

## DAMA PAJOUH ARVAIN

### Low Temperature Dilatometer specifications

One complete Horizontal Dilatometer instrument including Basic Unit, Data Acquisition and software:

#### Horizontal Dilatometer – DIL 102 LT

Base plate with measuring block with inductive displacement transducer, stroke 5mm, frictionless supported, integrated preamplifier for dL adjustment of the sample length via adjusting screw, with integrated Thermal Analysis System Controller (TASC) for data acquisition and temperature control interface for computer connection via USB or Serial Port (for max. 4 measuring instruments per each computer) with gas inlet connection for purge gas, Standard Sample included(material Al<sub>2</sub>O<sub>3</sub> or Fused Silica depending on the ordered sample holder), advanced software for DIL 101/LT for data acquisition, storage and Proteus software for DATA evaluation under MS WINDOWS

- Measuring range: 5000  $\mu$ m or  $\pm$  2.5mm
- Contact force for probe: 30 ... 45 CN
- Temperature Accuracy:  $\pm$ 0.1°C
- Thermocouple type: K
- Data evaluation rate: Max. 4/Sec

Features:

Multitasking with simultaneous operation of several TA systems, integrated detailed HELP system detailed information: see technical data sheet DIL-WINDOWS software (Hardware requirements: actual PC with MS Windows according to technical datasheet and printer)

#### Low Temperature Furnace

- Low-Temperature tube furnace with Ni-Cr Alloy heater, Control Thermocouple type K,
- Furnace Temperature Range: Rt...1150°C
- Max Working Temperature Range: Rt...1100°C
- Heating Rate: 1 ...20°C/min
- Furnace power supply 1.2 kVA, VAC 230V +/-10% and 50/60Hz
- Protective tube of fused silica, for gas flow, complete.

#### Tube Sample Holder

Tube sample holder kit of Al<sub>2</sub>O<sub>3</sub>, for sample lengths 25 ... 50 mm and sample diameter up to 9 mm, with holding tube, pushrod and sample thermocouple type K, including sample supporting kit, maximum temperature 1600°C

- Sample Holder: Al<sub>2</sub>O<sub>3</sub>
- Max Sample Size: 25 – 50 mm
- Max Sample Diameter: 9 mm
- Standard Calibration Sample: Al<sub>2</sub>O<sub>3</sub> or Quartz

#### Software:

Software package compatible with Windows 2000, XP and 7

- Heat up and Cool down Speeds
- Heat up segments, cool down segments as well as dwell time are programmable
- Repetition of the programmed cycles
- Softening point detection
- ASCII Export
- Measuring data will be corrected through correction curve