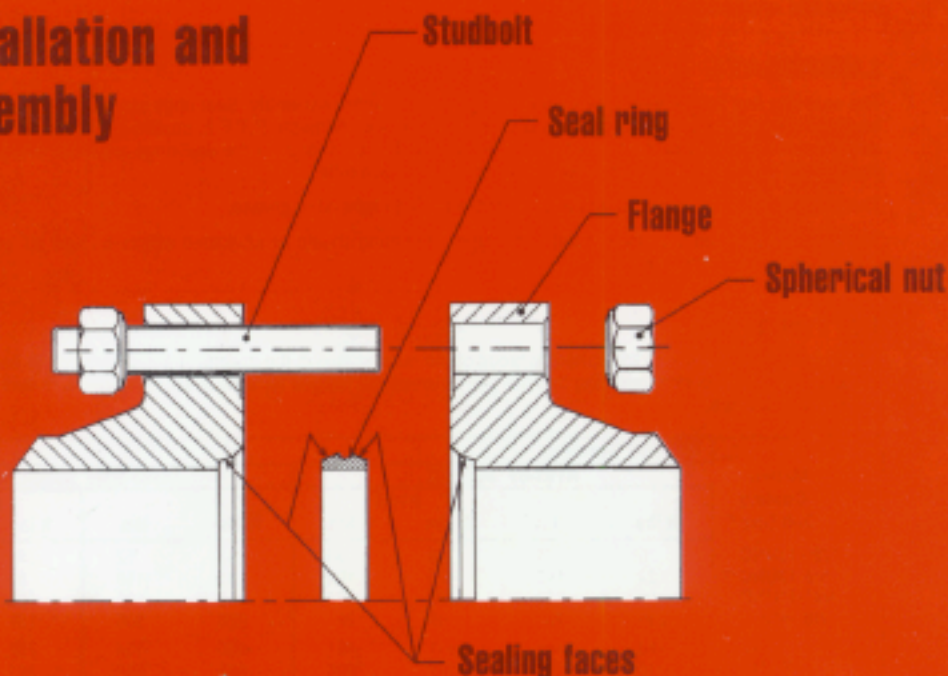


DESTEC 'DEFLEX' COMPACT FLANGE CONNECTIONS

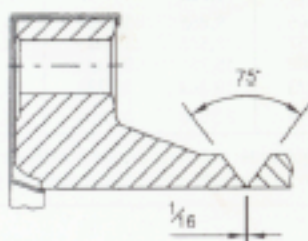
installation and assembly



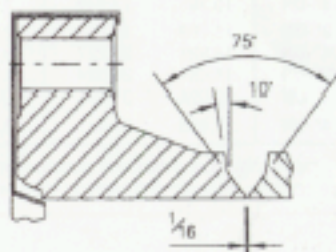
1 WELDING OF FLANGES TO PIPE ENDS

The standard flange is provided with a weld preparation for welding from the outside only. Protect the flange seat with the metal guards provided, and against oxidation, by using Berkatect No. 12 or equivalent.

If flanges welded to pipe lengths are not to be assembled immediately, remove metal guards and coat flanges with grease or lanolin preservative. Replace metal guards for storage.



UP TO 7/16" WALL THICKNESS



OVER 7/16" WALL THICKNESS

ASSEMBLY

2

CLEAN

Remove grease and preservative from flange and seat faces.

3

INSPECT

Check all sealing surfaces for mechanical damage and rust. Small scratches should be removed by polishing, more serious defects may mean remachining of the component or component replacement. Destec should be contacted for advice and information.

4

LUBRICATE

The seal ring and flange sealing faces must be lubricated before assembly. Seal rings are supplied coated with lubricant either P.T.F.E. or Molybdenum Disulphide. If the seal rings are P.T.F.E. coated the flange seat must be clean and uncoated or it may be coated with a thin even coat of clean light oil. If the seal rings are MoS₂ coated the flange seat should be sprayed with a thin coat of Molybdenum Disulphide.

The bolting if P.T.F.E. coated may be lubricated with clean light oil or grease.

The bolting if supplied uncoated or with other types of coating should be lubricated with clean light oil, grease or proprietary anti-scuffing agent.

