

### **DIDACTIC MACHINES**

# Universal Testing Machine for Material RP25ATF

#### Didactic testing machines for materials characterization





## RP25ATF

#### Didactic testing machines for materials characterization



- Universal: for tensile, flexural, compression, hardness, stamping, shearing tests
- **Multi-purpose**: supplied with multiple fixtures: flexural, compression, tensile ...
- Rigid: the frame is built to withstand the maximum load
- Ergonomics : machine mounted on a wheeled storage cabinet
- Complete: supplied with a set of testing specimens
- Low maintenance: electromechanical technology and hight quality components

#### Specifications :

- Sturdy two-column frame mounted on wheeled storage cabinet (easy to move)
- Distance between columns: 310 mm
- Adjustable upper crossbeam
- · Rigid coupling: motor, reduction gear and ball screw
- Vertical daylight under transducer: 400 mm
- Load cell: Capacity 25 kN, connected via USB (resolution ~1N, accuracy 0.5%)
- Displacement transducer: stroke 300 mm, resolution 10 µm, connected via USB
- Quick-release interface for easy bearings change out
- Force or displacement under servo control during tests
- Adjustable speed from 12 mm/min to 170 mm/min
- Stroke: 300 mm
- Test and analysis under software control
- Safety limit switches (high and low)
- High resolution: 65,000 points
- Safety enclosure made of makrolon
- Dimensions: 1860 x 990 x 700 mm
- Power 800 W
- Power supply 230V + Ground
- Weight: 290 kg



#### **Example of possible attachments**

#### A) FLEXURAL TEST:

- 3 points, adjustable from 30 to 330mm, roller diameter 10mm
- 4 points, adjustable from 30 to 330mm, roller diameter 10mm







#### B) TENSILE TEST 25 KN:

- · Manual grips
- Grip jaws for round or flat specimens from 0 to 13 mm

OPTION: TENSILE TEST 10 KN
• Parallel grips and grip jaws





#### C) COMPRESSION TEST:

- · Compression platen diameter 96mm, HRC 58
- ·Upper platen mounted on ball-joint





#### D) SHEARING TEST:

• Fixtures for double or single shear test (for use with compression test fixture), round samples Ø4 and Ø6





#### E) STAMPING TEST:

• Supplied with a Ø10mm stamp and sample clamp Also equipped with an indenter.





#### F) HARDNESS TEST:

- Brinell hardness test HBS 5/750
- ·Ball indenter diameter: 5 mm
- Testing table on the compression plate
- Mark measurement by Brinell Microscope (x40)



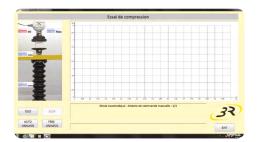


#### Software

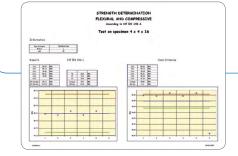
Specimens for each type of test: Flexion, compression, shearing,

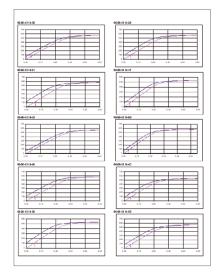
hardness and stamping tests

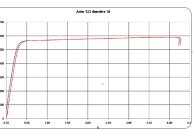
- QuantX (Test control Software)
- · Macros for creating reports with Microsoft™ Excel®
- Test results imported directly from QuantX software
- · Ablity to import directly into your own Excel® sheets
- Draws graphs (load / time, ...)
- · Test report examples provided
- · User-friendly modification of current test reports models

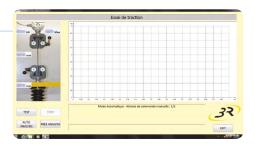


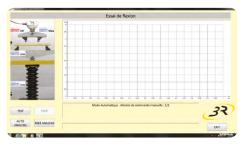
- Microsoft Office 2010 Professional Suite
- · MS Word®
- · MS Excel® for creating reports

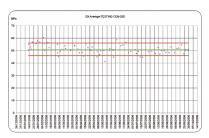


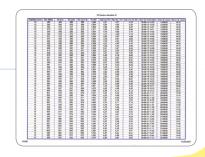












#### Extensometer

The range of extensometers covers the needs of deformation measurement or measurement of displacement following your testing standards.

Accuracy and stroke may be defined and adapted to fit your specific need and your products.

extensometers Available:

- Contact (Cilp-on or automatic)
- Laser
- Video
- High temperature





#### **RECHERCHES & REALISATIONS REMY sas**

1, Rue Joseph Marie Jacquard • ZI Nord • BP 80631 82006 MONTAUBAN Cedex • FRANCE

Tél: +33 (0)5.63.66.52.80 • Fax: +33 (0)5.63.66.52.71



