



CHANCELLOR
A TEAM OIL TOOLS COMPANY

SETTING TOOLS

CEMENTED LINER SETTING TOOLS

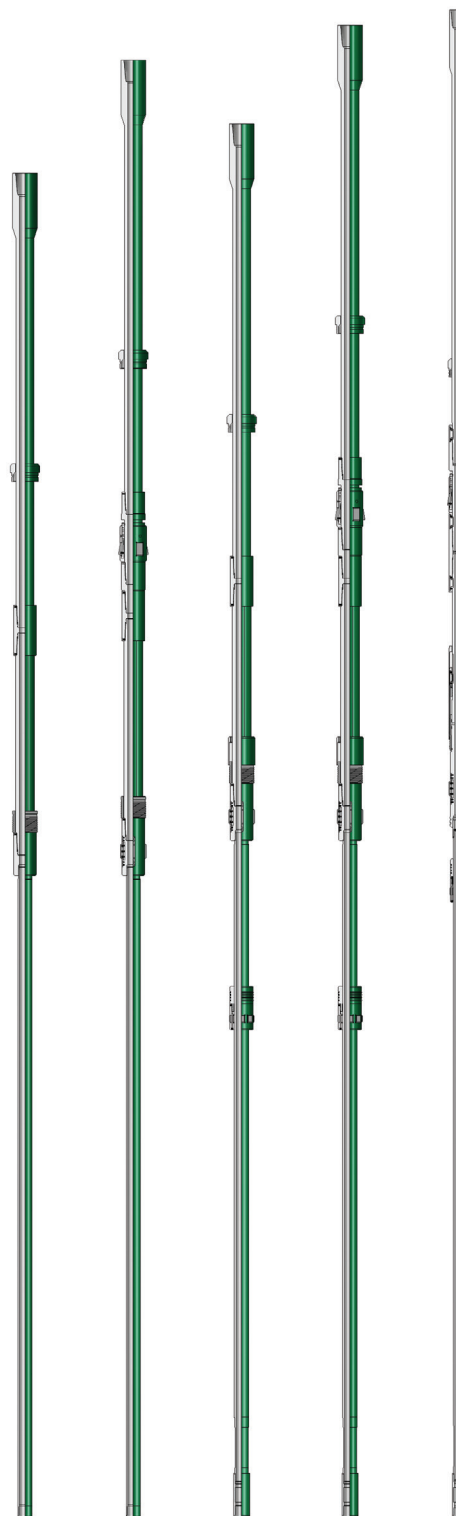
The Chancellor Cementing Setting Tools are designed for running, setting and cementing liners with Chancellor Mechanical or Hydraulic Set Liner Hangers with or without Setting Collars or Liner Top Packers. The Type A Setting Tool provides a floating nut on a two sided kelly. A lifter and junk screen is standard when running a Liner Top Tie Back Receptacle (TBR). After setting the hanger, or setting the liner on bottom, the setting tool is put in the neutral position and rotated right to release the running nut from the setting collar. The tool is then picked up and pulled out of the hole. A type B slick joint is used in combination with the drillable pack off bushing (DPB) to produce a seal between the liner and the setting tool during cement operations.

The Type B Setting Tool has all the capabilities of the Model A and also provides a Rotating Packer Setting Dog Sub (RPSDS) and is used to set liner top packers after displacing cement. The PSDS consists of spring loaded dog segments that collapse and reside in the TBR while running the liner in the hole. In this run position there is virtually no way to accidentally set the packer. After setting the hanger, cementing the liner, and releasing, the setting tool is picked up so that the PSDS clears the top of the TBR. The dog segments are now expanded and can be used to apply weight to set the liner top packer. A bearing is included so that the weight can be rotating in. This is especially beneficial where the liner top is highly deviated or horizontal liner and getting the set weight in is difficult. There is a 40,000 lbs shear indicator that is most often felt at surface for confirming that sufficient set packer weight was applied.

In addition to the Model B, the Model BR provides a Rotating Dog Sub (RDS) that mates with splines located in the setting collar. This dog sub transfers torque from the drill string, to the liner, while in tension or compression for the purpose of setting mechanical hangers, rotating liners during the cement operation, or insuring setting tool engagement during run-in.

In addition to the above, the Model D also utilizes the Retrievable Pack off Bushing (RPB) and slick joint. The RPB system is not preferred method of sealing the liner during cementing as it eliminates the upward hydraulic forces during pumping and eliminates the need for cement drill out. The Model E setting tool has all the features of the Model D including the PSDS.

The EHR hydraulic setting tool has the RPDS as well as the RPB but is features complete hydraulic liner hanger setting and hydraulic straight pull release where mechanical release is sometimes difficult or impossible as well as a secondary mechanical release back up option. The liner can be circulated and rotated in tension, compression, and neutral while running in the hole. This is most beneficial in horizontal applications.



TYPE A TYPE BR TYPE D TYPE E TYPE EHR

FOR MORE INFORMATION CALL CHANCELLOR AT 661-324-2213