

# A016 (TC400) UNIVERSAL TESTING MACHINE Capacity 400 kN (89924 lbf)

Electromechanical computerized universal testing machine, TC series single hollow test, developed for the measurement of mechanical strength of the materials under load. Depending on the needs and the types of materials, it can perform testing of tensile, compression, bending, breaking tests, bend, extension, tension, force limit, deformation limit, dishing, etc.., According to the most common international standards ISO, ASTM, EN and UNI. The structure is a strudy from two columns and the moving crosshead driven by pre-loaded ball screws with zero backlash to ensure the accuracy of motion. The movement and the crosshead speed is controlled electronically by 24-bit microprocessor. The machine is controlled through LBG HIGH TOWN software for MS® Windows 7 Operating System, at all stages of diagnostics, calibration and performance test.

# The supply included:

- Load Cell of 400kN (89924 lbf) tensile/compression
- Personal computer
- Color Deskjet printer A4 format
- Manuals instruction
- ACCREDIA Calibration certificate LAT
- LBG SW HT software ( A007)

The accessories to effect all the tests have to be ordered separately.

# **TECHNICAL CHARACTERISTICS:**

| 400 kN                | Load Capacity                    | 89924 lbf              |
|-----------------------|----------------------------------|------------------------|
| 0.01kN                | Resolution                       | 2 lbf                  |
| 0.5                   | Class                            | 0.5                    |
|                       | ISO 7500-1 (dal 2% al 100% f.s.) |                        |
| 250 mm/min            | Maximun Speed                    | 9.84 in./mm            |
| 0.1 mm/min            | Minimun Speed                    | 0.4 in./mm             |
| 250 mm/min            | Return Speed                     | 9.84 in./mm            |
| 450 kN/mm             | Stiffness frame                  | 2569566 lbf/in.        |
| 1080 mm               | Crosshead Travel                 | 42.5 in.               |
|                       | without accessories              |                        |
| 600 mm                | Crosshead Travel                 | 23.6 in.               |
|                       | with tensile heads A010-A100     |                        |
| 600 mm                | Column Spacing                   | 23.6 in.               |
| 2600 kg               | Weight                           | 5732 lb                |
| 1260 x 1050 x 2400 mm | Dimensions                       | 49.6 x 41.3 x 94.5 in. |
|                       | width x depth x height           |                        |
| + 10 °C / + 35 °C     | Operating Temperature            | + 50 °F / + 90°F       |
| 10 % / 80 %           | Relative Umidity                 |                        |
| 400V 3ph+N+T 50Hz     | Power Supply*                    |                        |
| 2600 VA               | Max Power Absorbed               |                        |

<sup>\*</sup> On request other POWER SUPPLY



#### **STANDARD ACCESSORIES:**

## A010-A100 TENSILE HEADS

A pair of tensile heads equipped with pneumatic system opening and closing controlled through a remote control supplied with emergency button for the exclusion of the embedded commands. For grip pliers have to be ordered separately. Maximum capacity 400kN (89924 lbf).

## A010-A101 GRIPS

A pair, with plain tightening surfaces applicable to specimens with thickness from 0 to 12 mm (0 to 0.47 in.) and until 80x90 mm (3.15x3.54 in.) (width x length). The grips have to be lodged in the tensile head A010-A100.

## A010-A102 GRIPS

A pair, with plain tightening surfaces applicable to specimens with thickness from 12 to 24 mm (0.47 to 0.94 in.) and until 80x90 mm (3.15x3.54 in.) (width x length). The grips have to be lodged in the tensile head A010-A100.

#### A010-A103 GRIPS

A pair, with plain tightening surfaces applicable to specimens with thickness from 24 to 36 mm (0.94 to 1.42 in.) and until 80x90 mm (3.15x3.54 in.) (width x length). The grips have to be lodged in the tensile head A010-A100.

#### A010-A104 GRIPS

A pair of grips with "V" plain tightening surfaces, applicable to specimens with diameter from 5 to 10 mm (0.18 to 0.39 in.) and 90 mm (3.54 in.) length. The grips have to be lodged in the tensile head A010-A100.

## A010-A105 GRIPS

A pair of grips with "V" plain tightening surfaces, applicable to specimens with diameter from 10 to 15 mm (0.39 to 0.59 in.) and 90 mm (3.54 in.) length. The grips have to be lodged in the tensile head A010-A100.

#### A010-A106 GRIPS

A pair of grips with "V" plain tightening surfaces, applicable to specimens with diameter from 15 to 20 mm (0.59 to 0.79 in.) and 90 mm (3.54 in.) length. The grips have to be lodged in the tensile head A010-A100.

### A010-A107 GRIPS

A pair of grips with "V" plain tightening surfaces, applicable to specimens with diameter from 20 to 30 mm (0.79 to 1.18 in.) and 90 mm (3.54 in.) length. The grips have to be lodged in the tensile head A010-A100.

# A010-A108 GRIPS

A pair of grips with "V" plain tightening surfaces, applicable to specimens with diameter from 30 to 40 mm (1.18 to 1.57 in.) and 90 mm (3.54 in.) length. The grips have to be lodged in the tensile head A010-A100.

# A010-A109 SAFETY PROTECTION

Polycarbonate transparent protection, with front and rear doors with shutters. Completely with electromagnetic system and safety switches.

## A010-A110

# ADAPTATION SET FOR COMPRESSION/FLEXURAL TESTS

Constituted by a pair of Steel Blocks must be inserted into the Tensile Heads (A017-A100).

This accessories in necessary to order together the items A009-A111 or/and A010-A112.

Suitable for TC300, TC400 and TC600 machine.

# A010-A111 EQUIPMENT FOR COMPRESSION TESTS

Must inserted into item A010-A110. Steel made 58HRC.

Consist of one upper plate spherically seated compression self-aligning  $\emptyset$  100 mm (3.94 in.) and fixable and a lower plate plane  $\emptyset$  150 mm (5.90 in.). Steel made 58HRC. Maximum capacity 600kN (134885 lbf).

# A010-A112

# EQUIPMENT FOR FLEXURAL / BENDING TESTS

3-point flexural / bending device, Steel made. Must inserted into item A010-A110.

Distance between supports adjustable from 50 to 500 mm (1.97 to 19.68 in.).

Upper diameter roller 25 mm (0.98 in.)

Lower Set of diameter rollers 50 and 100 mm (1.97 and 3.94 in.).

# OTHER ACCESSORIES ARE AVAILABLE ON REQUEST

LBG srl

Via PETRARCA, 5 - 24052 AZZANO S. PAOLO (BG) - ITALY Tel. +39 035 536762 - Fax +39 035 536049 E-mail: <u>info@lbgsrl.com</u> URL: <u>www.lbgsrl.com</u>

