/2X 3/4 X 1-1/2 C X C X C TEE   | Wrought Copper Alloys | 49/50                                      |
| 10066042    | 811 1-1/2X 3/4 X 2 C X C X C TEE       | Wrought Copper Alloys | 49/50                                      |
| 10066011    | 811 1-1/2X 1 X 3/4 C X C X C TEE       | Wrought Copper Alloys | 49/50                                      |
| 10066012    | 811 1-1/2X 1 X 1 C X C X C TEE         | Wrought Copper Alloys | 49/50                                      |
| 10066081    | 811 1-1/2X 1 X 1-1/4 C X C X C TEE     | Wrought Copper Alloys | 49/50                                      |
| 10066013    | 811 1-1/2X 1 X 1-1/2 C X C X C TEE     | Wrought Copper Alloys | 49/50                                      |
| 10066108    | 811 1-1/2X 1 X 2 C X C X C TEE         | Wrought Copper Alloys | 49/50                                      |
| 10066059    | 811 1-1/2X 1-1/4 X 1/2 C X C X C TEE   | Wrought Copper Alloys | 49/50                                      |
| 10066060    | 811 1-1/2X 1-1/4 X 3/4 C X C X C TEE   | Wrought Copper Alloys | 49/50                                      |
| 10066014    | 811 1-1/2X 1-1/4 X 1 C X C X C TEE     | Wrought Copper Alloys | 49/50                                      |
| 10075126    | 811 1-1/2X 1-1/4 X 1-1/4 C X C X C TEE | Wrought Copper Alloys | 49/50                                      |
| 10066393    | 811 1-1/2X 1-1/4 X 1-1/2 C X C X C TEE | Wrought Copper Alloys | 49/50                                      |
| 10066109    | 811 1-1/2X 1-1/4 X 2 C X C X C TEE     | Wrought Copper Alloys | 49/50                                      |
| 10066384    | 811 2 X 1/2 X 2 C X C X C TEE          | Wrought Copper Alloys | 49/50                                      |
| 10066121    | 811 2 X 3/4 X 3/4 C X C X C TEE        | Wrought Copper Alloys | 49/50                                      |
| 10066092    | 811 2 X 3/4 X 1-1/2 C X C X C TEE      | Wrought Copper Alloys | 49/50                                      |
| 10066388    | 811 2 X 3/4 X 2 C X C X C TEE          | Wrought Copper Alloys | 49/50                                      |
| 10066079    | 811 2 X 1 X 1/2 C X C X C TEE          | Wrought Copper Alloys | 49/50                                      |
| 10066062    | 811 2 X 1 X 3/4 C X C X C TEE          | Wrought Copper Alloys | 49/50                                      |

|          |                                     |                       |       |
|----------|-------------------------------------|-----------------------|-------|
| 10066017 | 811 2 X 1 X 1 C X C X C TEE         | Wrought Copper Alloys | 49/50 |
| 10066126 | 811 2 X 1 X 1-1/4 C X C X C TEE     | Wrought Copper Alloys | 49/50 |
| 10066197 | 811 2 X 1 X 1-1/2 C X C X C TEE     | Wrought Copper Alloys | 49/50 |
| 10066018 | 811 2 X 1 X 2 C X C X C TEE         | Wrought Copper Alloys | 49/50 |
| 10066063 | 811 2 X 1-1/4 X 3/4 C X C X C TEE   | Wrought Copper Alloys | 49/50 |
| 10066129 | 811 2 X 1-1/4 X 1 C X C X C TEE     | Wrought Copper Alloys | 49/50 |
| 10066019 | 811 2 X 1-1/4 X 1-1/4 C X C X C TEE | Wrought Copper Alloys | 49/50 |
| 10066125 | 811 2 X 1-1/4 X 1-1/2 C X C X C TEE | Wrought Copper Alloys | 49/50 |
| 10066064 | 811 2 X 1-1/4 X 2 C X C X C TEE     | Wrought Copper Alloys | 49/50 |
| 10066065 | 811 2 X 1-1/2 X 1/2 C X C X C TEE   | Wrought Copper Alloys | 49/50 |
| 10066020 | 811 2 X 1-1/2 X 3/4 C X C X C TEE   | Wrought Copper Alloys | 49/50 |
| 10066021 | 811 2 X 1-1/2 X 1 C X C X C TEE     | Wrought Copper Alloys | 49/50 |
| 10066022 | 811 2 X 1-1/2 X 1-1/4 C X C X C TEE | Wrought Copper Alloys | 49/50 |
| 10066023 | 811 2 X 1-1/2 X 1-1/2 C X C X C TEE | Wrought Copper Alloys | 49/50 |
| 10066024 | 811 2 X 1-1/2 X 2 C X C X C TEE     | Wrought Copper Alloys | 49/50 |

