



RFDA MF LTVP800

The LTVP800 system measures the elastic properties and internal friction (=damping) of samples continuously from -100°C up to 800°C in vacuum atmosphere. This system was especially designed for the steel industry and is perfectly suited to measure the Debye peak of materials which is used to investigate the thermal activated motion of various defects inside the material structure.

Specifications		
Measures	Resonant frequency Internal friction (=damping)	Young's modulus Shear modulus Poisson ratio
Internal dimensions of the furnace	Diameter: 350 mm Depth: 350 mm	
Temperature profile	-100°C to 800 °C	
Atmosphere	Vacuum (10 ⁻⁶ mbar)	
Number of samples	1	
Heating/cooling speed	1 - 60 °C/min	
Measurement interval	1 - ∞ sec	
Isolation	Vacuum atmosphere	
Heating elements	Infra-red heating elements	
Cooling medium	Indirectly cooled with liquid nitrogen	
Minimum sample size*	- Rectangular bar or cylindrical rod with a length of ±3 cm - Disc with a diameter of ±4 cm	
Maximum sample size	- Rectangular bar or cylindrical rod with a length of ±12 cm - Disc with a diameter of ±12 cm	

*smaller is possible for very stiff materials



More info:
www.imce.net/ltvp-800

Measurement examples:
[See annex](#)