THE Fill Drill

RECIPROCATING CASING LANDING TOOL

US Patent Pending

- Tapered drill bit to deflect off of obstructions
- Cleans fill on down stroke and up stroke
- Extends mechanically or hydraulically
- Eliminates the need to rotate casing
- Minimizes torque build up on casing
- Cuts Costly Rig Time

"Never Say Whoa In a Tight Spot"

THE Fill Drill

RECIPROCATING CASING LANDING TOOL

FMI Casing Landing Tool Encountering Bridge

The casing drill is reciprocated axially and reciprocated rotationally in response to an axial downhole and uphole stroking of the casing string. This reciprocating action engaging the obstruction aids in loosening and clearing the obstruction. Drilling fluids can be circulated through the casing drill for removing materials loosened by the casing drill. Drilling fluids convey the loosened materials up the annulus.

Axial movement of the mandrel, which is fixed to the casing, causes the sleeve to reciprocate one direction and then the other. Typically, a downhole stroke of 5 feet causes the sleeve to rotate in one direction and a full uphole stroke of 5 feet causes the sleeve to rotate in the other direction.

The sleeve comprises a Fill Mover Casing Bit, on the end of the outer sleeve. Upon rotation of the sleeve, the Fill Mover Casing Bit agitates the debris forming the obstruction and keeps the debris substantially suspended in the drilling fluid for removal through the annulus between the casing and the wellbore.

Accordingly, the Fill Mover Casing Bits are made from the highest quality steel and coated with tungsten carbide to increase the strength and to enhance the cutting ability of the bit.

The Fill Drill In A Partially Open Position

Fill Movers All Steel Casing Landing Tool

For Long String Production Casing

Negotiator Bit Designed For Stirring up fill, Deflecting Off Obstructions and Negotiating Ledges

Steel Body Construction With Tungsten Carbide Clusterite Cuting Faces, And Pronounced Paddles for Stirring Fill And Negotiating Obstacles

All Steel Construction

Durable Design To Maximize Stroke Length

Long Mandrel Length

Maximized Stroke Length of Approximately 4 Feet, Generating 4 Complete Bit Revolutions Per Stroke