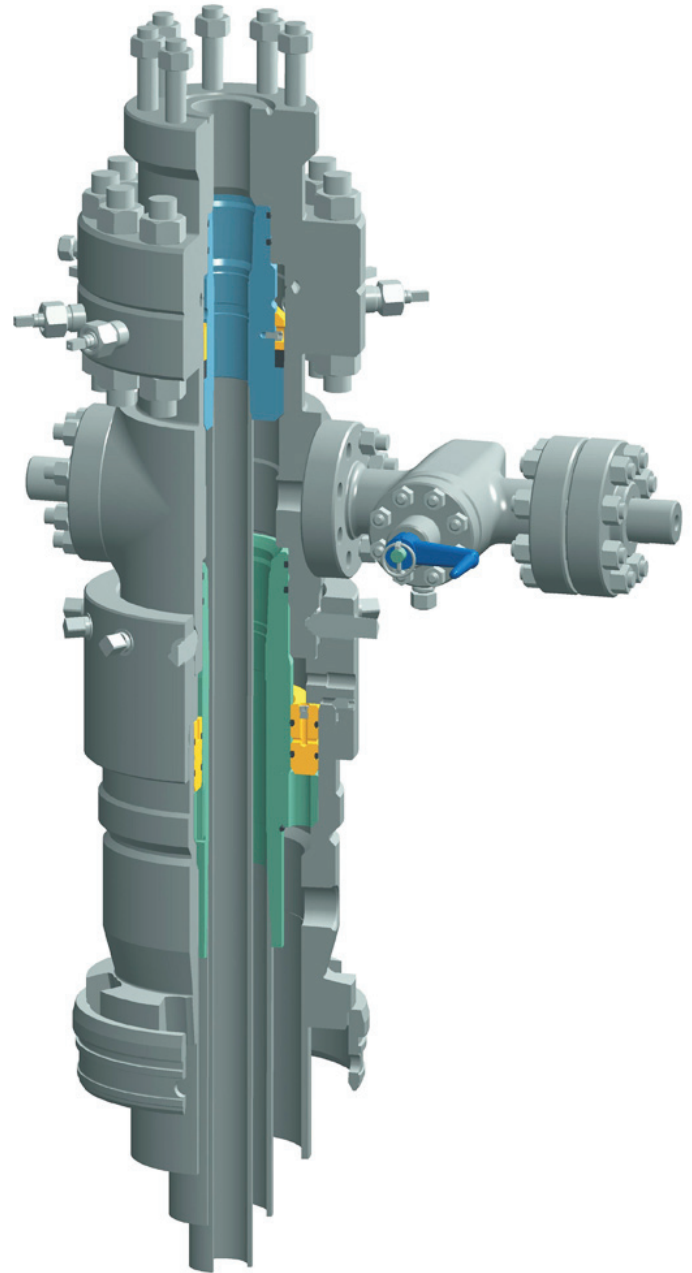




QCS

Quick Connect System

VetcoGray's Quick Connect System (QCS) wellhead is a versatile rapid makeup surface wellhead system. Dramatic rig time savings are accomplished through the reduction of flat time between casing installations. The time saving technology utilized in QCS also makes the system inherently safer for the individuals installing the wellhead in the field. Versatility also provides value to the QCS system. With ability to drill at 5,000 psi, quickly frac at 10,000 psi, and then produce at 3,000 psi the QCS system allows its user speed and flexibility. With over 300 QCS systems in worldwide service this proven wellhead design has provided VetcoGray's customers a faster and safer solution for today's surface drilling and production challenges.



Safety Features

- Reduces confined space time
- Reduces risk of injury associated with hammer wrenches
- Reduction of pinch points
- No "hot work" required

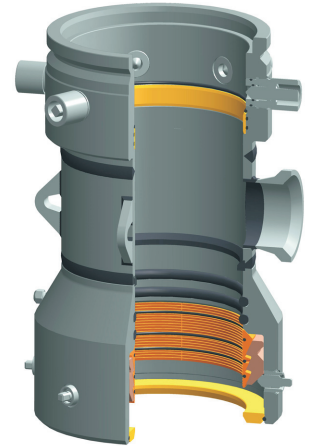


Optional Equipment

- Quick connect frac adapter
- Online or offline cementing tools
- Air drilling packoff assembly

Specifications

- Manufactured to API latest edition
- PSL 1-3
- PR2 rated
- Rated for 5,000 psi
- Available in AA-HH trim levels
- Rated for temperatures -50°F to +250°F
- Elastomeric sealing

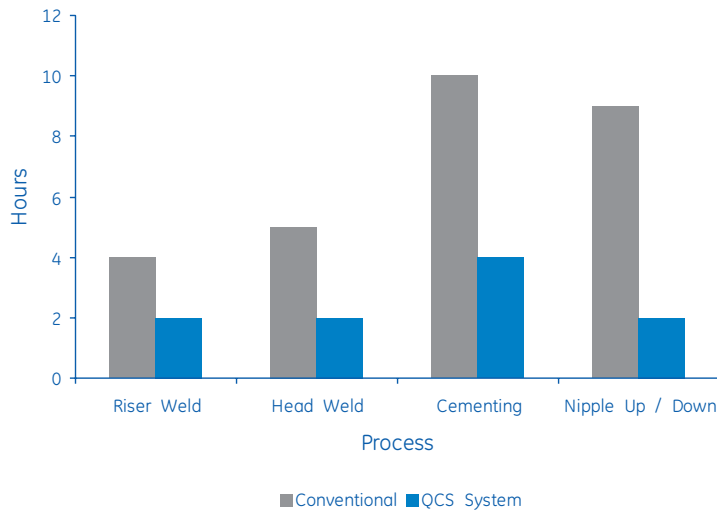


QCS Overshot Adapter

Projected Time Savings

21-33 total rig hours per well savings

- 2-4 hours welding time (conductor)
- 3-5 hours welding time (casing head)
- 8-12 hours cementing time (surface casing)
- 8-12 hours for nipple up and down procedure



GE imagination at work