



**A017 (TC600)  
UNIVERSAL TESTING MACHINE  
Capacity 600 kN (134885 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 sturdy frame from two columns and the moving crosshead driven by 4 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 600kN (134885 lbf) tensile/compression
- Personal computer
- Color Deskjet printer A4 format
- Manuals instruction
- ACCREDIA Calibration certificate LAT
- LBG HIGH TOWN software ( A007)

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

**TECHNICAL CHARACTERISTICS :**

600 kN 0.01kN	Load Capacity Resolution	134885 lbf 2 lbf
0.5	Class ISO 7500-1 (dal 2% al 100% f.s.)	0.5
200 mm/min 0.1 mm/min	Maximun Speed Minimun Speed	7.87 in./mm 0.4 in./mm
200 mm/min	Return Speed	7.87 in./mm
600 kN/mm	Stiffness frame	3426088 lbf/in.
1830 mm	Crosshead Travel without accessories	72.1 in.
1000 mm	Crosshead Travel with tensile heads A017-A100	39.4 in.
700 mm	Column Spacing	27.6 in.
3500 kg	Weight	7716 lb
1300 x 900 x 3200 mm	Dimensions width x depth x height	51.2 x 35.4 x 126.0 in.
+ 10 °C / + 35 °C	Operating Temperature	+ 50 °F / + 90°F
10 % / 80 %	Relative Umidity	
400V 3ph+N+T 50Hz	Power Supply*	
3200 VA	Max Power Absorbed	

\* On request other POWER SUPPLY

## **STANDARD ACCESSORIES :**

### **A017-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 600kN (134885 lbf).

### **A017-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 A017-A100.

### **A017-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 A017-A100.

### **A017-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 A017-A100.

### **A017-A104 GRIPS**

A pair of grips with "V" plain tightening surfaces, applicable to specimens with diameter from 5 to 10 mm (0.20 to 0.39 in.) and 90 mm (3.54 in.) length. The grips have to be lodged in the tensile head A017-A100.

### **A017-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 A017-A100.

### **A017-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 A017-A100.

### **A017-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 A017-A100.

### **A017-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 A017-A100.

### **A017-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  $\varnothing$  100 mm (3.94 in.) and fixable and a lower plate plane  $\varnothing$  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**

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