



## The QCS TapAble™ Flange

The QCS TapAble™ Flange is the low-cost, pressure-containing alternative to traditional subsea valve tie-in assemblies. When utilized as a future tie-in point on a subsea pipeline, the TapAble™ Flange eliminates the up-front cost of the valve as well as the additional fabrication and installation cost of the typical valve assembly.

The flat pressure-containment area of the QCS TapAble™ Flange contains intermittent machined grooves on the OD and the ID of the flange membrane. These evenly spaced grooves create a continuous channel for the dispersal of the steel chips from the tapping operation. To further aid the tapping operation, a pre-machined center punch creates a positive alignment guide for the pilot drill during the tapping process.

To make the lateral line tie-in, the operator installs a subsea valve on the flange and taps out the flange blank using a TD Williamson hot tap machine. Previous future tie-in flanges have been manufactured from castings, which require costly, specialized welding procedures. These cast flanges can also have difficulty meeting customer project-specific C.E. requirements. This is not the case with the forged body TapAble™ Flange, which is machined from a single A694 forging.

The TapAble™ Flange is the best means available to provide a pre-planned future hot tap tie-in location on an existing line because of the following features:

- Provides pressure containment without the use of a valve
- Reduced installation cost compared to subsea valve assemblies
- Reduced protective housing/concrete mat requirements
- Eliminates long-term valve operational concerns
- Unique tapping machine – friendly design
- Forged body construction eliminates special welding procedure costs of “cast” flange alternatives
- Less costly than mechanical hot tap clamps

For more information on the QCS TapAble™ Flange, call Quality Connector Systems at 713-920-9800 or check out our website at [www.qualityconnectorsystems.com](http://www.qualityconnectorsystems.com).