EXTERNAL LOADING

Tension

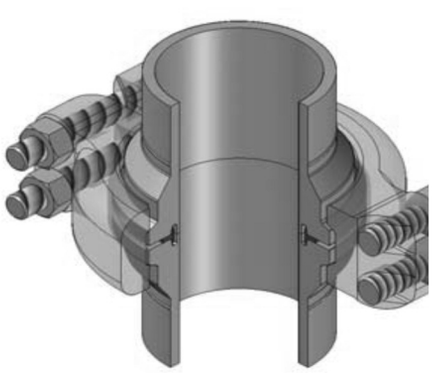
The G-LOK® connector is capable of withstanding higher tensile loads than a conventional ANSI flange.
Tensile loads can cause conventional flange faces to separate, providing a leak path across the flange face. With the pressure energised bore seal, this does not occur and the G-LOK® connector will remain leak tight.

Bending

G-LOK® connectors are designed to withstand severe bending loads without leaking or loosening.
Independent tests evaluating G-LOK® clamp connectors have shown that even under severe pressure and bending conditions, the connector does not leak and the bolting remains tight.
Increasing the bending moment to ultimate failure of the pipe has not resulted in connector leakage.
For application with high bending loads hubs can be offered with recessed seal.

Compression

As in most cases the bearing area of the sealring rib is larger than the cross section of the adjoining pipe it becomes impossible to over compress the sealring within the GLOK ® connector. For normal piping applications, the compressive limits are governed by other factors such as piping flexibility analysis or anchor loads and in practice the GLOK ® connector will always perform under the applied compressive loading.



Thermal Shock

G-LOK® connectors have been applied to both Cryogenic and high temperature service which are subject to thermal transient conditions. For very severe thermal shock (i.e.quenching), the connectors can be provided with thermal shrouds to protect the sealring lips from the full effects of the thermal shock.
The shrouded configuration also offers protection of the seal ring from erosive flow.