



CHANCELLOR
A TEAM OIL TOOLS COMPANY

CEMENTED LINER ASSEMBLIES MODEL HO HYDRAULIC STAGE COLLAR

The Chancellor Model HO Hydraulic Stage Collar is a tool designed to provide a means of opening and closing a port into the liner string for the purpose of cementing up a liner string. The HO cement ports are hydraulically opened with the application of pressure and mechanically closed using cementing plugs and pressure. It is most often used when cementing combination cemented/slotted liners. The HO allows the effective delivery of cement to the upper section of the liner string with pressure tight integrity afterward.

The Stage Collar is typically combined with an ECP to seal off the annulus and a baffle plate, ball seat or reverse flapper valve to retain the cement within the liner. These are critical items for keeping the cement above the slotted liner and out of the uncemented formation below.

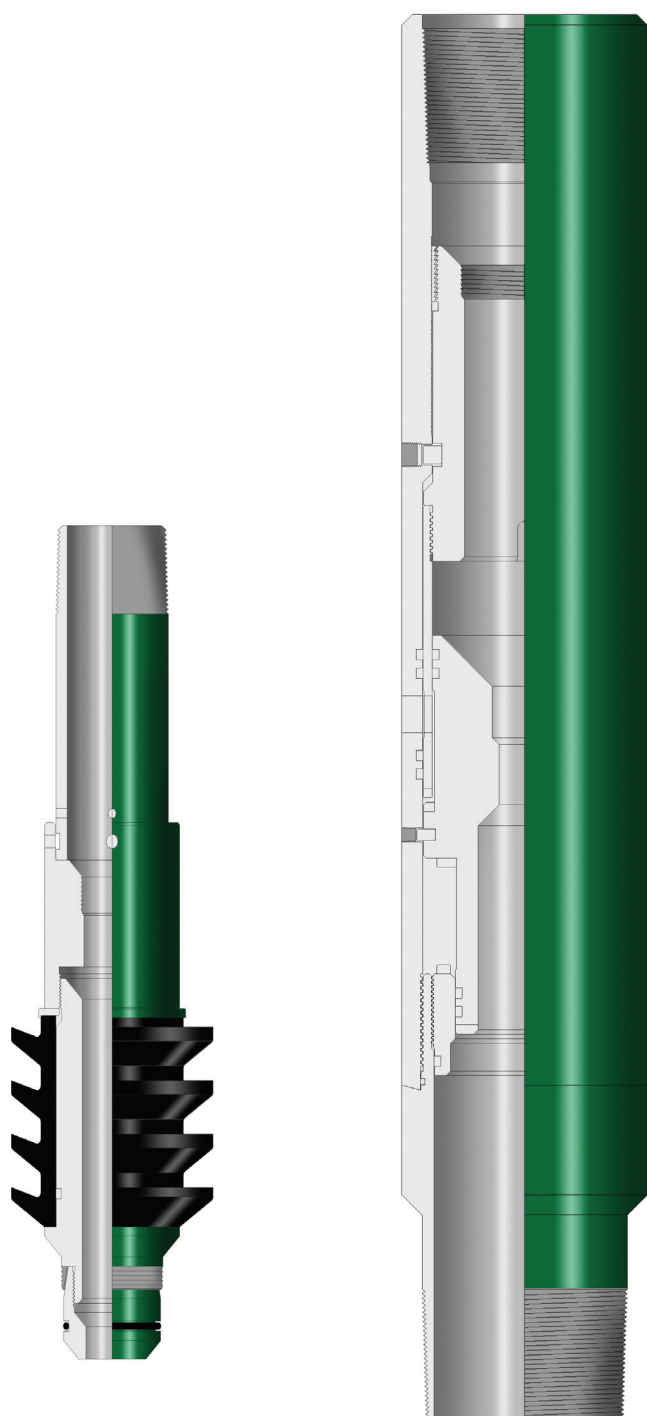
This Hydraulic Stage Collar system can be run with hydraulic or mechanical liner hangers and liner top packers above. The hydraulic opening feature eliminates the need to drop an opening plug which would be difficult or impossible to do with a standard liner hanger system in the hole on drill pipe.

The Model HO Stage Collar is designed to hydraulically open with differential pressure, however, there are a couple of features that make the HO stand out above the cementing stage collars on the market that were designed for primary cementing operations. It is imperative to get the closing sleeve shut and sealed with a stage collar used in a cemented liner assembly. The HO incorporates a much more effective body lock system to prevent the sleeve from moving up after closing in the bottom closed position or anywhere along the path of travel even if it does not close all the way. The closing Liner Wiper Plug also features a latch in and seal to provide a back up in the event the sleeve does not close.

With liner on bottom, the setting ball is dropped to land at the ball seat just below the ECP. Pump pressure is increased to set the hydraulic hanger (typically 1200-1500 psi, open and inflate the ECP (approx. 2200-2500 psi) and lastly to hydraulically open the Stage Collar (approx. 3200-3500 psi) to allow for circulating and cement operation to follow. The drill pipe dart is launched to displace the drill pipe and latch in at the Liner Wiper Plug. Displacement of liner continues with the tandem plugs landing and latching at the HO Stage Collar. 1000-1500 psi over pump pressure is sufficient to shear out and lock the closing sleeve.

All internal parts are aluminum alloy and easily drilled, and are firmly held from rotating during drilling. The port closing sleeve is positively locked in position after cementing. There are no internal restrictions after drill out.

FOR MORE INFORMATION CALL CHANCELLOR AT 661-324-2213



MODEL JM SOLID NOSE
CLOSING PLUG

MODEL HO
HYDRAULIC STAGE COLLAR