COMTES FHT®
Complete Technological Service - Forming, Heat Treatment

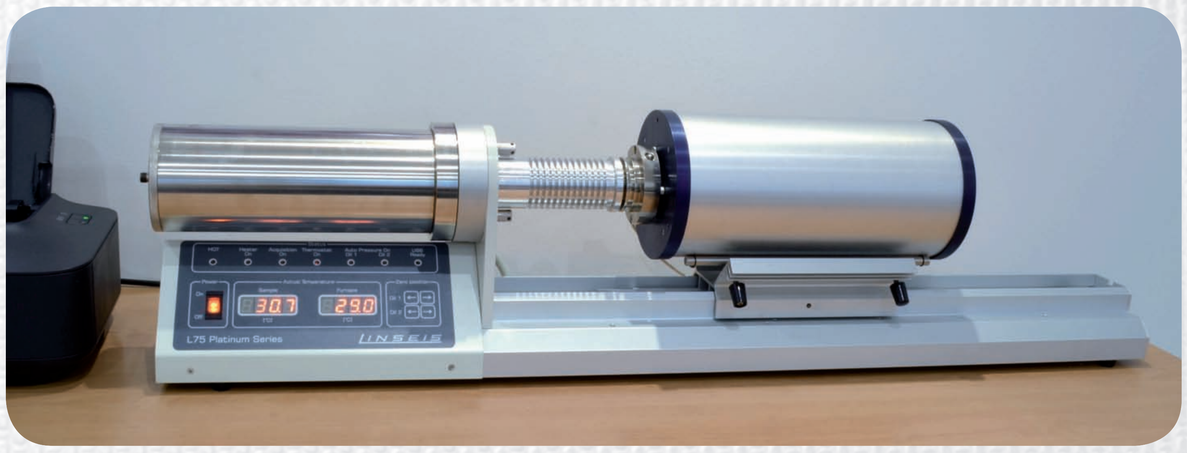
HIGH TEMPERATURE DILATOMETRY

Dilatometry is a technique which measures the dimensional change of a substance as a function of temperature while the substance is subjected to a controlled temperature program.

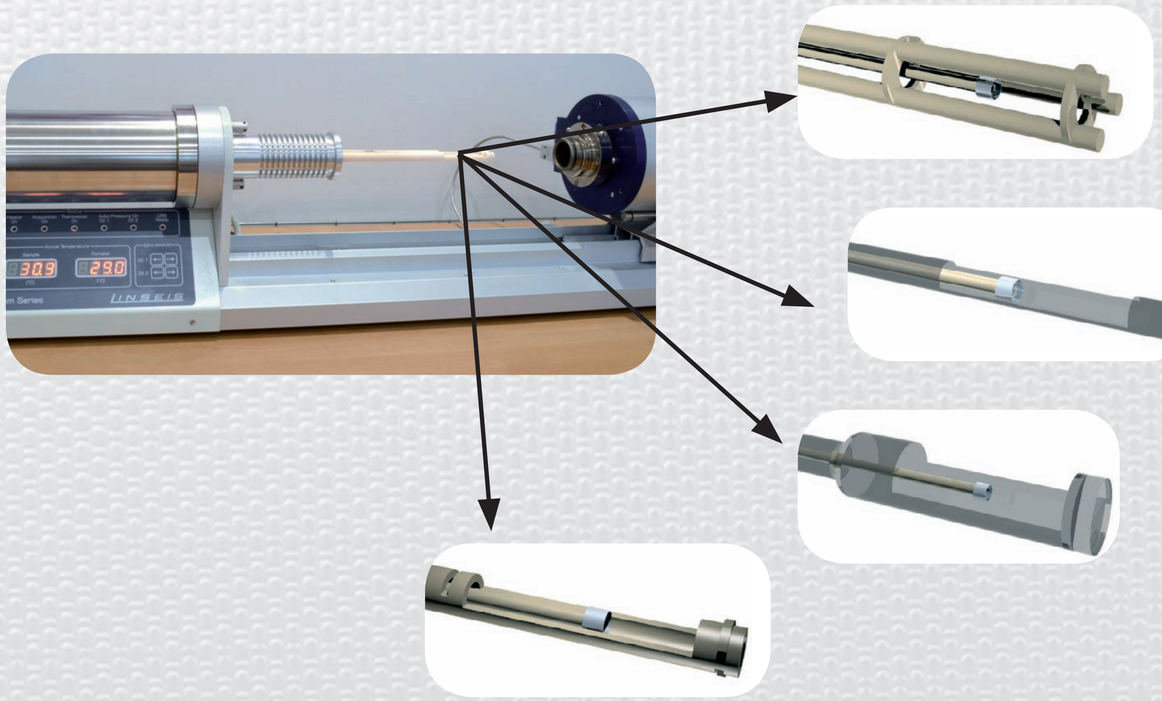
Dilatometers are frequently used for R&D and Quality Control of solids, liquids, powders and pastes to determine their:

- Linear thermal expansion (ΔL)
- Sinter-temperatures and intersteps
- Determination of glass transition (Tg)
- Phase changes
- Optimization of burning processes
- Determination of thermal expansion coefficient (CTE)
- Volume changes
- Rate controlled sintering (RCS)

HIGH TEMPERATURE DILATOMETER



DILATOMETERS PROBES



TECHNICAL SPECIFICATION

LINSEIS High Temperature Dilatometer L75HS1600C PT

• Temperature range	RT up to 1600 °C
• Atmospheres	inert
• Vacuum	10^{-2} Pa
• Sample lenght	up to max. 50 mm
• Sample diameter	7, 12 or 20 mm
• Measuring range	100 µm up to 5000 µm
• Maximum resolution	0,125 nm/digit

APPLICATION EXAMPLES

Dilatometrs are typically used in:

- New material research
- Metal/powder industry
- Phase transformation analyses
- Glass industry
- Ceramics industry
- Sintering of high tech ceramics
- Aerospace industry
- Automotive industry
- Polymer industry