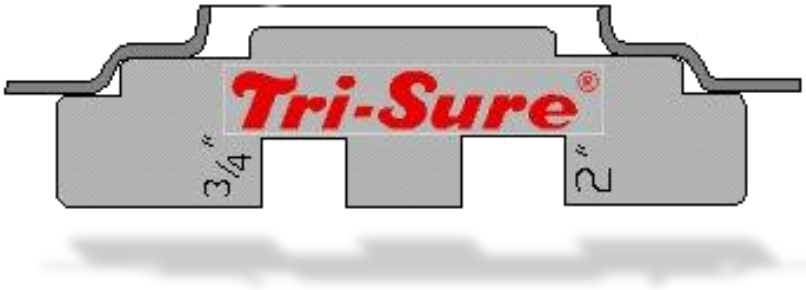
TRI-SURE® FLANGE INSERTION – PROCESS

Tri-Sure Closures supplies gauges, specifications, and documentation to assist customers in producing consistent quality of the flange insertion

Tri-Sure® insertion – Checking the 1st operation

Checking with the gauge

The below picture shows the gauge used to check whether the depth of the 1st operation die has been set correctly. When the gauge touches the end material, the octagonal embossing is of the correct depth. When there is a gap between the gauge and the end material, set the press lower till the gap disappears.



Checking the neck height

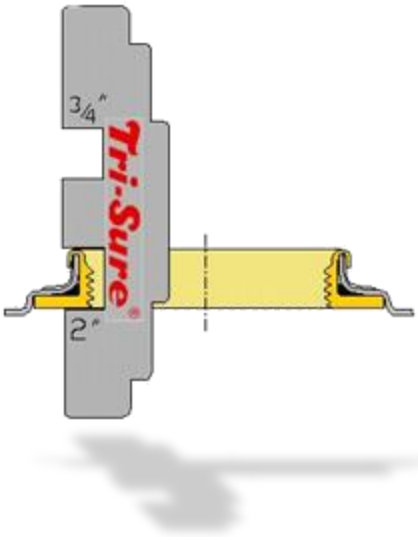
Dimensions of the neck height result from the right die parts used and the right insertion depth. Deviation of the neck height within one product may not exceed 0.3mm for inductive values of the correct neck height contact your local Tri-Sure contact.

Visual check

Check the octagonal embossing of the G2 and G3/4. The shape of the sides must be regular; any irregular deformation of the material can be caused by a damaged embossing die, or scrap particles inside the die. Check the collar of the G2 and G3/4 for cracks.

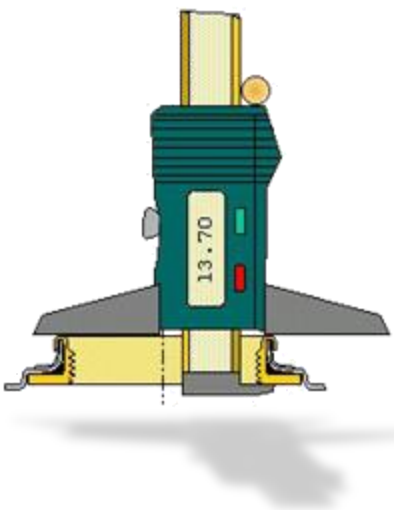
Tri-Sure® insertion – Checking the 2nd operation

Checking the height of insertion with the gauge



The height of the 2nd operation can be checked with the same Tri-Sure gauge.
The picture shows the gauge used as “go” gauge to check the height.
The gauge should just slip over the curl, all around the circumference.

Measuring the height of insertion with a depth gauge



It is recommended to measure the height with a depth gauge. The picture shows how the height is measured, using a digital depth gauge.
The height of the insertion should be measured at 4 spots.

When the difference in height, measured on one flange insertion, is more than 0.2 mm, the die parts in the 2e operation die should be checked for alignment and wear.

Visual check

Check the appearance of the curl. The flange should be curled evenly over the whole circumference. The curl should be symmetric.

