

# DURA HYDRAULIC TUBING DRAIN (HTD)

Designed To Drain Produced Fluid In The Tubing  
Without Mechanically Manipulating The Tubing String

The Dura hydraulic tubing drain (HTD) provides a positive method of draining produced fluid from the tubing without mechanical manipulation of the tubing string. Allowing the fluid to equalize during pulling operations eliminates the additional cost and safety hazards associated with pulling a “wet string.”

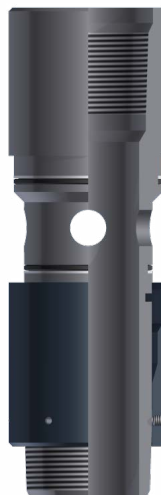
## Description and Operation

Draining the tubing is accomplished by providing additional pressure at the surface. When the over-pressure is applied, the shearing pins release and the hydraulic pressure causes a sliding sleeve to drop and expose several large flow ports. These ports allow the fluid from the tubing to drain into the annulus and equalize.

The shearing pins, which release once the over-pressure is applied (usually between 1,000 and 1,500 psig [6,900 to 10,350 kPa]) have a preset rating. By using several pins, the operator may accurately set the shearing over-pressure and activate the drain.



In Production



Actuated

## APPLICATION

- Drains produced fluid from tubing
- Is run with oversized tubing pumps to avoid pulling a wet tubing string
- When the tubing cannot be rotated to activate a drain (e.g. multi-zone completions where pack-offs are used)
- Running production packers
- Ensuring that hydraulic tubing anchors are pulled unset

## BENEFITS

- Does not require mechanical manipulation of the tubing string

## FEATURES

- Made from NACE MR0175 approved materials