

**Scope of accreditation of research laboratory
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Head of the laboratory

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Procedure

Dilatometric measurement of solid and sintered materials
(procedure no. P/19/IB-21)

Hydrogen sorption in solid materials (procedure no. P/19/IB-22)

Apparatus:

**Optical dilatometer Misura® 3 FLEX-ODLT
Device for gas sorption (IMI HTP) Hiden Isochema**

Description of the equipment

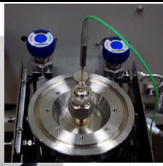
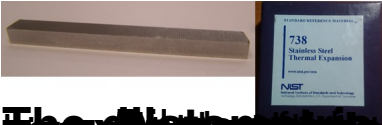
1. Dilatometric measurements of solid and sintered materials.

The optical dilatometer Misura® 3 FLEX-ODLT is designed for non-contact dilatometric measurements of very high accuracy. It is possible to register changes in the length of the tested samples as a result of temperature changes (both heating and cooling process) as a function of time, therefore determine the thermal expansion coefficient of investigated samples.

Moreover, the optical dilatometer Misura® 3 FLEX-ODLT enables non-contact bending measurements.



The device is calibrated with the use of NIST certified references sample material "SRM 738 Stainless Steel" (<https://www-s.nist.gov/srmors/certificates/738.pdf>) at an accredited range of temperature (20-507 °C).



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PCA

Zakres

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Przedmiot badań/wyrób	Rodzaj działalności/ badane cechy/metoda	Dokumen
Materiały lite i spiekane: metale, stopy metali	Zmiany liniowe w funkcji temperatury Zakres: (20 – 507) °C Metoda dylatometryczna.	P/19/IB-21 wyd. 2 z dnia 12
Materiały metaliczne i niemetaliczne, kompozyty	Zawartość wodoru Zakres (0,01 – 11,00) % Metoda pomiaru: sorpcja wodoru w zakresie (temperatur od -190°C do 500°C i ciśnieniu od 0 do 200 bar)	P/19/IB-22 wyd. 2 z dnia 15

Laboratorium formułuje opinie i interpretacje w sprawozdaniach z badań podanych w powyższej t

