










|   |  |             |              |                |             |             |             |   |                  |
|---|--|-------------|--------------|----------------|-------------|-------------|-------------|---|------------------|
| <b>OWNER:</b><br><br>شركة پترو شیمی بوشهر<br>BUPC                        | <b>BUSHEHR PETROCHEMICAL COMPANY<br/>MEG PLANT</b>     |             |              |                |             |             |             | <b>CONTRACTOR:</b><br><br>Chagalesh-Enerchimi-Steam<br>Joint Venture<br>BUPC-MEG PLANT PROJECT |                  |
|   | <b>Data sheet fo Instrument Tubes And Fittings (I)</b> |             |              |                |             |             |             | <b>VENDOR:</b><br>   |                  |
| <b>MC :</b><br><br>شرکت مست و موزی نوسان پتروشیمی<br>(سهامی خاص)<br>NPEC | <b>Project</b>   | <b>Area</b> | <b>Phase</b> | <b>MRQ No.</b> | <b>Dis.</b> | <b>Doc.</b> | <b>Seq.</b> | <b>Contract No :</b>  |                  |
| <b>Owner Document Number :</b>  | <b>BU</b>  | <b>20</b>   | <b>VD</b>    | <b>631A</b>    | <b>PI</b>   | <b>DSH</b>  | <b>0005</b> | <b>Rev :02</b>  | <b>Page: 1/3</b> |






## Data sheet for Instrument Tubes And Fittings (I)

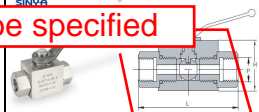
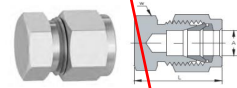
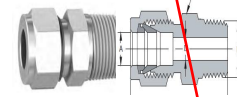
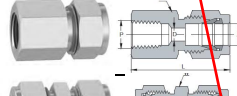
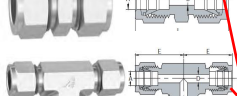



| Rev. | Date        | Purpose of Issue  | Prepared       | Checked | Approved | AC      |
|------|-------------|-------------------|----------------|---------|----------|---------|
| 02   | 15-Sep-2021 | Issue For Approve | Multi-Win zhou |         |          |         |
| 01   | 10-Sep-2021 | Issue For Approve | Multi-Win zhou |         |          |         |
| 00   | 08-Sep-2021 | Issue For Approve | Multi-Win zhou |         |          |         |
|      |             |                   |                |         | Class:1  | Phase:P |

|  |   |             |              |                |             |             |             |  |                            |
|--|---|-------------|--------------|----------------|-------------|-------------|-------------|--|----------------------------|
| <b>OWNER:</b><br><br>شرکت پترو شیمی اوشهر<br><b>MC:</b><br> <br>شرکت مهندسی و پیمانکاری (سهامی خاص) | <b>BUSHEHR PETROCHEMICAL COMPANY<br/>MEG PLANT</b>      |             |              |                |             |             |             | <b>CONTRACTOR :</b><br><br>Chagalesh-Enerchimi-Steam<br>Joint Venture<br>BUPC-MEG PLANT PROJECT |                            |
|  | <b>Data sheet for Instrument Tubes And Fittings (I)</b> |             |              |                |             |             |             | <b>VENDOR:</b><br>  |                            |
| <b>Owner Document Number :</b>   | <b>Project</b>  | <b>Area</b> | <b>Phase</b> | <b>MQR.No.</b> | <b>Dis.</b> | <b>Doc.</b> | <b>Seq.</b> | <b>Contract No :</b>   |                            |
|  | BU  | 20          | VD           | 631A           | PI          | DSH         | 0005        | <b>Rev. :02</b>  | <b>2 of 3<br/>Page:2/3</b> |

**Tabulation of Revised Pages**

| Page | Revision |    |    | Page | Revision |  |  | Page | Revision |  |  |
|------|----------|----|----|------|----------|--|--|------|----------|--|--|
|      | 00       | 01 | 02 |      |          |  |  |      |          |  |  |
| 1    | X        | X  | X  |      |          |  |  |      |          |  |  |
| 2    | X        | X  | X  |      |          |  |  |      |          |  |  |
| 3    | X        | X  | X  |      |          |  |  |      |          |  |  |
| 4    |          |    |    |      |          |  |  |      |          |  |  |
| 5    |          |    |    |      |          |  |  |      |          |  |  |
| 6    |          |    |    |      |          |  |  |      |          |  |  |
| 7    |          |    |    |      |          |  |  |      |          |  |  |
| 8    |          |    |    |      |          |  |  |      |          |  |  |
| 9    |          |    |    |      |          |  |  |      |          |  |  |
| 10   |          |    |    |      |          |  |  |      |          |  |  |
| 11   |          |    |    |      |          |  |  |      |          |  |  |
| 12   |          |    |    |      |          |  |  |      |          |  |  |
| 13   |          |    |    |      |          |  |  |      |          |  |  |
| 14   |          |    |    |      |          |  |  |      |          |  |  |
| 15   |          |    |    |      |          |  |  |      |          |  |  |
| 16   |          |    |    |      |          |  |  |      |          |  |  |
| 17   |          |    |    |      |          |  |  |      |          |  |  |
| 18   |          |    |    |      |          |  |  |      |          |  |  |
| 19   |          |    |    |      |          |  |  |      |          |  |  |
| 20   |          |    |    |      |          |  |  |      |          |  |  |
| 21   |          |    |    |      |          |  |  |      |          |  |  |
| 22   |          |    |    |      |          |  |  |      |          |  |  |
| 23   |          |    |    |      |          |  |  |      |          |  |  |
| 24   |          |    |    |      |          |  |  |      |          |  |  |
| 25   |          |    |    |      |          |  |  |      |          |  |  |
| 26   |          |    |    |      |          |  |  |      |          |  |  |
| 27   |          |    |    |      |          |  |  |      |          |  |  |
| 28   |          |    |    |      |          |  |  |      |          |  |  |
| 29   |          |    |    |      |          |  |  |      |          |  |  |
| 30   |          |    |    |      |          |  |  |      |          |  |  |
| 31   |          |    |    |      |          |  |  |      |          |  |  |
| 32   |          |    |    |      |          |  |  |      |          |  |  |
| 33   |          |    |    |      |          |  |  |      |          |  |  |
| 34   |          |    |    |      |          |  |  |      |          |  |  |

