

# TORSION TESTING MACHINE



REFERENCE: EM400

Torsion testing machine with capacity +/- 600 Nm with electromechanical drive. The rotation speed is variable between 0.1 rad / min and 250 rad / min. a mobile doll mounted on guides with a locking device makes it possible to test specimens with lengths up to 1000 mm. The digital analog interface implanted in the testing machine and the software associated with a PC constitute an integrated set of controlled driving, acquisition, analysis and data processing. The torsion testing machine can receive specimens or pieces of very different sizes. The tests can be performed at fixed or variable speeds, continuous or cycled, in torque control or speed.

Non contractual photo

SERVICE:

**DIMENSIONS: 2265 X 700 X 700** 

WEIGHT: 280KG

## **Educational Objectives:**

- Bar torsion tests, transmission devices (cord, clutch, etc.)
- Fatigue tests in alternating torsion.

### **Technical specifications:**

#### The torsion tester, EM400, has the following main characteristics

#### Horizontal machine mounted on a box frame comprising:

- An electromechanical drive assembly

- A mobile doll mounted on guides with locking device

Maximum torque: ± 600 Nm

Distance between trays: adjustable from 0 to 1000 mm

Shaft height: 300 mm

Fixing of the specimens: grooved plates of diameter 300 mm and cone

2 strain gauge torque meters, one with a static capacity of 600 Nm and

the other with 60 Nm, class 0.5

Rotation speed: 0.1 rd / min at 250 rd / min (other speed range on request)

Linear displacement sensor for measuring the movement of the

tailstock: type LVDT; stroke ± 5 mm

Incremental angle sensor: precision 0.002 rd

#### Control, acquisition and data processing set:

- Control of all functions directly by the micro computer
- Driving in couple or on the move
- Continuous and alternating torsional test
- Creep and relaxation test.

The EM400 Torsion Test Machine requires the use of a PC-compatible micro computer and a printer not included. It is delivered with welded chassis table.