

Background

A pumping company wanted to reduce the time to connect frac hoses to the frac pumps and frac missile to maximize daily effective pumping time. The company was using hammer-type unions, which took between 60 and 120 s to connect or disconnect each union, and the heavy sledge hammer required to make the connection represented a safety risk. Furthermore, because the maximum torque for tightening each connection was unknown, connections were made using a subjective perception of tightness.

Cameron, a Schlumberger company, recommended the robust 3-in clamp quick-connect system to accelerate rig-up and pump swapping during operations. The system's single-bolt setup enables setting or unsetting the clamp in a few seconds using a standard torque wrench to a predetermined torque value.

Technology

Clamp quick-connect system

Frac Hose Connect Time Reduced by 80%, West Texas

Clamp quick-connect system replaces hammer unions with a faster, safer, and stronger connection



The clamp quick-connect system connected to the frac missile. Using the clamp quick-connect system instead of traditional hammer unions for high-pressure frac hose connections slashed the average makeup time to 20 s, reducing connection time by up to 80%.