



- Measurement of all magnetic materials (hard magnetic: AlNiCo, Ferrite, SmCo, NdFeB, plastic bonded; soft magnetic: electrical steel, ferrite, etc.)
- Measurement with constant flux alteration $d\Phi/dt$ or sinusoidal polarization
- Measurement with J-compensated surrounding coils, pole or field coils, strip measuring coil, ring core sensor, punched part sensor, Epstein frame, sheet measuring coil
- Measurement at higher temperatures up to 200 °C
- Fully computer-controlled measuring system
- Real time display of hysteresis during the measuring process
- MAG/MPG Expert software for measurement, display and integration into QM systems
- Menu-assisted user commands
- Windows user interface

Measuring categories

Remanence

Coercive field strength

Maximum energy product

Total power loss

Specific hysteresis loss

Maximum field strength

Maximum polarization

Effective field strength

Permeability

Specific apparent output

Hysteresis display

Form factor

Measuring Technology for Hard Magnetic Materials

AC/DC Hystograph HG 200 AC

AC/DC Hystograph HG 200 AC

Operating principle

Determination of the characteristic properties of all magnetic materials. Measuring process according to IEC 60404 ff. or to customer specifications.

Highly accurate measurements with very good reproducibility. Process-controlled monitoring and regulation of the increase in current.

When measuring hard magnetic materials the process runs with constant change of flux $d\Phi/dt$ and avoids interference caused by eddy currents and phase displacement between the field strength and polarization measurement. With soft magnetic materials the measurement takes place with sinusoidal induction.

Processing of the measured values with MAG/MPG Expert software for measurement, display and integration into QM systems. Consists of measuring table with power supply unit and measuring electronics, electromagnet, Epstein frame, measuring system and computer hardware with MAG/MPG Expert evaluation software.

For measuring permanent magnets: J-compensated coils with a thickness of 1 mm and diameters of 10 – 60 mm, pole measuring coils with diameters of 3 – 9 mm, as well as special sizes and shapes.

For measuring soft magnetic materials: SST measuring sensors for the quality control of strips, sheets, slit strips in all manufacturing widths; no complex sample preparation required.

Punched part sensor for non destructive testing of punched parts in all geometries, e.g. when testing punched parts for motors. Ring core testing module for testing the magnetic properties of ring cores, stators or transformer cores directly on the component under manufacturing conditions.

Technical Data

Repeatability	0.2%
Measuring fixture	2 x drift-free Fluxmeter
Measuring coils	surrounding coils, pole coils, field coils, Epstein frame, single sheet tester, punched part sensor, ring core sensor
Electromagnet	with interchangeable coils and coil fixture
Measuring poles	interchangeable with a maximum diameter of 92 mm
Coil connectors	3 – 6
Software	MAG/MPG Expert under Windows
Measuring frequency	3 Hz to 10 kHz, DC with adjustable rise time for primary signals and flux alteration control $d\Phi/dt$
Model	cabinet version
Dimensions	2100 x 600 x 800 mm (height x width x depth)
Power supply	0 to ± 125 V, 0 to ± 40 A (52 A optional)
Mains supply	3 x 200 – 3 x 400 V AC, 32 A 50/60 Hz

Other measuring systems

[Hystograph](#)
[XYZ Field Scanner](#)
[Fluxmeter](#)
[Gaussmeter](#)

Product divisions

[Measuring Technology for Soft Magnetic Materials](#)
[Magnetizing Technology](#)
[Services](#)



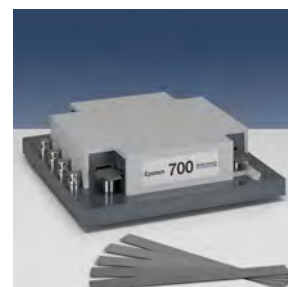
Electromagnet with heating poles



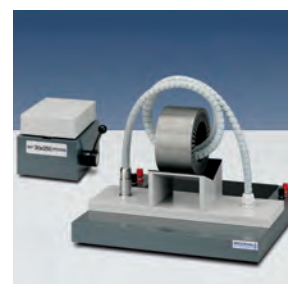
J-compensated coil



Segment pole caps



Epstein frame 700



Singlesheet and ring core sensor

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