|   |  |   |      |       |      |      |  |      |               |           |
|---|--|---|------|-------|------|------|--|------|---------------|-----------|
| OWNER:<br><br>شرکت پتروشیمی بوشهر  |  | <b>BUSHEHR PETROCHEMICAL COMPANY<br/>MEG PLANT</b>      |      |       |      |      | CONTRACTOR:<br><br>Chagalesh-Enerchimi-Steam<br>Joint Venture<br>BUPC-MEG PLANT PROJECT |      |               |           |
| MC:<br><br><br>شرکت مست و سنجی گسترده پارس<br>(سپاسی گیس) |  | <b>Data sheet for Instrument Tubes And Fittings (I)</b> |      |       |      |      | VENDOR:<br>   |      |               |           |
| Owner Document Number :   |  | Project   | Area | Phase | Unit | Dis. | Doc.   | Seq. | Contract No : |           |
|   |  | BU  | 20   | VD    | 631A | PI   | DSH  | 0005 | Rev. :02      | Page:3of3 |

| ITEM   | Material name          | Standards/Codes                                     | Material | Valve Class (psi) | TUBES AND FITTINGS DESCRIPTION  | Size           | Unit  | QTY  | Note  | Reference catalogue  |
|--------|------------------------|---|----------|-------------------|---|----------------|-------|------|---|----------------------|
| 1/100  | Ball Valve             | ASTM A 479, ASME B 1.201<br>Mechanical tests API598 | SS.316   | 3000              | NPT ANSI B1.20.1 Suitable for 200 bar Hydraulic Pressure.<br>Max. Temperature (240° C)<br>PTFE Packing<br>The valve body A182 F316<br>The valve stem A182 F316<br>The valve cover F316<br>The valve seat PTFE | 1/2" NPT       | PCS   | 270  | <br>shall be specified | QFT12-LWF-8, NPT1/2  |
| 2/205  | TUBING CAP             | ASTM A 479, ASME B 1.201<br>Mechanical tests BS4368 | SS.316   | 3000              | NPT ANSI B1.20.1 National<br>Pipe Thread Suitable for 200 bar Hydraulic Pressure.<br>Fitting type: Double compression ferrule   | 1/4"O. D.      | PCS   | 671  |                        | SKC-4, φ1/4          |
| 3/172  | Straight Tube Seamless | ASTM A269, BS 269, BS 4368                          | SS.316   | 3000              | TUBING, 0.035" WALL THICKNESS Rockwell hardness test scale shall be less than 80 ROCKWELL B Min.<br>Bending Radius: 3x0 D"  | 1/4"O. D.      | METER | 1846 | Tube straight length:6 Meter  |                      |
| 4/173  | Straight Tube Seamless | ASTM A269, BS 269, BS 4368                          | SS.316   | 3000              | TUBING, 0.065" WALL THICKNESS Rockwell hardness test scale shall be less than 80 ROCKWELL B Min.<br>Bending Radius: 2x0 D"  | 1/2"O. D.      | METER | 7798 | Tube straight length:6 Meter  |                      |
| 5/209  | MALE STUD COUPLING     | ASTM A 479, ASME B 1.201                            | SS.316   | 3000              | NPTM Nation pipe taper Fitting<br>type: Double compression ferrule  | 1/4"*1/4"O. D. | PCS   | 671  |                       | SK1-4-4, 1/4-NPT1/4  |
| 6/210  | MALE STUD COUPLING     | ASTM A 479, ASME B 1.201                            | SS.316   | 3000              | NPTM Nation pipe taper Fitting<br>type: Double compression ferrule  | 1/2"*1/2"O. D. | PCS   | 1573 |                      | SK1-8-8, 1/2-NPT1/2  |
| 7/236  | FEMALE STUD COUPLING   | ASTM A 479, ASME B 1.201                            | SS.316   | 3000              | NPTF Nation pipe taper Fitting<br>type: Double compression ferrule  | 1/2"*1/2"O. D. | PCS   | 528  |                      | SK7-8-8, 1/2-NPT1/2F |
| 8/244  | TUBE UNION             | ASTM A 479, ASME B 1.201                            | SS.316   | 3000              | Fitting type: Double compression ferrule  | 1/2"O. D.      | PCS   | 536  |                      | SK6-8, 1/2           |
| 9/308  | TEE UNION              | ASTM A 479, ASME B 1.201                            | SS.316   | 3000              | Fitting type: Double compression ferrule  | 1/2"O. D.      | PCS   | 80   |                      | SK3-8, 1/2           |
| 10/195 | POLYETHYLENE TUBE      | ASTM A 479  | P. E     | 1.0 Mpa           | -40 °C to 80 °C Min. Bending Radius: 3x0.D  | 1/4"O. D.      | METER | 30   |                      |                      |