UNIVERSAL TESTING MACHINE (Electromechanical)

Code : U002



- The Electromechanical Universal Testing Machine is used for precise mechanical testing of materials under tensile, compressive, and flexural loads. It serves as a versatile solution for evaluating the mechanical properties of metals, polymers, composites, and construction materials.
- Equipped with a servo-controlled electromechanical drive system, the machine ensures accurate load application and displacement control. This design facilitates high-resolution data acquisition, essential for detailed analysis of material behavior under various loading conditions.
- The system supports a wide range of test methods, including but not limited to tensile strength, compressive strength, flexural strength, shear strength, and elongation measurements. Its adaptability makes it suitable for research and development, quality control, and educational purposes.
- Advanced software integration allows for real-time monitoring and control of test parameters, as well as automated data processing and reporting. This enhances user efficiency and ensures compliance with international testing standards.
- The machine's modular design permits the incorporation of various accessories and fixtures, enabling customization to specific testing requirements and standards.

STANDARDS

EN ISO 6892 • EN ISO 4136 • ASTM A370 • EN ISO 527-1

TECHNICAL SPECIFICATIONS

- Capacity: 10 kN to 1000 kN
- Load Measurement Accuracy: ±1% of indicated load
- Displacement Resolution: 0.01 mm
- Control Modes: Load, displacement, and strain control
- Power Supply: 220 - 240 V / 50 - 60 Hz

EQUIPPED WITH

- High-precision load cell
- Servo-Motor & Servo-driver
- Digital Touch Screen Controlling Unit
- Precise Encoder for deformation measurement
- Advanced data acquisition and analysis software
- Emergency stop and safety interlocks

SUPPLIED WITH

- Set of standard tensile grips

ORDERING INFORMATION

Item Name	Item Code
UTM, ELECTROMECHANICAL - 10 kN	U002A001U
UTM, ELECTROMECHANICAL - 20 kN	U002A002U
UTM, ELECTROMECHANICAL - 50 kN	U002A005U
UTM, ELECTROMECHANICAL - 100 kN	U002A010U
UTM, ELECTROMECHANICAL - 150 kN	U002A015U
UTM, ELECTROMECHANICAL - 200 kN	U002A020U
UTM, ELECTROMECHANICAL - 300 kN	U002A030U
UTM, ELECTROMECHANICAL - 400 kN	U002A040U
UTM, ELECTROMECHANICAL - 600 kN	U002A060U
UTM, ELECTROMECHANICAL - 750 kN	U002A075U
UTM, ELECTROMECHANICAL - 1000 kN	U002A100U
UTM, ELECTROMECHANICAL with DOLI CONTROLLER (Hydraulic Grippers) - 250 kN	U002D025U
MECHANICAL GRIPPERS SET for U002	U002P001H
BENDING APPARATUS for U002	U002P002H
COMPRESSION APPARATUSES for U002	U002P003H
BRIQUET TENSILE APPARATUS (ASTM C307) for U002	U002P004H
BRC WELD STRENGTH TEST APPARATUS (One Side)	U002P005H
HYDRAULIC GRIPPING SYSTEM (Double-Piston)	U002P006H
COMPRESSION PLATENS (Upper and Lower) - EN 826 – EPS / PUR / PIR	U002P007H
TENSILE ATTACHMENT ASSEMBLY - EN 1607	U002P008H

BONDING PLATE SET (50x50 mm) - EN 1607	U002P009H
BONDING PLATE SET (100x100 mm) - EN 1607 - EPS	U002P010H
BONDING PLATE SET (150x150 mm) - EN 1607 - EPS	U002P011H
BONDING PLATE SET (200x200 mm) - EN 1607	U002P012H
BONDING PLATE SET (300x300 mm) - EN 1607	U002P013H
SANDWICH PANEL BENDING APPARATIS (3-points) - EN 14509	U002P014H
SANDWICH PANEL BENDING APPARATIS (4-points) - EN 14509	U002P015H

OTHER PHOTOS