### TEE - 811 SERIES

**Design Code: ASME B16.51**

**Pressure Rating: 200 psig at 200° F**

**ASME B16.51 Figure 1(h) P x P x P and Table I-1**

**Typical Manufacturing Drawing: 811-12-AA**

| Item Number | Description             | Material              | Drawing /<br>ApolloXpress Cat.<br>(AXCAT) - 8/12 |
|-------------|-------------------------|-----------------------|--|
| 10075578    | 811 1/2 C X C X C TEE   | Wrought Copper Alloys | 50   |
| 10075580    | 811 3/4 C X C X C TEE   | Wrought Copper Alloys | 811-12-AA / 50                                   |
| 10075070    | 811 1 C X C X C TEE     | Wrought Copper Alloys | 50   |
| 10075096    | 811 1-1/4 C X C X C TEE | Wrought Copper Alloys | 50   |
| 10075098    | 811 1-1/2 C X C X C TEE | Wrought Copper Alloys | 50   |
| 10075100    | 811 2 C X C X C TEE     | Wrought Copper Alloys | 50   |
| 10075518    | 811 2-1/2 C X C X C TEE | Wrought Copper Alloys | 50   |
| 10062072    | 811 3 C X C X C TEE     | Wrought Copper Alloys | 50   |
| 10062077    | 811 4 C X C X C TEE     | Wrought Copper Alloys | 50   |

### REDUCING RUN/OUTLET TEE LARGE DIAMETER - 811 SERIES

**Design Code: ASME B16.51**

**Pressure Rating: 200 psig at 200° F**

**ASME B16.51 Figure 1(h) P x P x P and Table I-1**

**ASME B16.51 Figure 1(b) FTG X P and Table I-1**

**Typical Manufacturing: 811 Series Tee with 818 Series Fitting Reducer Attached**

| Item Number | Description                             | Material              | Drawing /<br>ApolloXpress Cat.<br>(AXCAT) - 8/12 |
|-------------|---|-----------------------|--|
| 10066499    | 811 2 X 1-1/2 X 2-1/2 C X C X C TEE     | Wrought Copper Alloys | 51   |
| 10066501    | 811 2-1/2 X 3/4 X 2 C X C X C TEE       | Wrought Copper Alloys | 51   |
| 10066502    | 811 2-1/2 X 3/4 X 2-1/2 C X C X C TEE   | Wrought Copper Alloys | 51   |
| 10066503    | 811 2-1/2 X 1 X 2 C X C X C TEE         | Wrought Copper Alloys | 51   |
| 10066514    | 811 2-1/2 X 1 X 2-1/2 C X C X C TEE     | Wrought Copper Alloys | 51   |
| 10066504    | 811 2-1/2 X 1-1/4 X 2-1/2 C X C X C TEE | Wrought Copper Alloys | 51   |
| 10066505    | 811 2-1/2 X 1-1/2 X 1-1/2 C X C X C TEE | Wrought Copper Alloys | 51   |



