AUTOMATIC UNIVERSAL TESTING MACHINE- AUTO SERIES

UTM- AUTO series is the most simple and convenient solution for Construction Laboratories

These models are controlled by the UTM- AUTO Control Console and are complete with upper and lower menually operated jaws, complete set of grips for rounds and flats, transverse test attachment and high precision pressure transducer.

Automatic Universal Testing Machine, 1000 kN cap. UTM AUTO control console. Load measurement by high precision load cell. Supplied complete with, upper and lower hydraulically operated front open jaws, Inserts sets for Round samples (Dia.), 12 - 30, 30 – 46, 46 - 60 mm and Inserts sets for flat samples, sizes : 0 - 20, 20 – 40, 40 - 60 mm (accepts samples up to 90 mm wide)and transverse test attachment. 380 V, 50 Hz, 3 ph.

AUTOMATIC UNIVERSAL TESTING MACHINE- AUTO SERIES

SPECIFICATION

UTM-AUTO POWER AND CONTROL CONSOLE

Hardware and firmware

131.000 points effective resolution

Closed-loop P.I.D.control

1 channel for load cell (included)

1 channel to measure crosshead separation travel with high precision displacement transducer (included)

1 channel to measure rebars elongation with extensometers (see Accessories)

digital linearization of the calibration curve (multi-coefficient)

HYDRAULICS

Dual stage pump: centrifugal low pressure for fast approach (max. flow rate 2.5 l/min) automatically switching to radial multi- piston high pressure (max. flow rate 0.9 l/min) for loading

DC motor 1100 W

Maximum working pressure 700 bar

Oil tank capacity 9 l

TENSILE TEST:

Automatic test execution under load/stress control and grips separation control (by using the displacement transducer supplied with the machine) with closed loop PID control

Simultaneous display of load, stress and specimen elongation

Possibility to overlap two elongation/stress graphs:

one obtained with the included displacement transducer measuring crosshead separation travel

one obtained with an optional extensometer (coaxial or universal)

Graphical test data option showing the load/elongation curve

SOFTWARE :

The following Software packages are also are also included in the system:

UTS Light data acquisition and processing software (included) for tensile test according to EN Standard allowing:

Input of specimen identification, test and name of customer

real time downloading of test data

simultaneous display of stress/time and stress/elongation by using coaxial extensometer series or universal extensometer series (see Accessories) or displacment transducer reading crosshead separation travel (included)

elaboration of tension test results once test is completed: ReH, ReL or Rp, final elongation, etc. in conformity to EN ISO 6892-1 (method B) and EN 15630-1 (for steel rebars) when extensometer is adopted

unit of measurement: kN, mm, MPa

printout of test reports

multi-language software

STANDARDS

- EN ISO 7500-1
- EN ISO 6892
- EN ISO 7500-1
- ASTM A370
- EN ISO 15630-1

FEATURES

UTM - AUTO Series consisting,

RUGGED FOUR COLUMN FRAME

Extremely rigid four column frame with large vertical clearance adjustable by using the dedicated push button panel.

TENSILE GRIPS

Complete set of grips for rouds and flats.

SOFTWARE PACKAGE

Data acquisition and test results elaboration by intuitive and very comprehensive software

AUTOMATIC SYSTEM

Completely automatic test execution of tension and compression tests.

HYDRAULIC UNIT

DC motor with dual stage pump centrifugal low pressure for fast approach (max. flow rate 2.5l/min) automatically switching to radial multi-piston high pressure (max. flow rate 0.9 l/min) for loading.

ORDERING CODE

UT100-AUTO-HG

Automatic Universal Testing Machine, 1000 kN cap. UTM AUTO control console. Load measurement by high precision load cell. Supplied complete with, upper and lower hydraulically operated front open jaws, Inserts sets for Round samples (Dia.), 12 - 30, 30 – 46, 46 - 60 mm and Inserts sets for flat samples, sizes : 0 - 20, 20 – 40, 40 - 60 mm (accepts samples up to 90 mm wide)and transverse test attachment. 380 V, 50 Hz, 3 ph.

UT100-AUTO-MG

Automatic Universal Testing Machine, 1000 kN cap. UTM AUTO control console. Supplied complete with upper and lower manually operated jaws, Inserts sets for Round samples (Dia.), 12 - 30, 30 – 46, 46 - 60 mm and Inserts sets for flat samples, sizes : 0-22, 22-44, 44-65mm (accepts samples up to 70 mm wide), transverse test attachment and high precision load cell for load measurement.?380 V, 50-60 Hz, 3 ph

UT060-Auto-HG

Automatic Universal Testing Machine, 600 kN cap. UTM AUTO control console. Supplied complete with upper and lower hydraulically operated front open jaws, Inserts sets for Round samples (Dia.), sizes 10 - 25, 25 – 40, 40 - 55 mm and Inserts sets for flat samples, sizes : 0 - 15, 15 - 30 mm (accepts samples up to 80 mm wide), transverse test attachment and high precision load cell for load measurement. 380 V, 50-60 Hz, 3 ph (PC not included)

UT060-Auto-MG

Automatic Universal Testing Machine, 600 kN cap. UTM AUTO control console. Supplied complete with upper and lower manually operated jaws, Inserts sets for Round samples (Dia.), sizes 10 - 25, 25 – 40, 40 - 55 mm and Inserts sets for flat samples, sizes : 0 - 15, 15 - 30 mm (accepts samples up to 70 mm wide), transverse test attachment and high precision load cell for load measurement. 380 V, 50-60 Hz, 3 ph (PC not included)