5

FITTING

Fit the flanges together with the spherical faces of the nuts located in the special seating. Tighten the bolting evenly to the torques recommended, ensuring that the gap between the flanges remains reasonably constant during the tightening sequence.

| Material Coating Bolt Size | Bolting Torques | | | | | | | |
|----------------------------------|-----------------|--------|--------|--------|-------------------|--------|--------|--------|
| | A193-B7 A320-L7 | | | | A193-B7M A320-L7M | | | |
| | | | PTFE | | | | PTFE | |
| | ft.lbs | Nm | ft.lbs | Nm | ft.lbs | Nm | ft.lbs | Nm |
| 1/2"-13UNC | 55 | 74 | 39 | 53 | 42 | 57 | 30 | 40 |
| 5/8"-11UNC | 107 | 145 | 76 | 103 | 81 | 110 | 58 | 78 |
| 3/4"-10UNC | 186 | 252 | 132 | 178 | 142 | 192 | 100 | 136 |
| 7/8"-9UNC | 296 | 401 | 209 | 283 | 225 | 305 | 159 | 216 |
| 1"-UNC | 440 | 596 | 311 | 421 | 335 | 454 | 237 | 321 |
| 1.1/8"-UN | 636 | 862 | 447 | 606 | 485 | 657 | 341 | 462 |
| 1.1/4"-UN | 883 | 1,198 | 618 | 837 | 673 | 912 | 471 | 638 |
| 1.3/8"-UN | 1,187 | 1,609 | 827 | 1,121 | 905 | 1,226 | 630 | 854 |
| 1.1/2"-UN | 1,554 | 2,106 | 1,079 | 1,462 | 1,184 | 1,605 | 822 | 1,114 |
| 1.5/8"-UN | 1,988 | 2,695 | 1,377 | 1,866 | 1,515 | 2,054 | 1,049 | 1,422 |
| 1.3/4"-UN | 2,497 | 3,385 | 1,725 | 2,338 | 1,902 | 2,579 | 1,314 | 1,781 |
| 1.7/8"-UN | 3,085 | 4,183 | 2,126 | 2,883 | 2,351 | 3,187 | 1,620 | 2,196 |
| 2"-UN | 3,760 | 5,096 | 2,586 | 3,506 | 2,864 | 3,883 | 1,970 | 2,671 |
| 2.1/8"-UN | 4,525 | 6,134 | 3,108 | 4,213 | 3,448 | 4,674 | 2,368 | 3,210 |
| 2.1/4"-UN | 5,388 | 7,304 | 3,695 | 5,008 | 4,105 | 5,565 | 2,815 | 3,816 |
| 2.3/8"-UN | 6,354 | 8,614 | 4,351 | 5,898 | 4,841 | 6,563 | 3,315 | 4,494 |
| 2.1/2"-UN | 7,429 | 10,071 | 5,081 | 6,888 | 5,660 | 7,673 | 3,871 | 5,248 |
| 2.5/8"-UN | 7,798 | 10,571 | 5,327 | 7,221 | 6,567 | 8,902 | 4,486 | 6,081 |
| 2.3/4"-UN | 8,984 | 12,178 | 6,131 | 8,311 | 7,565 | 10,250 | 5,163 | 6,998 |
| 2.7/8"-UN | 10,283 | 13,940 | 7,011 | 9,504 | 8,660 | 11,739 | 5,904 | 8,003 |
| 3"-UN | 11,703 | 15,864 | 7,971 | 10,806 | 9,855 | 13,359 | 6,713 | 9,100 |
| 3.1/4"-UN | 14,921 | 20,227 | 10,148 | 13,757 | 12,565 | 17,033 | 8,546 | 11,584 |
| 3.1/2"-UN | 18,681 | 25,324 | 12,688 | 17,200 | 15,731 | 21,326 | 10,684 | 14,484 |
| 3.3/4"-UN | 23,024 | 31,211 | 15,619 | 21,173 | 19,389 | 26,283 | 13,153 | 17,830 |
| 4"-UN | 27,993 | 37,947 | 18,970 | 25,716 | 23,573 | 31,956 | 15,975 | 21,655 |

Tightened properly the connection will remain tight and leak-proof under the most severe conditions of vibration and temperature change. Periodic retightening may be necessary on connections operating at elevated temperatures.



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