|          |   |                       |    |
|----------|---|-----------------------|----|
| 10066506 | 811 2-1/2 X 1-1/2 X 2 C X C X C TEE     | Wrought Copper Alloys | 51 |
| 10066507 | 811 2-1/2 X 1-1/2 X 2-1/2 C X C X C TEE | Wrought Copper Alloys | 51 |
| 10066508 | 811 2-1/2 X 2 X 3/4 C X C X C TEE       | Wrought Copper Alloys | 51 |
| 10066509 | 811 2-1/2 X 2 X 1 C X C X C TEE         | Wrought Copper Alloys | 51 |
| 10066510 | 811 2-1/2 X 2 X 1-1/4 C X C X C TEE     | Wrought Copper Alloys | 51 |
| 10066511 | 811 2-1/2 X 2 X 1-1/2 C X C X C TEE     | Wrought Copper Alloys | 51 |
| 10066396 | 811 2-1/2 X 2 X 2 C X C X C TEE         | Wrought Copper Alloys | 51 |
| 10066174 | 811 2-1/2 X 2 X 2-1/2 C X C X C TEE     | Wrought Copper Alloys | 51 |
| 10066515 | 811 2-1/2 X 2 X 3 C X C X C TEE         | Wrought Copper Alloys | 51 |
| 10066522 | 811 3 X 3/4 X 2-1/2 C X C X C TEE       | Wrought Copper Alloys | 51 |
| 10066523 | 811 3 X 3/4 X 3 C X C X C TEE           | Wrought Copper Alloys | 51 |
| 10066524 | 811 3 X 1 X 2-1/2 C X C X C TEE         | Wrought Copper Alloys | 51 |
| 10066525 | 811 3 X 1 X 3 C X C X C TEE             | Wrought Copper Alloys | 51 |
| 10066526 | 811 3 X 1-1/4 X 3 C X C X C TEE         | Wrought Copper Alloys | 51 |
| 10066527 | 811 3 X 1-1/2 X 3 C X C X C TEE         | Wrought Copper Alloys | 51 |
| 10066528 | 811 3 X 2 X 2 C X C X C TEE             | Wrought Copper Alloys | 51 |
| 10066529 | 811 3 X 2 X 2-1/2 C X C X C TEE         | Wrought Copper Alloys | 51 |
| 10066530 | 811 3 X 2 X 3 C X C X C TEE             | Wrought Copper Alloys | 51 |
| 10066531 | 811 3 X 2-1/2 X 2 C X C X C TEE         | Wrought Copper Alloys | 51 |
| 10066136 | 811 3 X 2-1/2 X 2-1/2 C X C X C TEE     | Wrought Copper Alloys | 51 |
| 10066137 | 811 3 X 2-1/2 X 3 C X C X C TEE         | Wrought Copper Alloys | 51 |
| 10066538 | 811 4 X 1-1/2 X 3 C X C X C TEE         | Wrought Copper Alloys | 51 |
| 10066539 | 811 4 X 2 X 4 C X C X C TEE             | Wrought Copper Alloys | 51 |
| 10066138 | 811 4 X 2-1/2 X 4 C X C X C TEE         | Wrought Copper Alloys | 51 |
| 10066540 | 811 4 X 3 X 1-1/2 C X C X C TEE         | Wrought Copper Alloys | 51 |
| 10066541 | 811 4 X 3 X 2 C X C X C TEE             | Wrought Copper Alloys | 51 |
| 10066139 | 811 4 X 3 X 2-1/2 C X C X C TEE         | Wrought Copper Alloys | 51 |
| 10066096 | 811 4 X 3 X 3 C X C X C TEE             | Wrought Copper Alloys | 51 |
| 10066140 | 811 4 X 3 X 4 C X C X C TEE             | Wrought Copper Alloys | 51 |

## BULLHEAD TEE - 811 SERIES

**Design Code: ASME B16.51**

**Pressure Rating: 200 psig at 200° F**

**ASME B16.51 Figure 1(h) P x P x P and Table I-1**

**ASME B16.51 Figure 1(b) FTG X P and Table I-1**

**Typical Manufacturing: 811 Series Tee with 818 Series Fitting Reducer Attached**

| Item Number | Description                            | Material              | Drawing /<br>ApolloXpress Cat.<br>(AXCAT) - 8/12 |
|-------------|--|-----------------------|--|
| 10066070    | 811 1/2 X 1/2 X 3/4 C x C x C BH TEE   | Wrought Copper Alloys | 52   |
| 10066006    | 811 1/2 X 1/2 X 1 C x C x C BH TEE     | Wrought Copper Alloys | 52   |
| 10066071    | 811 3/4 X 3/4 X 1 C x C x C BH TEE     | Wrought Copper Alloys | 52   |
| 10066008    | 811 1 X 1 X 1-1/4 C x C x C BH TEE     | Wrought Copper Alloys | 52   |
| 10066128    | 811 1 X 1 X 2 C x C x C BH TEE         | Wrought Copper Alloys | 52   |
| 10066107    | 811 1 X 1 X 2 C x C x C BH TEE         | Wrought Copper Alloys | 52   |
| 10066090    | 811 1 X 1 X 2 C x C x C BH TEE         | Wrought Copper Alloys | 52   |
| 10066550    | 811 1-1/2 X 1-1/2 X 3 C x C x C BH TEE | Wrought Copper Alloys | 52   |
| 10066551    | 811 2 X 2 X 3 C x C x C BH TEE         | Wrought Copper Alloys | 52   |
| 10066135    | 811 2-1/2 X 2-1/2 X 3 C x C x C BH TEE | Wrought Copper Alloys | 52   |
| 10066094    | 811 2-1/2 X 2-1/2 X 4 C x C x C BH TEE | Wrought Copper Alloys | 52   |

**FEMALE OUTLET TEE - 8712 SERIES**

Design Code: ASME B16.51, ASME B16.22

Pressure Rating: 200 psig at 200° F

ASME B16.51 Figure 1(h) P x P x P and Table I-1

ASME B16.22 Figure 1 FTG x F Adapter and Table II3.

