

- Determination of the magnetic properties of electrical steel in all common quality grades, thicknesses and geometries and of other soft magnetic materials
- Quality control of strip steel, punched parts, stators, transformer or ring cores
- Versatile
- Easy to operate
- Fully digitized measuring unit
- Three coil connectors for different measuring requirements
- Module for the measurement of rings, ring strip cores, stacked punched parts etc.
- Possibility to extend the modules to include Epstein measurement
- User commands and control via PC under Windows
- MPG Expert software for measurement, display and integration into QM systems

Measuring categories

Specific hysteresis loss

Maximum polarization

Effective polarization

Maximum field strength

Effective field strength

Remanence

Coercive field strength

Permeability

Specific apparent power

Hysteresis display

Form factor

$J(H)$ values for graphic display

Measuring Technology for Soft Magnetic Materials

Measuring Instrument C510

Measuring Instrument C510

Operating principle

The sample is exposed to a defined magnetic field within a measuring coil. A magnetic flux is created inside the material. The required current is supplied by a power amplifier.

The current is measured by means of a temperature-stable and induction-free precision resistor (shunt) or by field coils.

Polarization is determined by measuring the induced voltage, and then conversion and integration by means of a 16 bit processor. Parallel recording of H and J sizes in separate recording systems guarantees absolutely parallel measurement. Errors in measurement due to phase displacement are thereby avoided.

The processor calculates all the values from the differentiated and integrated parameters.

Measuring coils

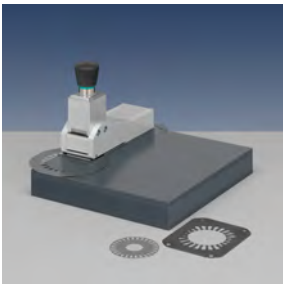
- SST sensor for “as delivered” slit strips, comparable IEC 60404-3
- C510 sensor for punched parts and small cuts
- Measuring module for rings, stators and transformer cores

Technical Data

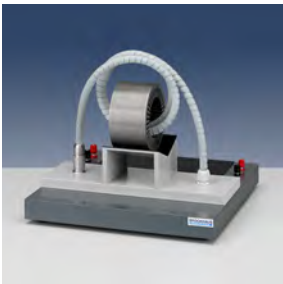
Repeatability	0.2 %
Comparability of the measuring results	IEC 60404-3
Setting accuracy of the nominal value	IEC 60404-3
Maximum current	± 5 A (optional 10 A)
Maximum voltage	± 32 V
Coil connectors	3
Operating mode	PC/software
Dimensions	tower 300 x 560 x 540 mm (width x depth x height)
Power supply	220 V AC, 50/60 Hz



Strip measuring sensor



Punched part sensor



Ring core sensor

Other measuring systems

Electrical Steel: MPG 200 D

Inline: EBA

Surface Resistance: Franklin Tester

Product divisions

Measuring Technology for Hard Magnetic Materials

Magnetizing Technology

Services