Triple-Lok/Triple-Lok 2 Assembly

For leak-free performance, the Triple-Lok fitting requires the following steps:

1. Cutting, deburring and cleaning of the tube
2. Flaring
3. Flare inspection
4. Installation

> **Caution:** Use only seamless or welded and drawn tube that is fully annealed for flaring and bending. (See page U14 for tube/fitting material compatibility information.)

Step 1 has been covered in a previous section (see page T12).

For the recommended minimum and maximum tube wall thickness for Triple-Lok fittings, please refer to Table C3 on page C8.

Flaring

Several flaring methods, ranging from simple hand flaring to hydraulic/electric power flaring, are available. Various tools for flaring are shown on pages S27 through S32. Power flaring is quicker and produces more accurate and consistent flares compared to hand flaring. Therefore, it is a preferred method of flaring. Hand flaring should be limited to places where power flaring tools are not readily available. The Parflange machines shown on pages S24-S25 also flare tube with an orbital flaring process and provide the best flare for stainless steel tube.

Prior to flaring, determine the tube length allowance using Table T17. This tube length allowance should be added to the cut tube length to allow for the "loss" of tube caused by flaring.

Nominal Tube O.D.		A
Inch	Metric	
1/8	—	0.07
3/16	—	0.08
1/4	6	0.09
5/16	8	0.08
3/8	10	0.08
1/2	12	0.12
5/8	14, 15, 16	0.13
3/4	18, 20	0.15
7/8	22	0.15
1	25	0.15
1 1/4	30, 32	0.20
1 1/2	38	0.18
2	42	0.28

Table T17 — Tube length allowance

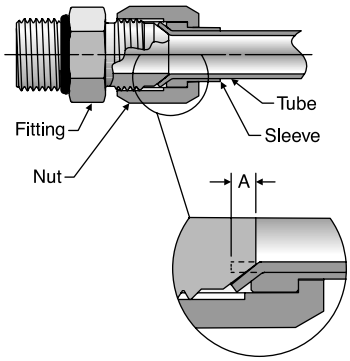

Fig. T25 — Tube length allowance

Flare tube end using one of the flaring tools and following its operating instructions. Fig. T26 shows flaring with Hydra-Tool.

> **Note:** Be sure to insert a nut and a sleeve in proper sequence and orientation before flaring either end of a bent tube, or second end of a straight tube (see Fig. T27).

Fig. T26 – Flaring with Hydra-Tool

Fig. T27 – Nuts and sleeves assembled before flaring

Flare Inspection

Inspect flare for dimensions and surface quality. Table T18 shows the proper flare dimensions. The sleeve can also be used for a quick check of the flare dimensions as shown in Fig. T28.

Inch Tube O.D. (in.)	Metric Tube O.D. (mm)	37° Flare Diameter ØA (in.)
1/4	6	.340/.360
5/16	8	.400/.430
3/8	10	.460/.490
1/2	12	.630/.660
5/8	15 & 16	.760/.790
3/4	18 & 20	.920/.950
1	25	1.170/1.200
1 1/4	30 & 32	1.480/1.510
1 1/2	38	1.700/1.730

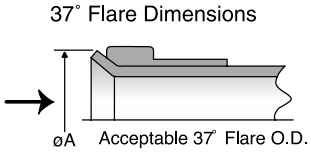

Table T18 — 37° Flare Dimensions

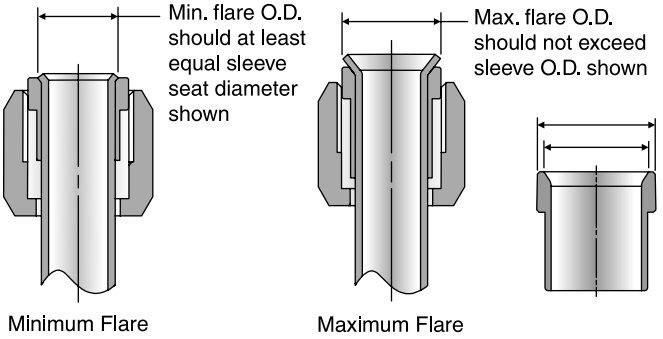

Fig. T28 – Comparing flare O.D. with sleeve seat and O.D.

Underflaring (see Fig. T29) reduces contact area causing excessive nose collapse and leakage; or, in extreme cases, tube pull out under pressure.

Overflaring (see Fig. T29) causes tube nut thread interference, either preventing assembly altogether, or giving a false sense of joint tightness resulting in leakage.