



Hydraulic Safety Clamp

Weatherford's hydraulic safety clamp installs easier and faster than conventional (manual) safety clamps, minimizing the risk of clamp slippage and pipe surface damage. The hydraulic safety clamp is controlled by a foot- or hand-actuated pump that uses standard rig air supply at 125 psi (0.862 MPa), and it supplies a grip force of 2,260 lbf at 2,000-psi (13.7-MPa) operating pressure. This grip force maintains adequate pressure on the clamp without damaging the pipe surface.

The single-acting, spring-return hydraulic safety clamp pressures up in seconds, saving significant installation time compared to conventional safety clamps. Most important, this safety clamp is completely self-contained, which improves safety and eliminates the possibility of dropping tools, such as hammers and hammer wrenches, into the wellbore.

Applications include casing and/or tubing operations, as well as bottomhole assembly (BHA) makeup and breakout. In BHA applications, the high-visibility hose that powers the hydraulic safety clamp easily disconnects to allow rotation of the BHA and rotary table.



Applications

- All types of casing and tubing operations
- BHA makeup and breakout

Features, Advantages and Benefits

- The hydraulic safety clamp is easily fitted and requires minimal handling time, which reduces personnel fatigue and saves rig time.
- This clamp is easily adaptable to all types of tubulars (2-7/8 in. through 30-1/2 in.), allowing it to be used for multiple applications.
- The manually operated needle valve maintains clamp pressure when it is necessary to disconnect the air supply hose, such as when rotating the BHA.
- Use of this safety clamp reduces the number of hand tools required around the hole and on the rotary, improving efficiency and safety while decreasing the potential for objects dropped downhole.



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Features, Advantages and Benefits (continued)

- The pressure gauge allows pressure monitoring, which reduces the possibility of crushing thin pipe.
- Weatherford's hydraulic safety clamp uses off-the-shelf parts, eliminating the need to keep specialized spare parts in inventory.

Specifications

Hose	10,000 psi (68.9 MPa) WP	High visibility
Hydraulic Ram	5.51 tn (5 t)	Single acting/Spring return
Foot Pump	Air-operated	Foot-/Hand-actuated
Needle Valve	Load holding for hose disconnection	Manually operated
Pressure Gauge	Pressure monitoring	Reduced potential for crushing thin-walled OCTG