

G-LOK® - THE ADVANTAGES

The G-LOK® Connector is designed to offer the strength and sealing integrity of a welded joint and the versatility of a mechanical joint. It serves the same purpose as a bolted flange assembly, with the advantages of being more easily installed, lighter and smaller.

A self-energized, pressure activated connection, the G-LOK® clamp-type connector consists of four basic elements:

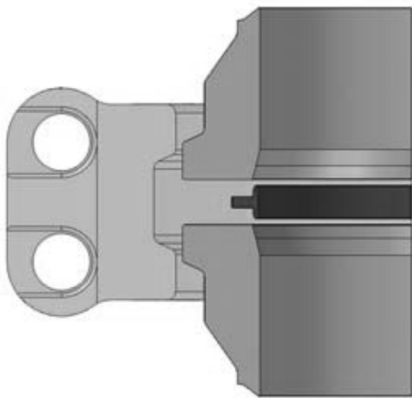
- **Hub**
- **Clamps**
- **Seal**
- **Bolting**

The hubs are usually welded to pipe; the seal is installed and the bolting is tightened on the clamps to form a pipe connector that provides superior strength and leak integrity. The G-LOK® is commonly used in service with temperatures of up to 650°C. The G-LOK® also excels in high pressure applications, where working pressure of 30,000 psi is not uncommon. The G-LOK® clamp has been designed for the optimum strength of a bolted connection.

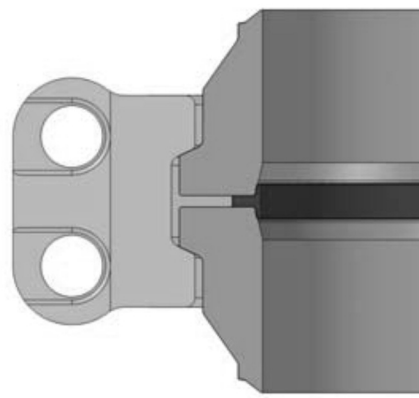
Since the bolts are perpendicular to the axis of the pipe, they do not receive direct bending and pressure loads. This system of clamping provides greater strength than ANSI or API flanges at a fraction of the seal size and weight as a result of this design. Less bolting torque is required for proper seating of the seal.

The design of the connector provides considerable stored energy in the system when compared with ANSI or API flanges. This stored energy works to provide leak resistance during thermal cycling and maintains proper bolt loading.

When properly installed, the G-LOK® will usually provide greater bending and torsional strength than the connecting pipe. The full face contact of the connector resists bending and ensures rigidity not provided by other clamp-type connectors. The pressure and temperature limitations are determined only by the materials of construction.



G-LOK® std free position



G-LOK® std made-up position