



HM-1
Retrievable
Packer

HM-1 Retrievable Packer

Product: HM-1 Packer

Type: Retrievable

Set: Hydraulic

Retrieve: Right-Hand Rotation or Straight Pull

The TIW HM-1 Retrievable Packer is a hydraulically set packer, suitable for high-pressure applications and sour service. The HM-1 is set by applying a differential pressure through the tubing at the packer and is held set mechanically by an opposed mechanical slip arrangement. It is a reliable, versatile packer, ideal for shallow, deviated and crooked holes or in applications where it is necessary to displace and set the packer after the well is flanged up.

The HM-1 is available with either straight-pull or optional right-hand rotation release.

Advantages

- The HM-1 is set hydraulically, held set mechanically and will hold differential pressure from either direction. It does not rely on differential pressure from below the packer to actuate the holddown slips.
- Rotational release permits tubing to be hung free or in tension to facilitate trouble-free, through-tubing service operations.
- Changes in temperature and pressure induced by treating and production operations will not prematurely unseat the HM-1 with rotational-release features.
- The HM-1 can be set after the wellhead is installed so the production zone can be washed and clean packer fluid can be spotted in the casing before the packer is set.
- The HM-1 can be supplied with a Ball Seat, P-1 Landing Sub or Wireline Seating Nipple as a temporary means of plugging the tubing below the packer during setting operations.
- The packer's large bypass area and the absence of friction blocks or springs result in smooth running in directional holes or liner.
- The hydraulic setting mechanism virtually eliminates the possibility of premature setting because the slips are held in the running position by shear pins.
- Gold Seal Packoffs prevent "cold flow." These superior packoffs feature special metal back-up rings which extrude to conform to the contour of the casing wall, securely encasing the packoff elements.

Applications

- Testing
- Isolation of single, alternate/selective zones
- Flanged-up completions
- Deviated wells
- Shallow wells
- Lower packer in multiple-string hookups

Hydraulic Setting

- Install the tubing-plugging device, such as the TIW Ball Seat Sub Assembly, P-1 Landing Sub or Wireline Landing Nipple, on the bottom of the HM-1 Packer and run in the hole.
- With the packer in position and the tubing landed in the wellhead, the tubing and casing can now be displaced and the packer set.
- Install the Tubing Blanking Plug or Setting Ball.
- Apply pressure on the setting string, slowly increasing to 1,500 psi to shear the pin and start movement of the setting piston. Gradually increase pressure in 500 psi increments until the pre-determined setting pressure is reached.
- Release pressure and remove the tubing plug, using the applicable procedures.
- Test the packer as desired.