

## Subs Drilling Tools

### Features

- Variety of different subs available (listed below)

### Benefits

- Bespoke manufacturing to suit customer specific requirements
- First rental company worldwide to receive NS-1™ Facility Approval for drilling products
- Large inventory
- Fast response times

**Subs range from 4 3/4" to 9 1/2" OD. Below is a few of the subs in our range, other types are available and can be manufactured to suit customer specific requirements. Specifications are available upon request:**

#### Crossover Sub

A short sub assembly used to enable two components with different thread types or sizes to be connected.

#### Bit Sub

Used just above the bit and acts as a crossover between the drill collar connection and the bit connection, it also houses the float valve.

#### Float Sub

Houses a float valve, sometimes referred to as a back pressure valve. The float valve functions as a safety between the wellbore and the inside of the drillstring to prevent drilling fluids from backflowing up to the surface.

#### Drop Ball Circulating Sub

Designed to run immediately above or below the bottom hole assembly (BHA), activation is accomplished by dropping a chrome steel ball from surface and applying pressure. This causes a pin in the sub to shear allowing the sleeve to drop from its primary position to its secondary position, opening three sub ports which divert the flow to the annulus.

#### Universal Bottom Hole Orientation (UBHO) Sub

Used in a directional drilling BHA. It is often referred to as a mule shoe sub. This device is typically run directly below a drill collar and contains a landing sleeve for directional survey equipment. This sub is used to establish the "high side of the tool", which is essential for knowing the tools orientation in the wellbore.



#### Saver Sub

Used to extend the life of the drill stem component it is made up to, by taking the wear. The saver sub connection is sacrificed because it can be easily repaired or inexpensively replaced.

#### Lift Sub

Enables the safe, efficient handling of straight tubulars.

#### Bullnose Sub

Acts as a guide of sufficient linear dimensions to guide the attached component through the existing wellbore to sidetrack. The bullnose sub contains ports in the rounded end, these include ports to enable circulation of fluids through the bullnose into the wellbore.