

# **MATERIAL**

### **MEASURING COILS & SENSORS**

### **MEASURING SYSTEMS**

All systems are operated by comprehensive BROCKHAUS® software applications.

## **RESULTS** BROCKHAUS MEASUREMENTS

### LABORATORY

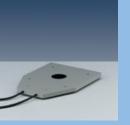


- NdFeB SmCo PtCo
- Powder material
- Rotors
- Semifinished products
- Sensors



**Electro magnet** 

Field coil



Helmholtz coil

**Customized 3D coils** 

**SPECIAL APPLICATIONS** 



**Detail Rotortester** 

Hall probes







Hysteresis curve

Temperature measurement from -45°C to 200°C

Field strength up to 3200 kA/m

**Coercive field strength** 

Remanence

Maximum energy product BH-max

Hd5

HKnee

**Maximum polarization** 

IEC 60404-5

Flux density

**Magnetic vector** 

Magnetic flux

**Magnetic moment** 

Potential

Field induction

Field strength distribution

Rotor scan

3D graphical display

**Angle error** 

Magnetic flux

**Magnetic moment** 

Potential

Field induction

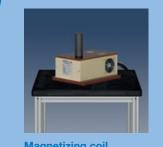
Magnetic field strength

Tesla/Gauss

Fluxmeter system

**Calibration of sensors** 

### **MAGNETIZING TECHNOLOGY**



Parallel magnetizing coil









Magnetizer

Magnetizing impulse **Demagnetizing impulse Magnetizing current** Magnetic flux

**Saturation level** 

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BE SURE OF PERFECT RESULTS.

### **QUALITY**

BROCKHAUS MEASUREMENTS is known all over the world as a market leader – primarily due to the high-quality of its sophisticated technical equipment. The exclusive use of high-quality materials, best trained employees and the use of state-of-the-art machinery guarantee the renowned long-life cycle of our products. Extensive verification processes in the selection of suppliers and material as well as in the production ensure the top quality of all BROCKHAUS products. This is proved by the very large number of installations at extremely satisfied customers around the world. BROCKHAUS products are in accordance with national and international standards (IEC 60404). BROCKHAUS is certified according ISO 9001.

#### **SERVICES**



## Measuring Laboratory and Calibration Service

Professional measurement and calibration service

- For testing soft and hard magnetic materials according to IEC 60404
- Preparation of reference samples
- Calibration and testing of measuring instruments
- Testing documentation and certification
- On-site service



#### **BROCKHAUS Academy**

Professional training of customer staff at the BROCKHAUS Academy in Luedenscheid, Germany

- Training of operators in the use of BROCKHAUS instruments
- Support in self-maintenance works of BROCKHAUS testers
- General update of knowledge in the field of magnetic measurements
- View on future developments of hard- and soft magnetic materials
- Consulting:
  - Assistance in implementation of measuring equipment
  - Improvement of existing Quality Control
  - Guidance in optimizing manufacturing process



#### R&D

As a market leader we continously seek to match the future needs of our customers. Hence we dedicate significant resources to research and product development. Due to our innovative culture and work approach we frequently gain access to private-public research programs, as well as cooperations with highly regarded universities and institutes.

Our company's vision states that "we constantly strive for a better understanding of our customers" and that "this understanding enables us to optimize our performance". All our research is dedicated to improving the competitive edge of our current and future customers. We are convinced that "through this we will become a partner to our customers" in times of rapid evolution in the fields of energy efficiency and e-mobility.





