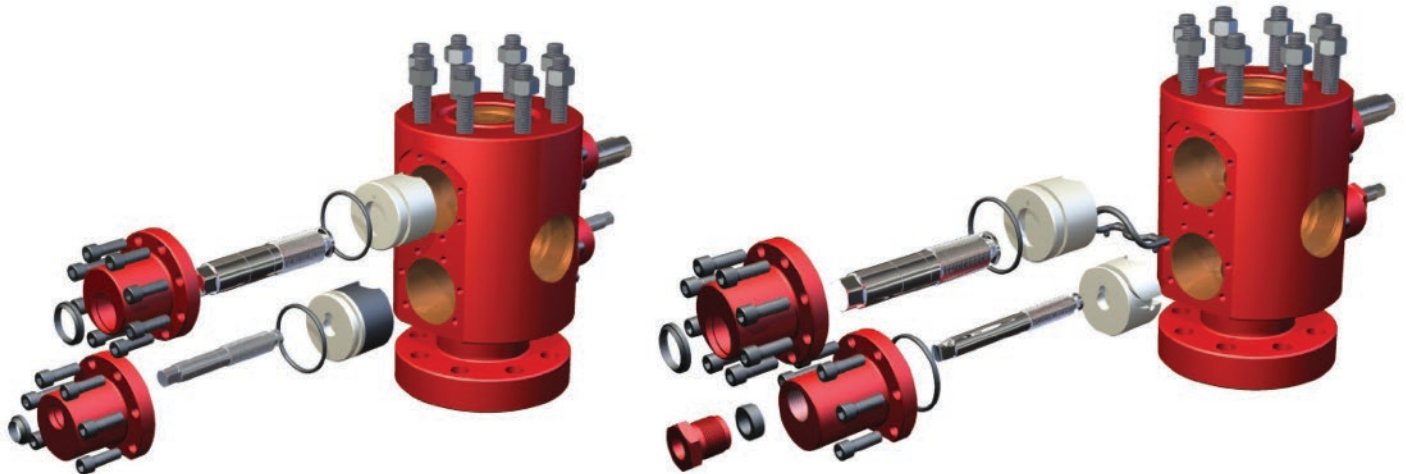




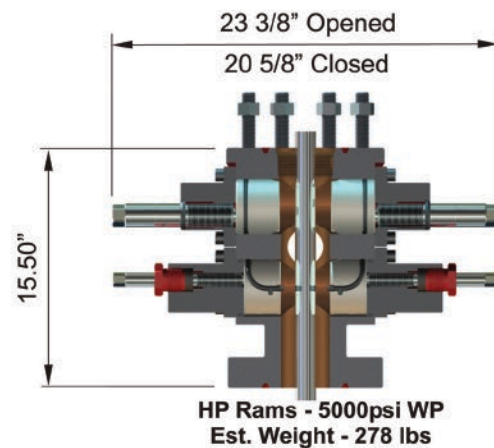
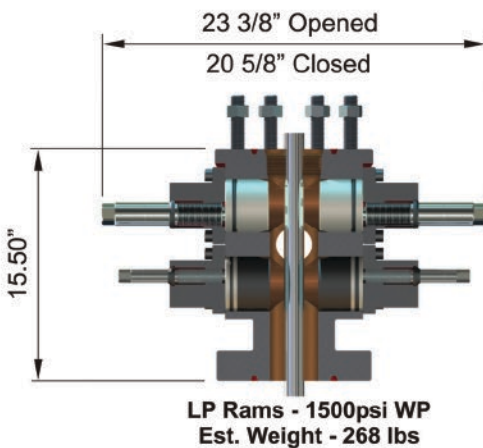
BLOWOUT PREVENTER

As part of your COMPLETE PCP SYSTEM, MANTL is proud to offer a superior solution for blowout prevention.