Typical Manufacturing: 811 Series Tee with 803-2 Series Female Street Adapter Attached

| Item Number                       | Description                            | Material              | Drawing /<br>ApolloXpress Cat.<br>(AXCAT) - 8/12 |
|-----------------------------------|--|-----------------------|--|
| <b>Female Outlet Tee</b>          |  |                       |  |
| 10066399                          | 8712 1/2 C X C X F Tee                 | Wrought Copper Alloys | 52   |
| 10066154                          | 8712 3/4 C X C X F Tee                 | Wrought Copper Alloys | 52   |
| <b>Reducing Female Outlet Tee</b> |  |                       |  |
| 10066400                          | 8712 3/4 x 3/4 x 1/2 C X C X F Tee     | Wrought Copper Alloys | 52   |
| 10066401                          | 8712 1 x 1 x 1/2 C X C X F Tee         | Wrought Copper Alloys | 52   |
| 10066150                          | 8712 1 x 1 x 3/4 C X C X F Tee         | Wrought Copper Alloys | 52   |
| 10066402                          | 8712 1-1/4 x 1-1/4 x 1/2 C X C X F Tee | Wrought Copper Alloys | 52   |
| 10066153                          | 8712 1-1/4 x 1-1/4 x 3/4 C X C X F Tee | Wrought Copper Alloys | 52   |
| 10066403                          | 8712 1-1/2 x 1-1/2 x 1/2 C X C X F Tee | Wrought Copper Alloys | 52   |
| 10066156                          | 8712 1-1/2 x 1-1/2 x 3/4 C X C X F Tee | Wrought Copper Alloys | 52   |
| 10066404                          | 8712 2 x 2 x 1/2 C X C X F Tee         | Wrought Copper Alloys | 52   |
| 10066159                          | 8712 2 x 2 x 3/4 C X C X F Tee         | Wrought Copper Alloys | 52   |

**TUBE CAP - 817 SERIES**

Design Code: ASME B16.51

Pressure Rating: 200 psig at 200° F

ASME B16.51 Figure 1(d) P and Table I-1

Typical Manufacturing Drawing: 75172

| Item Number | Description        | Material              | Drawing /<br>ApolloXpress Cat.<br>(AXCAT) - 8/12 |
|-------------|--------------------|-----------------------|--|
| 10075166    | 817 1/2 TUBE CAP   | Wrought Copper Alloys | 53   |
| 10075168    | 817 3/4 TUBE CAP   | Wrought Copper Alloys | 53   |
| 10075170    | 817 1 TUBE CAP     | Wrought Copper Alloys | 53   |
| 10075172    | 817 1-1/4 TUBE CAP | Wrought Copper Alloys | 75172 / 53                                       |
| 10075174    | 817 1-1/2 TUBE CAP | Wrought Copper Alloys | 53   |
| 10075176    | 817 2 TUBE CAP     | Wrought Copper Alloys | 53   |
| 10062142    | 817 2-1/2 TUBE CAP | Wrought Copper Alloys | 53   |
| 10062147    | 817 3 TUBE CAP     | Wrought Copper Alloys | 53   |
| 10062152    | 817 4 TUBE CAP     | Wrought Copper Alloys | 53   |

**CROSSOVER - 836 SERIES**

Design Code: ASME B16.51

Pressure Rating: 200 psig at 200° F

ASME B16.51 Figure 1(c) P X P and Table I-1

Typical Manufacturing Drawing: 836-8

| Item Number | Description | Material | Drawing /<br>ApolloXpress Cat.<br>(AXCAT) - 8/12 |
|-------------|-------------|----------|--|
|-------------|-------------|----------|--|

|          |                         |                       |            |
|----------|-------------------------|-----------------------|------------|
| 10075370 | 836 1/2 C x C CROSSOVER | Wrought Copper Alloys | 836-8 / 53 |
| 10075372 | 836 3/4 C x C CROSSOVER | Wrought Copper Alloys | 53         |

