# **TECHNICAL DATA**

# TI-150MMR - 150 mt Hydraulic work over Rig

TI-150MMR is our latest generation monocylinder rig, optimised for workover and geothermal drilling applications to 2000 meter MD, with hoisting capacity of 150 mt and pushing load of 30 mt.

We have incorporated our latest hoisting technologies and advanced systems such as enhanced energy recovery. It has been specially thought for clever logistic, as easy to move and ready to operate. Footprint has been kept to its minimum.

Single man operation, with enhanced telemetry and automation providing reliable performances.

Our optimised horizontal racking system, catwalk and roughneck allow the rig for hands free operation handling drillpipe, completion tubing and casing, in a safe and very efficient manner.

TI-150MMR rig has the capacity to adapt to a large scale of drilling locations, especially in urban area where drillpads are usually harder to access. Loads have been optimised to be easily transportable without any additional permit requirement.





#### **GENERAL**

Manufacturer: Herrenknecht Vertical GmbH Hook Load: 150 mt (330.000lbs) Drilling depth: 2,000m (6,560ft) Drillpad size: 30 x 50 m (1500m²) Load quantity: 22 (Rig Component Only) Noise level: Max. 50 dB(A) @ 200m

MAST

Manufacturer: Herrenknecht Vertical GmbH Type: U Shaped, Telescopic Deployed: 32,5 m (from ground) Hoisting Capacity: 560kW (750hp)

**SUBSTRUCTURE** 

Manufacturer: Herrenknecht Vertical GmbH

Type: box on box

Height of drillfloor: 6.2 m (5.7 m below rotary) Rotary capacity: 150 mt (330.000lbs) Rotary opening: 27-1/2" (Auxiliary Rotary)

Rigfloor dimensions: 5 m x 7.5 m

BOP handling: 45 mt (Handling Frame)

HOISTING SYSTEM

Manufacturer: Herrenknecht Vertical GmbH Type: Multistage Monocylinder Rated capacity: 150 mt (330,000lbs) Push capacity: 30 mt (65.000lbs)

Hoisting speed: 0.7 m/s

Stroke: 17.5 m, suitable to handle range III drillpipes

Tripping speed: approx. 360 m/h

**TOP DRIVE** 

Manufacturer: Herrenknecht Vertical GmbH Type / Model: Hydraulic / TD H 150-500 Load capacity: 135mt (33.000lbs) Power Rating: 372kW (500hp)

Output Torque: 30,000Nm (22,130ft-lbs) @ 90rpm

IRON ROUGHNECK

Manufacturer: McCoy

Type / Model: Hydraulic / We TORQ 100

Make-up / Brake-out: 85,000 Nm / 115,000 Nm (65,000 ft-lb / 85,000 ft-lb)

Tubular range: 2 3/4" - 8 3/4"

Manufacturer: Herrenknecht Vertical GmbH Type / Model: Hydraulic / DT 27.5-175 Size: 700mm (27 1/2") Load Rating: 150 mt (330.000lbs)

#### **POWER GENERATION**

Power supply: Diesel or Grid

Engine / Generator type: 2 x 980 KW/1310 hp 3512B Caterpillar

Emergency engine type: optiona

Hydraulic power unit: Herrenknecht Vertical GmbH, 2 x 400 kW / 536 hp electrical motors

**HIGH PRESSURE MUD SYSTEM** 

Type: 2 x TSP 80-120 Schäffer Urbach (3rd Optional)

Power rating: 2 x 800 KW/1000 hp Pressure rating: 5000 psi (350 bar)

### LOW PRESSURE MUD SYSTEM

Manufacturer: Herrenknecht Vertical GmbH Active System: 50 m3 (2 x 20m3 + 10m3)

Separation Tank: 30 m3

Mixing / Processing Tank: 75 m3 (3 x 20m3 + 10m3)

Reserve Tank: 25 m3 (1 x 25m3)

Shale Shaker (Brand/Type): 2 x Mongoose Pro + 1 x Mongoose Pro

Mudcleaner 8T4, 3x12

Shaker Net (API) screen: 2 x 2 m<sup>2</sup> + 1 x 2 m<sup>2</sup>

Shaker Capacity: 2 x 2,500 l/min + 1 x 2,500 l/min @ 1.44 SG / **API 120** 

## WELL CONTROL EQUIPMENT

BOP: 13-5/8 3K Annular

13-5/8 5K Double with Super Shear, 13-5/8 5K

Choke and Kill Manifold: 3" - 5K Manifold (API 16C)

### ADDITIONAL FFATURES

Classification: CE + Zoning according to BVEG

API for specific equipment

Max Weight per Lift: 45 mt