



# Sandvik UDR1500

The UDR1500 MK III is a multipurpose specialized deep hole drill rig, which is highly effective in deep hole diamond coring and rotary drilling techniques. Featuring a 12-meter rod pull and mast platform the UDR1500 is highly efficient in a variety of deep hole high capacity applications.

# TECHNICAL INFORMATION ENGINE SPECIFICATION

#### **Drill Mast:**

- 12-meterrod pull capacity
- Capable of angles from vertical to 45°
- · Dual point mast pivot frame
- 1300mmmastdump
- Adjustable plugslide
- Mast top platform with finger board for rod racking
- Mast racking capacity 2,200m "N" @ 90°
- Mast racking capacity 2,000m "N" @ 60°



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# Diesel Engine:

- Cummins "M" Series
- 254kW (341 HP) @ 1800 rpm

#### Rotation Head:

- UDR Type 3000 two speed top head drive
- High low manual gear change
- Stepless speed control
- 3 137 rpm low gear, 137 1500 rpm high gear
- · Floating spindle design
- Oil jet lubricated gears and bearings

# Technical Information Engine Specification (cont.)

#### **Rotation Head Output Torque:**

- 13,030 Nm @ 3-73 rpm
- 1,370 Nm @ 1000 rpm
- 1,193 Nm @ 1500 rpm

#### **Head Traverse:**

- Hydraulic cylinder over ropes 2:1 ratio
- · Maximum speed 48.2 m/min upwards
- Maximum speed 36.2 m/min downwards
- Hydraulic rotation head rack back

Pull Down: 70 kN (15,700 lbf) Pull out: 217kN (48,700 lbf)

### Main Hoist:

- Mast top mounted, single line pull
- Maximum pull 213 kN (47,800 lbf)
- Maximum speed 137m/minute
- Failsafe brake mechanism (spring applied, hydraulic release)
- · Load sensing motor allows maximum speed for weight

#### Main Hoist Travel Limiter:

- · Slows hoist speed at a set point
- Stops winch at a further set point
- · Stops hoist plug and rods being pulled onto winch drum

#### Water Pump:

- FMC (Bean) L1118SC
- 246 l/minute @ 12,400kPa

# Rod Break Out:

- · Hydraulically powered chain tong
- Maximum torque 24,400 Nm (18,000 lbf)
- 83mm to 210mm pipe capacity
- Optional hydraulic hands free RC/Rotary rod break out tool
- Optional wireline Safe-T-Spin rod pre torque, make, break tool

# Rod Clamps & Slips Table:

- Hydraulically operated, self-energizing rod clamp
- Easy to remove jaws
- · Common jaws from 44.5mm to 177.8mm
- Drop in slips table for rod clamp
- Casing and rod slips for all popular sizes
- Standard 320mm mast bottom opening
- Optional hydraulically operated table spanner

#### Wireline Winch:

- Capacity of 2000m of 10mm wire rope
- Maximum pull 53.7 kN (bare drum)
- Maximum speed 395m/minute (full drum)

#### **Hydraulics:**

- Highest quality axial and radial piston pumps and motors Five main open loop hydraulic circuits
- Full flow 10 micron
- · Beta rated return oil filtration
- · Larger than average hoses and control valves

### Rod Whip Guard:

- Hydraulically operated
- Retracts automatically
- Eliminates excessive rod whipping when high speed coring

#### Rod Spin Guard:

- Cages off the rods from the operator
- · Hydraulically interlocked with rotation
- Reduces rotation speed to 100 rpm when cage is opened

### Depth Capacities

Diamond Coring	<ul> <li>NRQ – 2780m</li> <li>CHD76 – 2600m</li> <li>HRQ – 1848m</li> <li>CHD101 – 1680m</li> </ul>
Rotary Down Hole	3-1/2" Rod - 950m x 6- 1/2" hole