- Integral construction combines tubing bonnet connection, BOP and pumping tee, which reduces leak paths, assembly labor and risk of over-tightened threads
- All steel construction eliminates risk of casting porosity and reduces stack height by 50% compared to traditional assembly
- Suitable for sour, low temperature applications

- LP rams available to close on 0 - 1 1/2" diameter polish rods to 1500 psi working pressure
- HP rams available to close on specified polish rod diameters to 5000 psi working pressure
- Integrated polish rod clamp enhances safety and reduces work over costs
- Clamp rated at 25,000 lbs. polished rod weight with 800 ft-lbs. torque on clamp bolts



INTEGRAL PRODUCTION BOP WITH POLISH ROD CLAMP 3 1/8" - 3000#
TOP & BOTTOM CONNECTION WITH 3 1/2" - 8RD EUE LIFT THREAD

'CAUSE WE GIVE A S#!T

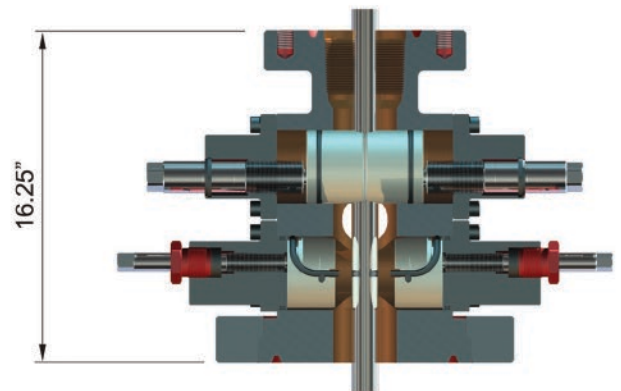
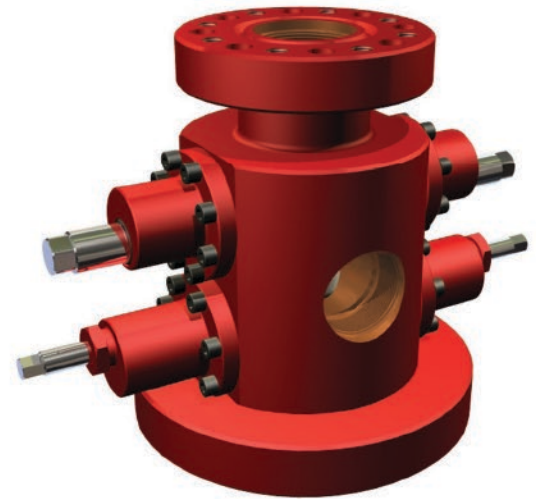


BLOWOUT PREVENTER

As part of your COMPLETE PCP SYSTEM, MANTL is proud to offer a superior solution for blowout prevention.

INTEGRAL PRODUCTION BOP WITH POLISH ROD CLAMP

- Universal top connection can be used with any drive head (studded or bolted connection)
- Bottom flange rotates to simplify field tie-in
- All steel construction eliminates casting integrity concerns
- Integrated polish rod clamp enhances safety and reduces work over costs
- Clamp rated at 25,000 lbs. polished rod weight with 800 ft-lbs. torque on clamp bolts



OPERATING PROCEDURE: OPERATING CLAMP RAM (UPPER) BOP

NOTE: The Clamp Rams do not seal around polish rod; they are used to lock out and suspend the rod string only.

- To tighten the clamp turn feed screw (10) clockwise until each Clamp Ram touches polish rod. Tighten hand tight.
- With a torque wrench apply 800 ft./lbs. torque to either feed screw (10).
- In the absence of a torque wrench it is acceptable to use a wrench and 4 foot long extension (piece of pipe) and apply 200 lbs. weight to the end of the extension to simulate 800 ft./lbs. of force.
- The clamp will now support 25,000 lbs of rod string.
- To open the clamp turn feed screw (10) counter-clockwise until each Clamp Ram stops moving. Rams are now in full open position.

'CAUSE WE GIVE A S#!T