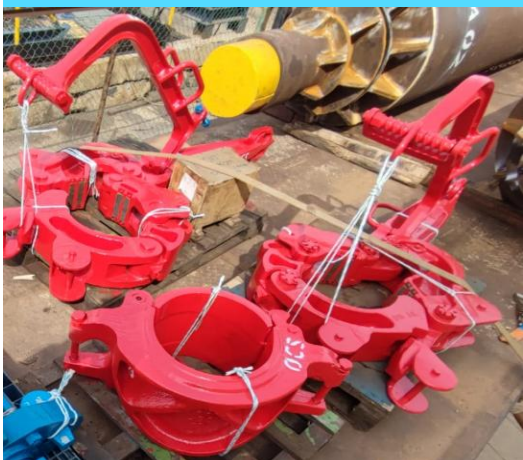




# Drilling of the Boom



Drilling can be either 'Pile top drilling' or 'drilling off the boom'. OCS drilling off the boom method uses a drilling power swivel and drill string connected to the vessel crane. Equipment includes a hydraulic power pack and hoses, a drilling power swivel, Reverse Circulation (RC) drilling string with centralizers and a drill bit and Bottom Hole Assembly (BHA). The rotating drill bit at the bottom of the drilling strings breaks up the soil plug and the cuttings are airlifted to the surface. This string rotates and uses roller cutters on the drill bit to break up the formation.

The key working principal for 'drilling off the boom' comprises of:

- Drilling assembly rigged up onto the vessel crane and lowered into the pile top.
- The Bottom hole assembly rotating bit cuts and breaks up the soil plug formation.
- Cuttings from the formation is airlifted to the surface.

Power Swivel Specification	
Model	DK 3-5 Reversed Circulation Airlift Powerswivel
Suitability	Soil Plug Removal and Pilot Hole Drilling in Hard Rock formation
For Drillpipe	NW 150
Torque	66 kNm
Rotation	9.4 to 22.4 rpm
Hydraulic Power Pack	Power & Speed : 230kW @ 1500 rpm Working Pressure 210 Bar
Power Swivel Dimension	1000 x 700 x 1200 (mm)

Accessories Specification	
Drill Pipe	15ft 13-3/8" H490
Top BHA Dimension (mm)	8300 x 1000 x 1000
Bottom BHA Dimension (mm)	6000 x 1000 x 1000
Pipe elevator Dimension	900 x 500 x 350 mm
HT100 Tongs	Type 15-3/4" Torque capacity 60,000 lb-ft (8,295 kg-m) Momentum Arm 5 ft (1.53 m)



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