PROETI

# MULTITECH 50

## Precision and versatility in material testing

This machine represents the ideal solution for large laboratories conducting tests that require displacement control. Multitech features a rigid two-column structure with an adjustable upper crosshead, allowing for multiple height configurations. It is equipped with an automatic force or displacement/deformation control system, enabling the execution of the following tests:

- **Electronically Controlled Load:**
  Powered by a **mechanically operated jack driven** by a brushless motor with a **closed-loop system** and optical encoder.

- **Intelligent Protection:**
  The load piston includes limit switches to prevent accidental operations.

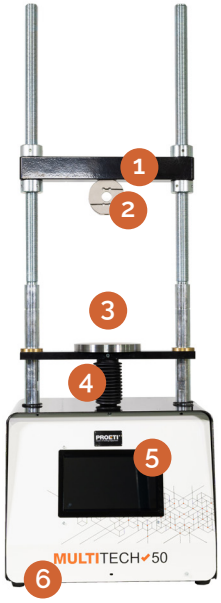
- **Intuitive Interface:**
  Control unit with a **color touchscreen**, operating on **Windows,** featuring unlimited storage and multiple connectivity options **(2 USB ports)**


**APLICATIONS:**

| | | | | | |
|---|---|---|---|---|---|
| **SOIL:**<br>CBR (California Bearing Ratio)<br>Unconfined compression<br>Quick triaxial | **CONCRETE:**<br>Flexural on beams and tiles | **CEMENT:**<br>Flexural test on mortar prisms 40x40x160 mm<br>Compression test on mortar prisms 40x40x160 mm | **ASPHALT:**<br>Marshall<br>Splitting tensile<br>Direct shear Leutner | **ROCKS AND STONES:**<br>Uniaxial splitting tensile | **CLAY BLOCKS:**<br>Punching |

## Technical Specifications:

**Power Supply:** 230 V | 50-60 Hz | 150 W
**Testing Speed:** 0.01 to 51 mm/min
**Load Gradient:** 1 to 15,000 N/sec
**Maximum Stroke:** 100 mm
**Distance Between Columns:** 380 mm
**Vertical Clearance:** 850 mm
**Dimensions:** 500x450x1450 mm
**Weight:** 130 kg




**1- Adjustable Frame**

**2- Load Cell**

**3- Testing Area**

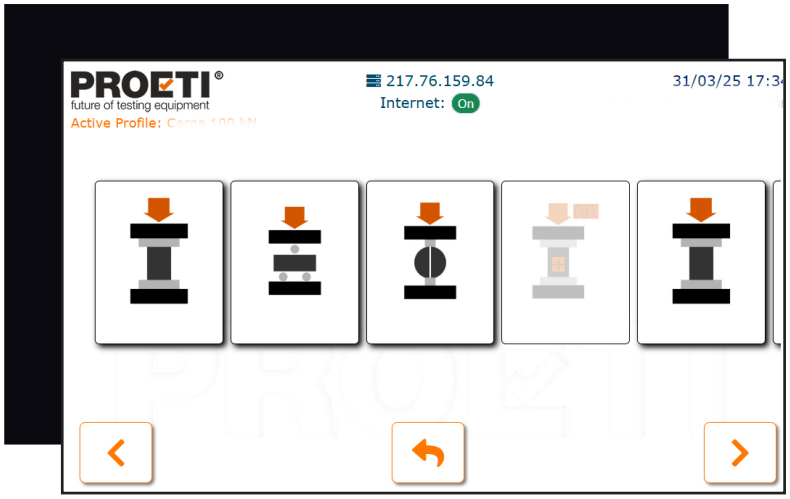
**4- Electromechanical System**

**5- 10" Touchscreen**

**6- Adjustable Feet**

**SMARTECH**
**Advanced Technology for Testing Machine Control**

**SMARTECH** is a state-of-the-art control system designed to optimize the operation of testing machines, ensuring precision, efficiency, and adaptability to the highest industry standards. Its advanced architecture provides an intuitive and configurable interface, enabling full control over testing processes and data analysis.




**Main Features:**

- **Optimized Interface**
  Ergonomic design focused on usability, ensuring a smooth and efficient interaction.
- **10" Touchscreen**
  One of the largest and most user-friendly on the market, designed to enhance user experience and data visualization.
- **Real-Time Monitoring and Analysis**
  Advanced graphical representation of test data for detailed and accurate evaluation.
- **Secure Data Management**
  Structured storage with export and traceability capabilities to ensure data integrity.
- **Customizable Test Configuration**
  Full adaptability to different protocols and standards, with flexible parameterization according to specific requirements.
- **Optimized Performance**
  Advanced control algorithms that maximize operational efficiency and minimize downtime.

**SMARTECH** provides a comprehensive technological solution for the advanced control of laboratory machines, ensuring maximum precision in testing, resource optimization, and compliance with the most demanding standards.

**MARSHALL TEST**
EN 12697-34 | ASTM D1559, D5581, D6927
AASHTO T245 | BS 598 :107 | NF P98-251-2

**INDIRECT TENSILE TEST**
EN 12697-12 | EN 12697-23 | ASTM D6931
AASHTO T283 | CNR 134

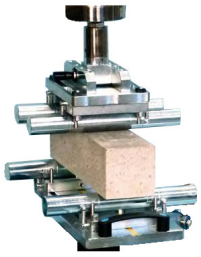
**LEUTNER TEST**
ALP A StB T4

**COMPRESSION TEST ON MORTAR**
EN 196-1 | ISO 679 | ASTM C109 | ASTM C349
NF P15-451 | BS 3892 | DIN 1164

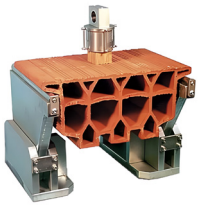
**FLEXURAL TEST ON MORTAR**
EN 196-1 | ISO 679 | ASTM C348
NF P15-451 | DIN 1164

**TENSILE TEST ON MORTAR**
ASTM C190 | ASTM C307 | AASHTO T132

**FLEXURAL ON GLASS-FIBRE REINFORCED CONCRETE**
EN 12390-5 | EN 1170-4 | ASTM C78
ASTM C293



**PUNCHING TEST ON CLAY BLOCKS**
EN 15037-2 | EN 15037-3



**FLEXURAL TEST ON CONCRETE BEAMS AND CLAY TILES**
EN 12390-5, 491, 538 | ASTM C78, C293
BS 1881:118

**CBR TEST**
EN 13286 -47 | ASTM D1883 | BS 1377:4
AASHTO T193 | NF P94-07

**UNCONFINED COMPRESSION TEST**
ASTM D2166 | BS 1377:7 |AASHTO T208

**TENSILE TEST ON METALS, PLASTICS,...**
ASTM D2166 | BS 1377:7 | AASHTO T208