

SLOTTED LINER ASSEMBLIES

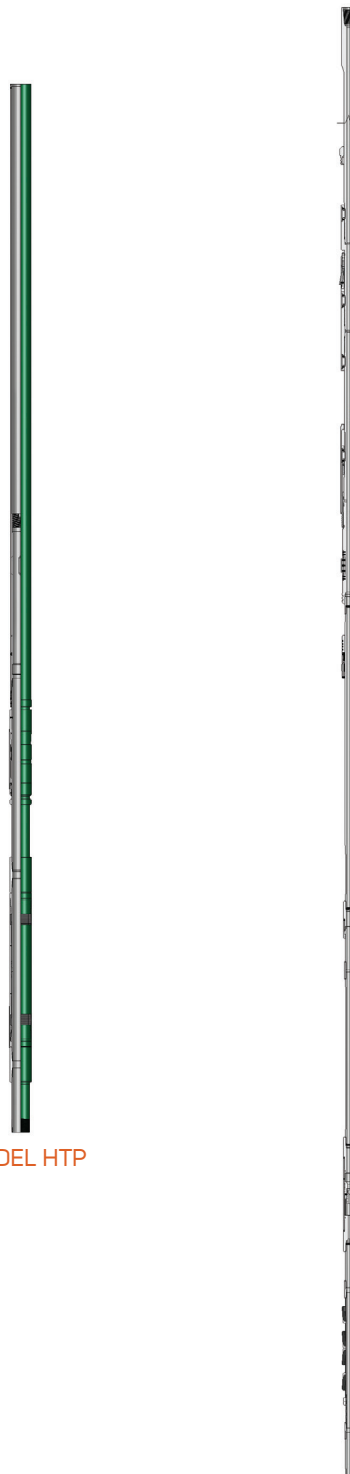
TYPE EHRSL SETTING TOOL

The Chancellor Type EHRSL Slotted Liner Setting Tool is designed for running horizontal or highly deviated slotted liners with Chancellor Hydraulic Set Liner Hangers with Liner Top Packers. The HR hydraulic setting tool features complete hydraulic liner hanger setting and hydraulic straight pull release where mechanical release is sometimes difficult or impossible. The liner can be circulated and rotated in tension, compression, and neutral while running in the hole. The system includes the 2S ball seat that offers complete isolation of the hydraulic hanger and HR setting tool during run in to allow for high circulating pressures without the risk of setting the hanger or releasing the setting tool. The Slick Joint and Retrievable Packoff Bushing (RPB) allow for packer testing after set.

After tagging bottom, the liner is picked up to circulate. A setting ball is dropped down the drill pipe and conventionally pumped to seat at the 2S Ball Seat. Pressuring up to 1200 psi opens the set ports and sets the hydraulic liner hanger. After slacking off weight to confirm hanger set, pressure is increased to 2200 psi to release the HR setting tool. This allows the setting tool to be released with straight pick up. A mechanical secondary release is available with a 1/4 turn LH rotation followed by 1/2 foot slack off. The 2S ball seat shears out at 3000-3200 psi.

The PCPA cup packer is run below the 2S ball seat and features two sets of up and down cup to isolate the hanger and setting tool against surge pressures during run in.

The Type HR Setting Tool is combined with the Rotating Packer Setting Dog Sub (RPDS) used to weight set the liner top packer after release of setting tool. The packer dog segments 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 tagging bottom and pumping a change over, with the hanger set and the setting tool released, the setting tool is picked up so that the RPDS 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. The RPDS has a journal bearing that allows the packer weight to be rotated in. This is especially beneficial in highly deviated or horizontal applications. A 40,000 lb shear indicator is provided to verify that weight was applied to the packer.



MODEL HTP

TYPE EHRSL