

## HOW THE G-LOK® CONNECTORS SEALS

The seal ring in the G-LOK® resembles a "T" in cross section. The base of the "T" is the rib that is held by abutting hub faces as the connection is made up. The top of the "T" forms the lips that seal against the inner surfaces of the hubs.

In the assembly of the connection, the clamps fit over the two hubs, and as they draw the hubs together the seal ring rib ensures proper seal alignment. As the hubs are drawn together by the clamp assembly, the seal ring lips deflect against the inner sealing surfaces of the hubs. This deflection elastically loads the lips of the seal ring against the inner sealing surface of the hub, forming the self-energized seal.

Internal pressure reinforces this seal, so the sealing action of the G-LOK® is both self-energized and pressure energized. G-LOK® clamp connectors are interchangeable with other connectors designed and manufactured according to the same standard.

The G-LOK® connector has been designed for many different critical service applications. Many of these involve rapid cyclic operating conditions over extended periods of time, with various combinations of both pressure and temperature. To ensure compliance with the applicable design codes with regard to these severe thermal and pressure excursions, G-LOK® utilizes state of the art engineering technology. Finite Element Analysis (FEA) allows the detailed examination of all connector elements under these varying conditions.

