

# COMPUTER CONTROLLED DUCTILITY MACHINE

## ASTM D 113, D 5976 - IP 32 - ISO 1208

### EN 13398, 13589, 13703

The apparatus consists of a constant temperature bath capable to work in the range from -10 to 40 °C (thanks to a built-in cooling compressor) with an electrically powered tractor that pulls apart at an selectable speed the two ends of three briquet specimens: a load cell records continuously the force applied to the briquettes and temperature, speed and applied force data are graphically shown on a 8.4" touch screen interface from which it's also possible to control the equipment itself. Data can be stored and printed by simply connecting any USB printer. The instrument does not require an external cooler.



Apparatus, 1000 mm traction length

- Enamel finished steel case, floor mounted with swivelling castors.
- Stainless steel bath, thermally insulated, with drain valve.
- Chromium plated brass pump: it provides an adequate stirring of the liquid in the bath. Switch to turn it off during the test.
- Stainless steel heater.
- Microprocessor thermoregulator with PID action: built-in digital display 0.1°C accuracy. Probe: Pt100 RTD. Working range: from -10 to 40°C.
- Independent safety device against overheating and low level with alarm lamp.
- Built-in hermetic cooling compressor that permits to quickly cool down the liquid in the tank.
- Acrylic hinged cover: it helps to maintain a constant temperature in the bath providing a clear view of the inside.
- Traction carriage with variable speed motor: the carriage supports up to three briquet molds. Automatic stop safety switch that stops the carriage when the maximum elongation has been reached. Traction length: 50, 100 or 150 cm.
- Stainless steel screen fixed to the bottom of the bath: it permits a better vision of the test while in execution.
- Three load cells mechanically connected to the briquet molds. Range: 0 - 200 Newton. Accuracy: 0.1 Newton.
- 8.4" Panel PC with touch screen interface for the control of the equipment. It allows complete control of the apparatus plus data acquisition and storing: temperature and force applied to briquettes are shown in real time and can be saved and printed together with test data such as date, operator etc. Software routines for calibration of temperature, force and elongation sensors.
- Easy access control box containing all the electronics.
- English written user manual with installation instructions.
- For 220 V/50 Hz connections: 1800 W power consumption.
- Dimensions (l x w x h): mm 1800 x 450 x 1300 approx. (100 cm version) 2400 x 450 x 1300 approx. (150 cm version). Weight: 200 kg approx.
- CE marked.

AD0113-500 Apparatus, 500 mm traction length  
 AD0113-510 Apparatus, 1000 mm traction length  
 AD0113-520 Apparatus, 1500 mm traction length

#### ACCESSORIES

AD0113-A00 Mold acc. to ASTM D 113 - IP 32 - IS 1208  
 AD0113-A01 Brass plate for mold assembling  
 AD5976-A00 Mold acc. to ASTM D 5976  
 PRN01 Printer  
 CAL001 PT100 simulator  
 CAL003 Official Certificate for Pt100 simulator

Specifications may vary without notice.

**The apparatus includes the items listed aside the picture, accessories etc. should be purchased separately.**

#### Agence Nord:

Campus Effiscience  
 2 Rue Jean Perrin - Bât D  
 14460 Colombelles  
 tél : 02.31.34.50.74  
 fax : 02.31.34.55.17

#### Agence Est:

Parc Club des Tanneries  
 2 Rue de la Faisanderie  
 67380 Lingolsheim  
 tél /fax : 03.88.04.01.81



#### Agence Sud:

Hôtel d'Entreprises de la Croix Rouge  
 Lot A4 - 10 Av de la Croix Rouge  
 84000 Avignon  
 tél : 04.90.27.17.95 fax : 04.90.27.17.52

[www.deltalabo.fr](http://www.deltalabo.fr)  
[info@deltalabo.fr](mailto:info@deltalabo.fr)