

## **2012 Massenza MI4**

### **VMD754IE3 RIG DECK ENGINE:**

VM Diesel make, model D 754 IE3, diesel, super-charged, 4 cylinders in line, 4 stroke, direct injection, water-cooled, Bore x stroke 94 x 107, Total displacement cm 3000, Rpm 2600, Max power Hp/kW 95 (70). In conformity with EU's regulation EPA 2004/26/EC- STAGE III A.

### **CRAWLER AND DRILLING RIG RADIO REMOTE CONTROL:**

Radio remote control that controls the whole drilling rig plus the crawler complete of:

- Transmission unit with proportional joysticks, with double speed functions, on-off switches and emergency stop.
- Receiving unit.
- 2 rechargeable batteries.
- Battery charger.

### **MAST SUPPORT UPRIGHT:**

Made out of electrically welded high quality steel, hydraulic cylinder for the lifting & lowering of the mast and a hydraulic cylinder for the vertical traverse of the mast (stroke 1,25 m).

### **MAST for 3 m DRILL PIPES:**

Box type construction, made out of electrically welded high quality steel.

Treated steel guides are applied to the mast for the rotary head power carriage (stroke 3.71 m). The crown block and hydraulic clamp can both be easily removed.

Capacity 45 kN

Height 5.5 m

### **PULL-DOWN SYSTEM:**

Hydraulically powered device by means of geared motor and heavy-duty high resistance chain.

Hydraulically adjustable feed system of battery weight and pressure thrust on drill string.

Up and down speed max 30 m/min

Pull-up max 45 kN

Pull-down max 45 kN

### **TOP OF MAST (Crown block):**

With one sheave (Ø 170 mm)

### **ROTARY HEAD POWER CARRIAGE:**

Made entirely out of high quality steel, complete with hydraulic device for side-parking of rotary head, stroke 460 mm.

### **HOSES CHAIN SUPPORT:**

Hoses chain support mounted on the mast and fixed on the sliding.

### **HANDLING WINCH:**

Hydraulically powered by hydraulic motor and rig's hydraulic circuit. Up and down control.

Complete with 15 m of steel cable Øe. 8 mm.

Direct pull max 13 kN

### **MASSENZA DOUBLE HYDRAULIC ROUGHNECK model MS225:**

Equipment for guiding, blocking, screwing, unscrewing of drill pipes, bits and casing. High quality steel construction. Powered by n°5 hydraulic cylinders.

Diam. max passage 225 mm

Diam. min clamping 50 mm

Diam. max clamping 205 mm

Force max clamping 108 kN

Torque min unscrewing 23500 Nm

#### CASING EXTRACTOR:

Hydraulic cylinder mounted under the mast.

Max pull 9.6 tons

Stroke 254 mm

#### SUPPORT FOR ROTARY HEAD TILTING models TM:

Support with tilting of the rotary head with hydraulic cylinders, inclination 80° +/-2°.

#### ROTARY HEAD MASSENZA model TM2C3:

Steel case, pinion-crown transmission, alloy treated steel shafts and gears mounted on bearings, oil-bath lubrication and 4-speed gear box. Powered by hydraulic motors. Dragging head under part, floating type, with shock absorber incorporated, i.d. 35 mm

1° torque 4200 Nm (speed 0 - 80 Rpm)

2° torque 2100 Nm (speed 0 - 160 Rpm)

3° torque 1680 Nm (speed 0 - 200 Rpm)

4° torque 840 Nm (speed 0 - 400 Rpm)

#### SWIVEL HEAD model TAW150:

ONLY FOR TM2C, TM2C1 & TM2C2

Swivel head for direct circulation Øi. 1" ½ (30 mm).

#### RUBBER CRAWLER UNDERCARRIAGE:

Tracked crawler unit complete with hydraulic circuit of translation and controls on the portable unit.

Crawler width 250 mm

Total width 1300 mm

Length 1900 mm

Speed 2 Km/h

Pressure 0,50 kg/cm<sup>2</sup>

#### OPERATOR'S PROTECTIVE GUARD (UK Style):

Mounted on the base of the mast, manual opening and movement control with a gas spring, complete with end of line switch with blockage of head rotation when the guard is open.

Max height from ground 2.0 m

Min height from ground 0.5 m

#### MUD PIPES VALVE OPENER CYLINDER:

Hydraulic cylinder mounted on the mud pipes to open the valve regulating the air/mud flow operated by a lever in the control panel.