

L 75 – Laser Dilatometer

Laser Dilatometer

The Laser Dilatometer is the next step in expansion measurements. The L 75 Laser Dilatometer outperforms any conventional pushrod dilatometer by offering a 33 times higher resolution. The measurement principle is based on a Michelson interferometer which eliminates all mechanical errors.

Applications

Highest precision expansion measurements of materials such as carbon, graphite, composites materials, glass, alumina, fused silica, substrates, semiconductors, etc.

But the L75 Laser is also the perfect choice for quality entry control of materials with problematic expansion characteristics like, glass, bimetals, precision electronics components, etc.



L 75 Laser Dilatometer

Pico resolution

	L75 Laser Dilatometer
Method	Laser Dilatometer „Michelson Prinzip“
Temperature range	-180 up to 500°C; RT up to 1000°C
Sample dimensions	up to 20mm long and up to 7mm diameter
Resolution	0.3nm
Atmosphere	inert, oxid., red., vac.

Helium-Cryo-Dilatometer

L 75 Cryo Dilatometer/TMA

The L 75/Cryo Dilatometer offers unsurpassed performance for demanding under very low temperatures. The analyzer is equipped with a closed loop helium cryostat, permitting expansion measurements from -263°C to 220°C in one measurement.



L 75 Cryo-Dilatometer

closed loop helium cryostat

-263 up to 220°C

	Dilatometer furnaces
Temperature	-260 up to 220°C
Mode	Dilatometer/TMA
Element	Thermo coax, Helium cryostat
Atmosphere	inert, oxid., red., vac.
Temperature sensor	diode or PT 1000