

BE SURE OF PERFECT RESULTS.

**BROCKHAUS**  
MEASUREMENTS



Laboratory with all BROCKHAUS products for measurements acc. to IEC 60404 ff. and other international standards



Calibration laboratory accredited acc. to DIN EN ISO/IEC 17025:2018

## Measurements as a service

- Measurements of hard and soft magnetic materials, e.g. electrical steels, amorphous materials, powder composites, stators, rotors, magnetic assemblies
- Calibration of material samples
- Calibration and re-calibration of measuring instruments
- Reference samples calibrated in our calibration laboratory accredited acc. to DIN EN ISO/IEC 17025:2018 (Epstein and sheet samples 500 x 500 mm)



Measuring Technology for Hard and Soft Magnetic Materials

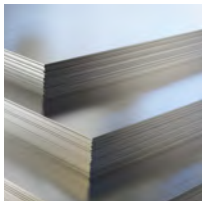
**Measuring & Calibration Service**

# Measuring, testing, calibration in the BROCKHAUS laboratory

## Soft magnetic materials



- All measurements acc. to IEC and other international standards like ASTM, JIS, e.g.
  - Epstein testing acc. to DIN IEC 60404-2:2008-06\*\*
  - Sheet samples 500 x 500 mm acc. to DIN IEC 60404-3:2010-04\*\*
  - Ring core measurement acc. to IEC 60404-4 (Electrical Steel Tester MPG 200 D\*)

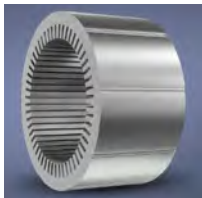


- Coercive field strength of magnetic materials in an open magnetic circuit acc. to IEC 60404-7 (Coercimeter CFT 200\*)



- Franklin Test acc. to IEC 60404-11 (Franklin Tester FT 600\*)

- Individual measurements on single laminations, stripes, sheets and rings (MPG 200 D\* with Epstein frame, Single Sheet Test sensor SST and ring sensor)



- Measurements under special treatments like tension/pressure or different temperatures (Single Sheet Test sensor SST\*)

- Ring and stator measurement in various production stages (Stator Tester BST-M, BST-L\*)



- Stator core measurement via different stator segments comprising teeth and sections of back iron (relative magnetic properties in teeth) (Stator Tester BST-L\*)
- Single-tooth measurement of stators (MPG 200 with ECL sensor\*)
- Magnetostriction measurement (Magnetostriction Tester MST 500\*)

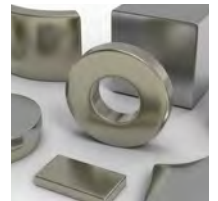
## Hard magnetic materials

- Measurement of permanent magnets in an electromagnet acc. to IEC 60404-5 (Hystograph HG 200\*)



- Measuring under temperature in the range of -45°C up to 200°C (Hystograph HG 200\*)

- Individual measuring setup of testing rotors with permanent magnets (Rotor Tester RMA 01\*)



- Measurement of magnetic flux density, field strength and magnetic stray field by scanning the magnetic surface of permanent magnets and rotors (Field Scanner XYZ-RMA\*)



- Measurement of the magnetic moment and angle error of magnetic axis vs. mechanical axis (Fluxmeter system F10-3D\*)

- Eddy current losses test (MPG 200 with ECL sensor\*)

- Magnetizing service (Magnetizer MAG 2000\*)

\* BROCKHAUS device used for the measurement

\*\* also available in our calibration laboratory accredited by DAkkS acc. to DIN EN ISO/IEC 17025:2018

**Please visit our website  
for all technical details  
and direct contact:**

