**EMI 400 HP 250 TON**

**SPECIFICATIONS:**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EMI 400 HP 250 TON</strong> (with a 250 ton integrated swivel)</td>
<td></td>
</tr>
<tr>
<td>Rated Capacity</td>
<td>250 ton</td>
</tr>
<tr>
<td>Rated Power</td>
<td>298 kW</td>
</tr>
<tr>
<td>Weight</td>
<td>13,650 lbs.</td>
</tr>
<tr>
<td>Operating Length (including 9 ft. links &amp; elevators)</td>
<td>253 in. 6.426 mm</td>
</tr>
<tr>
<td>Width</td>
<td>44.5 in. 1.130 mm</td>
</tr>
<tr>
<td>Max. Continuous Drill Torque</td>
<td>21,000 ft-lb. 2,847 daN-m</td>
</tr>
<tr>
<td>Make-up / Breakout Torque</td>
<td>32,000 ft-lb. 4,339 daN-m</td>
</tr>
<tr>
<td>Max Speed</td>
<td>200 rpm</td>
</tr>
<tr>
<td>Quill ID</td>
<td>2.5 in. 63.5 mm</td>
</tr>
<tr>
<td>Quill Connection</td>
<td>NC50 NC50</td>
</tr>
</tbody>
</table>

**PERFORMANCE CURVE:**

- **Theoretical Torque vs. Speed**

- **10.96 : 1 Gear Ratio**

**A full-featured electric top drive for small-mast applications.**

The EMI 400 top drive system is the most versatile offering in TESCO’s electric top drive line.

**Designed for use on offshore and land based drilling rigs, the EMI 400 provides the performance and pipe handling features required for drilling and workover applications.**

The EMI 400 employs an AC induction motor and drive system.

- The EMI 400 top drive system is the most versatile offering in TESCO’s electric top drive line.
- The EMI 400 provides the performance and pipe handling features required for drilling and workover applications.

**Value Added Operational Benefits**

- The complete system including the top drive, torque system, and optional VFD building can be installed in less than one day. Minimal rig modifications are necessary.
- The EMI 400 is available with an optional genset. The drive can be independently packaged as a cabinet or building. The top drive can also be easily integrated with most existing drive configurations.
- The EMI 400 offers all critical pipe-handling functions including elevator link-tilt, 137.2 mm (54 in.) extend/retract (for making mousehole connections), and 360° pipe handler rotation. The grabber will accommodate tool joints from 76.2 mm (3 in.) to 222.25 mm (8 3/4 in.) OD.
- The EMI 400 top drive’s unique design integrates the swivel, gearbox and load frame resulting in a very compact unit but maintains the serviceability expected from a TESCO top drive.
- The EMI 400 system incorporates programmable logic control. PLC ensures flawless communication between the driller’s panel and the drive system. The PLC system optimizes efficiency and provides important safety interlocks.
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- The EMI 400 package includes a customizable torque arrest system. The track/torque bushing configuration is simple to install and requires minimal maintenance. A mud saver/safety valve is incorporated into the system design.
- The entire EMI 400 top drive can be transported in three standard 5.08 m (20 ft.) sea containers and the top drive may be transportable in the mast for quick rig up.
EMI 400 HP 250 TON

SPECIFICATIONS:

EMI 400HP 250 TON (with a 250 ton integrated swivel)

Rated Capacity: 250 ton / 227 tonne
Rated Power: 400 hp / 298 kW
Weight: 13,650 lbs / 6,204 kg
Operating Length (including 9 ft. links & elevators): 253 in / 6,426 mm
Width: 44.5 in / 1,130 mm
Max. Continuous Drill Torque: 21,000 ft-lb / 2,847 daN-m
Make-up / Breakout Torque: 32,000 ft-lb / 4,339 daN-m
Max Speed: 200 rpm / 200 rpm
Quill ID: 2.5 in / 63.5 mm
Quill Connection: NC50 / NC50

PERFORMANCE CURVE:

Theoretical Torque vs. Speed

EMIS400 Top Drive

10.96 : 1 Gear Ratio

Drill Pipe RPM

Drill Pipe Torque (ft.-lbs. x 1000)

Breakout

Inside Of Swivel Ball

253 in. / 6,426 mm

9 ft. Links

230 in. / 5,842 mm

Top Of Tool Joint

9.163 in. / 232.9 mm

54.125 in. / 1,372.9 mm

68.125 in. / 1,730 mm

19.135 in. / 485.9 mm

38.6 in. / 981 mm

22.5 in. / 571.5 mm

3.8125 in. / 96.8 mm

1.375 in. / 35 mm

EMI 400 HP 250 TON

A full-featured electric top drive for small-mast applications.

The EMI 400 top drive system is the most versatile offering in TESCO's electric top drive line.

Designed for use on offshore and land based drilling rigs, the EMI 400 provides the performance and pipe handling features required for drilling and workover applications.

The EMI 400 employs an AC induction motor and drive system.

The EMI 400 can be operated from a self-contained generator, or can be connected directly to the rig's AC Bus (600 VAC, 50 or 60 Hz). The EMI 400 is capable of producing 298 kW (400 HP).

Value Added Operational Benefits

- The complete system including the top drive, torque system, and optional VFD building can be installed in less than one day. Minimal rig modifications are necessary.
- The EMI 400 is available with an optional genset. The drive can be independently packaged as a cabinet or building. The top drive can also be easily integrated with most existing drive configurations.
- The EMI 400 offers all critical pipe-handling functions including elevator link-tilt, 137.2 mm (54 in.) extend/retract (for making mousehole connections), and 360° pipe handler rotation. The grabber will accommodate tool joints from 76.2 mm (3 in.) to 222.25 mm (8 3/4 in.) OD.
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