### FITTING REDUCER - 818 SERIES

**Design Code: ASME B16.51**

**Pressure Rating: 200 psig at 200° F**

**ASME B16.51 Figure 1(b) FTG X P and Table I-1**

**Typical Manufacturing Drawing: 75160**

| Item Number | Description                   | Material              | Drawing /<br>ApolloXpress Cat.<br>(AXCAT) - 8/12 |
|-------------|-------------------------------|-----------------------|--|
| 10075146    | 818 3/4 X 1/2 FTG x C RED     | Wrought Copper Alloys | 54   |
| 10075150    | 818 1 X 1/2 FTG x C RED       | Wrought Copper Alloys | 54   |
| 10075148    | 818 1 X 3/4 FTG x C RED       | Wrought Copper Alloys | 54   |
| 10075336    | 818 1-1/4 X 1/2 FTG x C RED   | Wrought Copper Alloys | 54   |
| 10075154    | 818 1-1/4 X 3/4 FTG x C RED   | Wrought Copper Alloys | 54   |
| 10075156    | 818 1-1/4 X 1 FTG x C RED     | Wrought Copper Alloys | 54   |
| 10075332    | 818 1-1/2 X 1/2 FTG x C RED   | Wrought Copper Alloys | 54   |
| 10075334    | 818 1-1/2 X 3/4 FTG x C RED   | Wrought Copper Alloys | 54   |
| 10075158    | 818 1-1/2 X 1 FTG x C RED     | Wrought Copper Alloys | 54   |
| 10075160    | 818 1-1/2 X 1-1/4 FTG x C RED | Wrought Copper Alloys | 75160 / 54                                       |
| 10075338    | 818 2 X 1/2 FTG x C RED       | Wrought Copper Alloys | 54   |
| 10075340    | 818 2 X 3/4 FTG x C RED       | Wrought Copper Alloys | 54   |
| 10075162    | 818 2 X 1 FTG x C RED         | Wrought Copper Alloys | 54   |
| 10075152    | 818 2 X 1-1/4 FTG x C RED     | Wrought Copper Alloys | 54   |
| 10075164    | 818 2 X 1-1/2 FTG x C RED     | Wrought Copper Alloys | 54   |
| 10068025    | 818 2-1/2 X 1/2 FTG x C RED   | Wrought Copper Alloys | 54   |
| 10068001    | 818 2-1/2 X 3/4 FTG x C RED   | Wrought Copper Alloys | 54   |
| 10068002    | 818 2-1/2 X 1 FTG x C RED     | Wrought Copper Alloys | 54   |
| 10068017    | 818 2-1/2 X 1-1/4 FTG x C RED | Wrought Copper Alloys | 54   |
| 10068004    | 818 2-1/2 X 1-1/2 FTG x C RED | Wrought Copper Alloys | 54   |
| 10075165    | 818 2-1/2 X 2 FTG x C RED     | Wrought Copper Alloys | 54   |
| 10068005    | 818 2-1/2 X 2 FTG x C RED     | Wrought Copper Alloys | 54   |
| 10068019    | 818 3 X 3/4 FTG x C RED       | Wrought Copper Alloys | 54   |
| 10068007    | 818 3 X 1 FTG x C RED         | Wrought Copper Alloys | 54   |
| 10068008    | 818 3 X 1-1/4 FTG x C RED     | Wrought Copper Alloys | 54   |
| 10068020    | 818 3 X 1-1/2 FTG x C RED     | Wrought Copper Alloys | 54   |
| 10068010    | 818 3 X 2 FTG x C RED         | Wrought Copper Alloys | 54   |
| 10057500    | 818 3 X 2-1/2 FTG x C RED     | Wrought Copper Alloys | 54   |
| 10068011    | 818 4 X 1/2 FTG x C RED       | Wrought Copper Alloys | 54   |
| 10068022    | 818 4 X 3/4 FTG x C RED       | Wrought Copper Alloys | 54   |
| 10068013    | 818 4 X 1 FTG x C RED         | Wrought Copper Alloys | 54   |
| 10068014    | 818 4 X 1-1/4 FTG x C RED     | Wrought Copper Alloys | 54   |
| 10068023    | 818 4 X 1-1/2 FTG x C RED     | Wrought Copper Alloys | 54   |
| 10068016    | 818 4 X 2 FTG x C RED         | Wrought Copper Alloys | 54   |
| 10057503    | 818 4 X 2-1/2 FTG x C RED     | Wrought Copper Alloys | 54   |
| 10057506    | 818 4 X 3 FTG x C RED         | Wrought Copper Alloys | 54   |