DILATOMETRY 6 – 8



# **DILATOMETER 1600**

#### DESCRIPTION

For laboratory tests with a max temperature 1600 °C. The models or 1200 or 1600 are dilatometers equipped with the same measuring system consisting of an alumina sample holder and push rod (on demand we can supply the quartz version) transmitting the thermal expansion of the specimen to one LVDT. The only difference between the 2 types stays in the maximum working temperature. The cylindrical ovens we fit onto type or 1600 have an improved heating system .The units are mounted on a metallic framework equipped with keyboard and display, housing the electronic controls and communication to one PC. A suitable software enables – via easy controls – to set a programme for: the thermal cycle, the recording of the test, the graphic display and relevant print–out, the comparisons among different curves, zooming and exporting of the datas over to other applications, to mention a few only of the features.

#### TECHNICAL SPECIFICATIONS

## INSTRUMENTS:

- Max temperature: 1600 °C
- Accuracy with quartz measuring system: ± 0,50 %
- Accuracy with alumina measuring system: ± 0,75 %
- Repeatability of accuracy typically 0,0006 mm: ± ¼
- LVDT Range: ± 2,54 mm
- LVDT linearity: 0,25 % FS
- · LVDT contact pressure: 4 g or more
- Max sample size: L=100 x Ø = 20 mm
- Heatings rate: 30 °C / min
- Supply: 240 V 50/60 Hz sigle phase

### SOFTWARE:

- PLC: Percent Linear Change versus temperature
- DCE: Differential Coefficient of Expansion
- Zoom for selected portion of the curves
- Compare up to 6 previous curves
- Transition points: Mathematic calculates transition points