Measuring the diameter of the curl

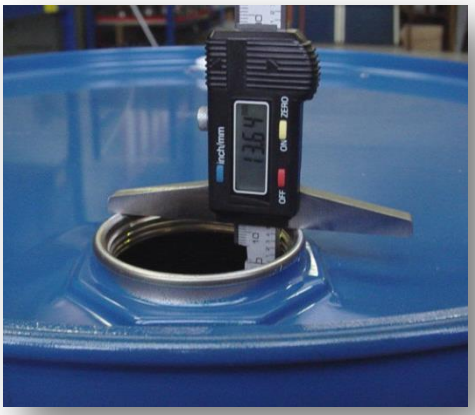
The diameter of the G3/4 and G2 curl can best be measured with the digital gauge
The diameter should be measured at two positions, 90 degrees rotated.
The difference between the two measurements must not be more than 0.2 mm.
If the difference is more, it means that the curl is not correct.

How to use the digital gauge

Measuring the height of the insertion
of the G3/4 and G2 flange

Measure at 4 spots

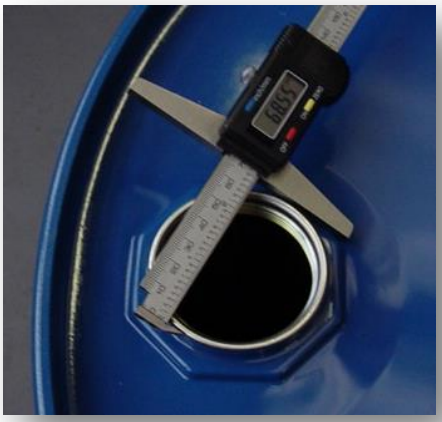
Maximum difference between
measurements <0.2mm



Measuring the curl diameter
of the G3/4 and G2 flange.

Dimensions
G3/4 = 34.1 ±0.3mm,
G2 = 68.6 ±0.3mm

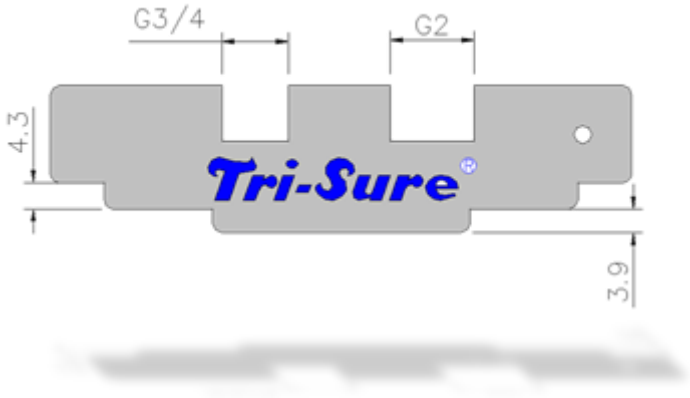
Measure at 2 positions (90° rotated)



A digital depth gauge (Vernier) is available from your local Tri-Sure Sales organization.

Vernier article code: **CLTL00121CLA0001**

Dimensions of Tri-Sure® gauges / Flange insertion height



Gauges		Gauge dimensions		2nd operation Flange insert height	
Engraving - Colour	Used for:	G3/4	G2	G3/4	G2
1990 DFT without label ring / liner **RED** **Code CLTL00477CLA0001**	DFT/TB flange Single washer Without label rings	10.6-10.7	13.4-13.5	**10.6 ±0.1**	**13.4 ±0.1**
1990 DFT / DWS **BLUE** *(or black)* **Code CLTL00120CLA0001**	DFT/TB flange 4S system or Single washer With label rings	10.9-11.0	13.7-13.8	**10.9 ±0.1**	**13.7 ±0.1**
1990DFT/DWIS 1.5 mm only **ORANGE** **Code CLTL00242CLA0001**	DFT/TB flange 4s system 1.5 mm material	11.2-11.3	14.0-14.1	**11.2 ±0.1**	**14.0 ±0.1**
Stainless steel **GREEN** **Code CLTL00480CLA0001**	Stainless steel Flanges Single washer	11.5-11.6	14.3-14.4	**11.5 ±0.1**	**14.3 ±0.1**

Note: Gauges used for DFT flanges are also suitable for TB (Thin Base) flanges.
With the 4s system the same gauge is used for insertions with- or without label rings or liners.