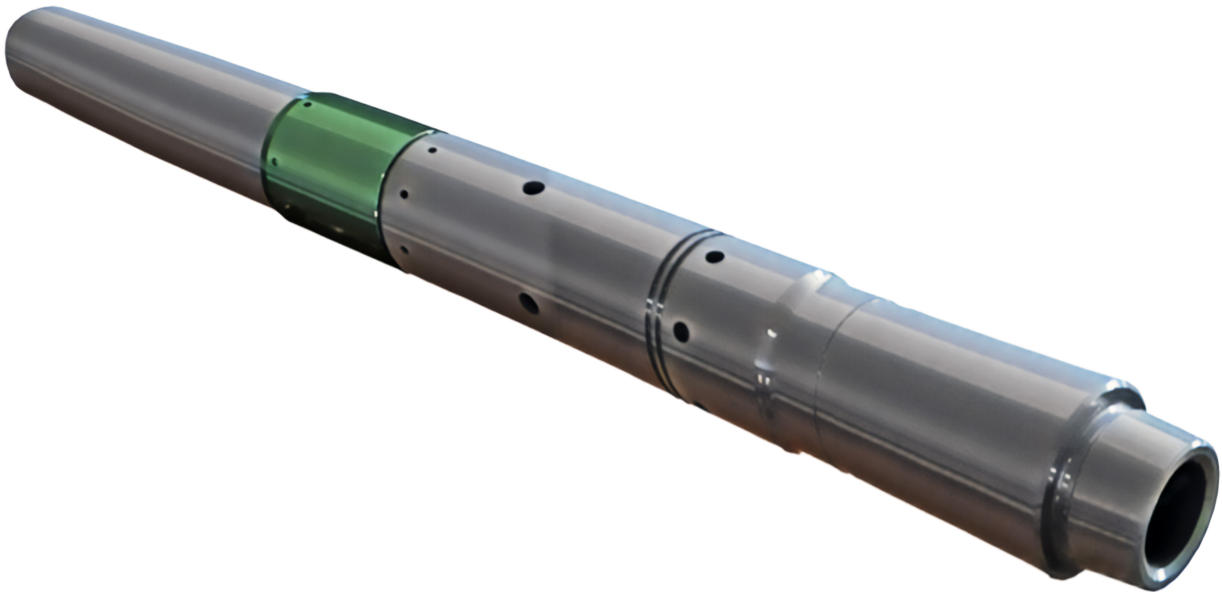


Single Opening Displacement Sub



The Single Opening Displacement Sub is a simple and effective tool designed to open communication ports between the drill pipe and the annulus to allow displacement of the well, then to reclose the ports to re-establish communication to the bit.

FEATURES

- Single piece body with no internal connections
- Ball drop activated
- Shearing pressure can be controlled by adding or removing shear stock
- Generous circulation ports

Wellbore Clean-up Technology

BENEFITS

Cost Savings

- Reduces displacement times by opening flow paths at desired points in the wellbore

Increases Well Productivity

- A properly executed wellbore clean-up reduces fine debris which can block screens and pore throats reducing well productivity

Integrity

- Available with high torque connections reducing the need for reduced strength crossovers
- Single piece mandrel with no internal connections for increased strength

Reducing Non-Productive Time

- A robust wellbore clean-up is proven to reduce non-productive time during the completion of the well
- Can be used to prevent the need to pump out of hole in the event of swabbing

APPLICATIONS

- BOP Jetting
- Running above Well bore Filter Tools
- Running above mud motors

OPERATIONAL

- Running above mud motors
When required to be operated, a ball is pumped down to the SODS Single Opening Displacement Sub in a controlled manner
- Once on seat pressure is applied to shear the tool and open the external bypass
- 100% of the flow is now diverted through the ports to allow jetting or circulating
- To close the ports and re-establish circulation to the bit, a second operating ball is pumped down to the Single Opening Displacement Sub to shear the tool closed