CHANCELLOR
A TEAM OIL TOOLS COMPANY

SLOTTED LINER ASSEMBLIES
DRILL-IN/CIRCULATING SHOES AND BALL SEATS

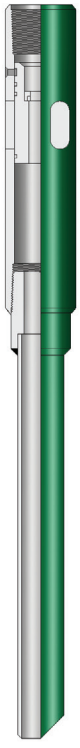
The drill-in shoe is used when drilling in a liner with a bit on bottom. Tubing is spaced out within the perforated liner with a stinger joint stabbed through the packoffs and landed just above the flapper check valve. This is to ensure proper delivery of circulating fluid to the bit. A 3" diameter dropping ball is provided to prevent a bailer or other tool from getting stuck in the packoffs.

The Chancellor Model CP Circulating Shoe is ideal for circulating soft formation fill while running liner in or changing over well bore fluids once on bottom. A bottom ported bull nose is used with optional bladed bottom to assist in the process. The liner and circulating shoe can be rotated while circulating in. A 2-3/8" or 2-7/8" stinger joint is run on the bottom of the inner tubing string and stabbed through the rubber packoffs until landing on top of flapper check valve. The tubing string is properly spaced out with pups so that when the liner top adapter/hanger and setting tools are made up to the liner top, the stinger is always stabbed in pack-off while insuring proper delivery of circulating fluid. A stinger valve can be run to provide circulating ports above the packoffs for the purpose of circulating or reversing without having to pull out the stinger. After release of setting tools with tubing string and stinger, a 3 inch diameter cast steel ball is dropped from surface to land on the pack-off to prevent tubing bailers, etc., from getting stuck in the bore. All internals can be made drillable. The 2S ball seat was designed for use with slotted or uncemented liners for the purpose of providing a port to set a hydraulic changer. The 2S ball seat is typically located at the liner top between a PCPA Packer Cup Mandrel and a Retrievable Packoff Bushing (RPB) or TBR Packoff straddling the hydraulic hanger to be set. The set port is covered by a port piston during run in to prevent inadvertent hanger setting due to high circulating pressures or surges. This is especially beneficial when running in heavy, sometimes unconditioned, muds where pressure to break circulation can exceed the standard hydraulic hanger set pressure.

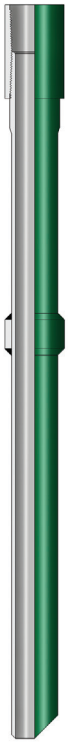
The setting ball lands on the piston to shear out at 1000 psi to expose the hanger set ports. After hanger set and with tools released, the ball seat piston shears out at 2500 psi to allow for full fluid bypass to circulate a change over after set, this prevents hydraulic lock when pulling out of the packer.

DRILL-IN SHOE

MODEL CP
CIRCULATING SHOE



MODEL CP
STINGER VALVE



TUBING STINGER

MODEL 2S

FOR MORE INFORMATION CALL CHANCELLOR AT 661-324-2213