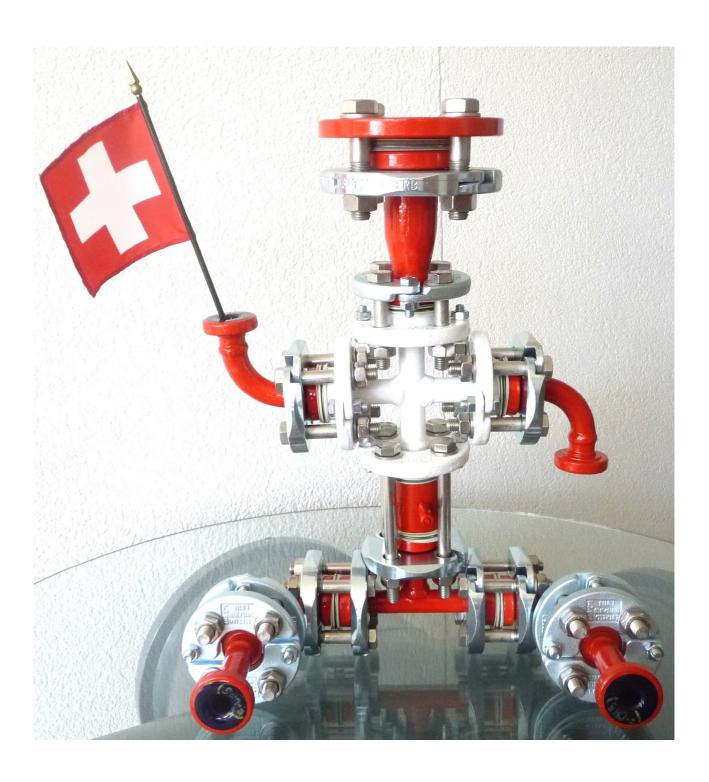
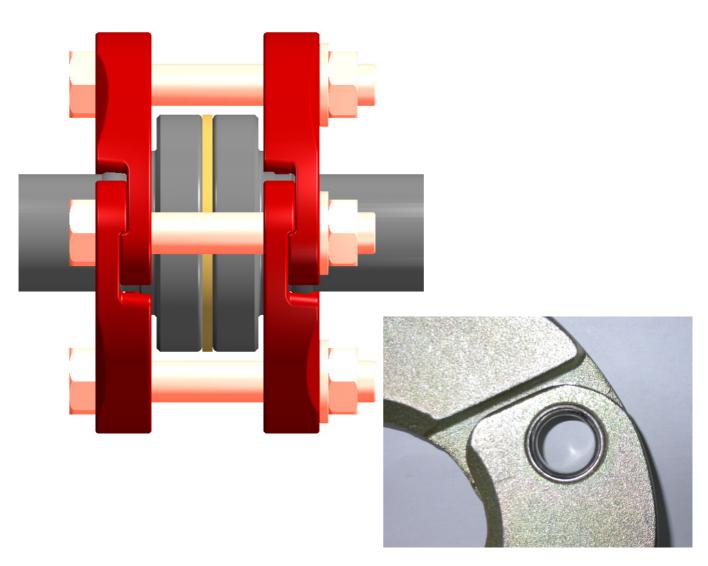
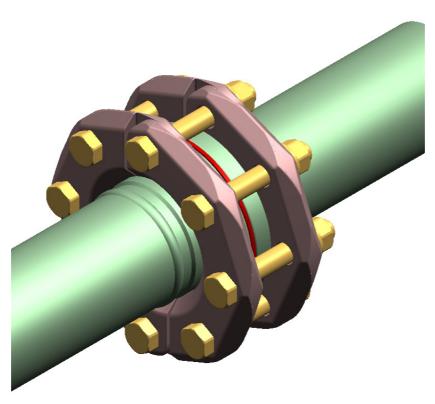


Professional Solutions in Glass Lining







Specification for using Estrella "safety split flanges"

1) Background:

The Estrella "safety split flange" was designed in conjunction with the development of its R2 (reduced void) system of glass lined steel pipe and fittings. Estrella now extends many of the benefits of its R2 sealing technology for interconnection with older generations of glass lined piping components.

2) Technical benefits.

- Sealing forces are concentrated directly behind the flange hub, instead of the perimeter, for more uniform sealing.
- Undersized hinge screws are replaced by full size bolts for greater strength.
- Improved sealing alignment
- Increased design possibilities (PN25 in sizes up to DN 100).

3) Indications for using "safety split flanges":

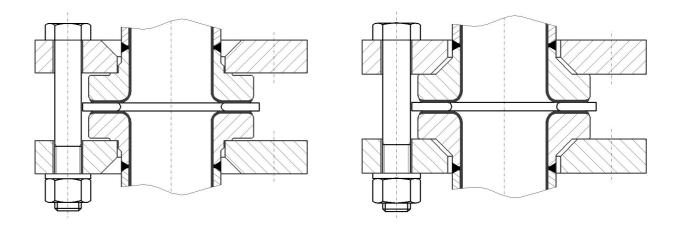
Inter-connecting Estrella 2000 piping (identified with protruding step on the backside of stub ends):

- Flanges halves are matched and fitted together.
- When fitted properly, the chamfered side of the flange I.D. is pointing away from the stub end.
- Fastener lengths need to be adjusted for increased flange thickness.
- Supports may need to be adjusted for approx. 5% increase in system weight.

Inter-connecting other types and brands of glass lined steel piping (identified by absence of step on backside of stub ends:

- For assembly of old manufacturing styles, reverse the flanges so that the chamfered side of the flange I.D. is pointing towards the backside of the stub end.

Most pieces can be assembled in this way. For a few fittings, there might be flange interference; if this is not practical for cost reasons, it is possible to continue using existing DIN 28150 flanges on old manufactured parts (as well as on new ones).



- 4) Step-by-step assembly procedure (see enclosed drawing):
 - Close the flanges together and insert the 1st connecting bolt on connecting axis
 - Insert gasket.
 - Insert remaining flange bolts.
 - Use recommended torque procedures beginning with the 2 bolts that join the halves.
 - Dismantle flanges by using this procedure in reverse order.

Estrella AG 03/2011

