



**NANOTEST**  
Berliner Nanotest und Design GmbH

# TIMA<sup>®</sup> 5



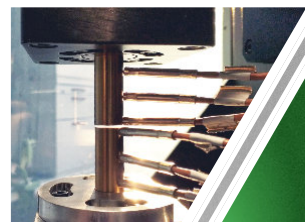
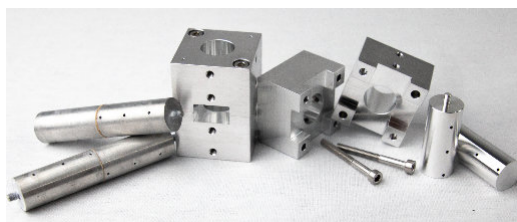
**Thermal Interface Material Analyzer**  
Model 5

**The first convenient  
automated  
all-in-one  
ASTM D 5470 test system.**

## Simple yet versatile

TIMA is a comprehensive laboratory and industrial measurement tool providing a wide range of thermal measurements and analyses to be performed with highest scientific standard.

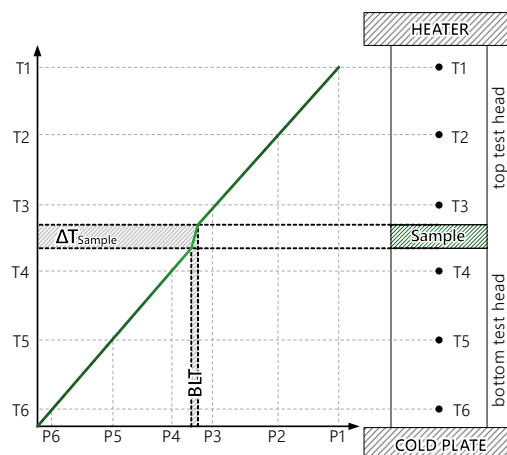
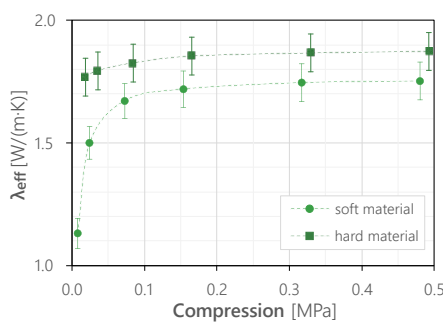
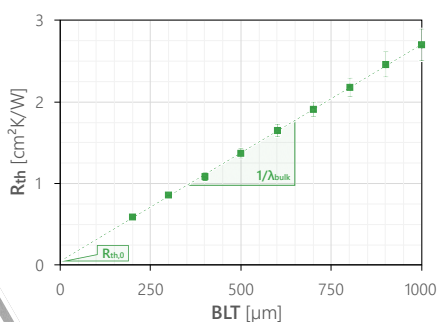
- ▶ Greases and pastes
- ▶ Cured gap fillers and adhesives
- ▶ Anisotropic composites
- ▶ Phase change materials
- ▶ Overall thermal resistance
- ▶ Effective thermal conductivity
- ▶ Thermal interface resistance
- ▶ Bulk thermal conductivity
- ▶ Curing parameters study
- ▶ Boundary conditions study
- ▶ In-situ reliability investigation
- ▶ Extreme conditions testing



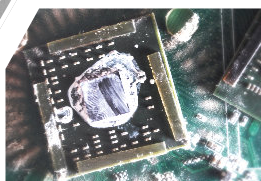
## ASTM D 5470 Standard Conforming and Beyond

TIMA 5 fully meets the established test methodology described in ASTM Standard D 5470-17, while also providing fully automated characterization and many additional features not described in the ASTM Standard.

- ▶ Full coverage of specification range
- ▶ Up to 150°C sample temperature
- ▶ Scientific standard accuracy estimation
- ▶ Fully automated measurement
- ▶  $\pm 300$  N clamping and tensile force
- ▶ Highly user-friendly, robust, and reliable

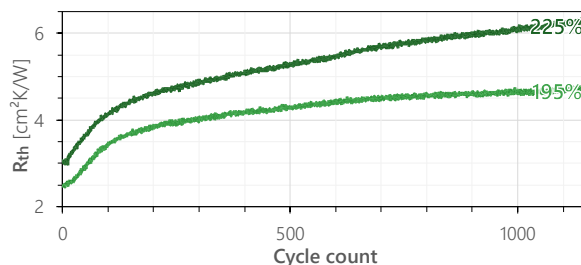
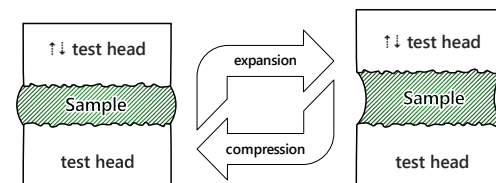


## Ageing and Reliability Investigations



TIMA allows accelerated lifetime testing for thermal interface materials exposed to thermo-mechanical stress by emulating mechanical strain from in-field application.

- ▶ In-situ monitoring of aging / degradation
- ▶ Application-related testing conditions
- ▶ Highly accelerated: 500 cycles per day
- ▶ Thickness- and pressure-controlled cycling



[nanotest.eu/tima](http://nanotest.eu/tima)