

4.3.07-11 Ferromagnetic hysteresis with PC interface system



What you can learn about ...

- Induction
- Magnetic flux, coil
- Magnetic field strength
- Magnetic field of coils
- Remanence
- Coercive field strength

Principle:

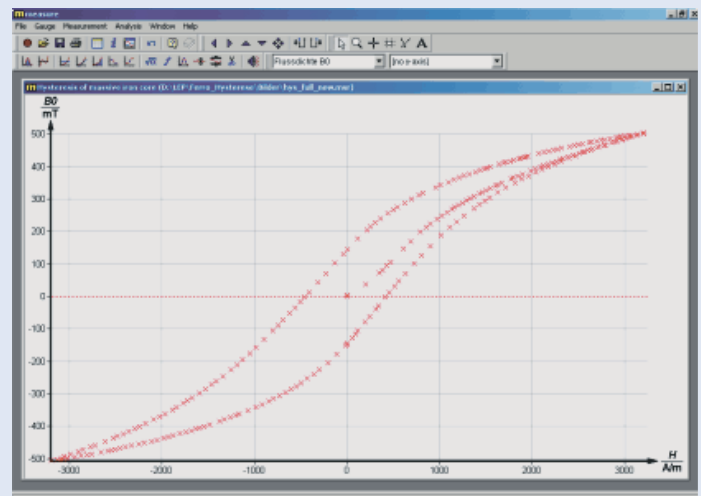
A magnetic field is generated in a ring-shaped iron core by a continuous adjustable direct current applied to two coils. The field strength H and the flux density B are measured and the hysteresis recorded.

The remanence and the coercive field strength of two different iron cores can be compared.

What you need:

Coil, 600 turns	06514.01	2
Iron core, U-shaped, solid	06491.00	1
Iron core, rod shaped, solid	06490.00	1
Iron core, U-shaped, laminated	06501.00	1
Iron core, rod shaped, laminated	06500.00	1
Commutator switch	06034.03	1
Power supply, universal, with analog display	13501.93	1
Rheostats, 10 Ω , 5.7 A	06110.02	1
Hall probe, tangential, with protective cap	13610.02	1
Barrel base -PASS-	02006.55	1
Right angle clamp -PASS-	02040.55	1
Support rod with hole, stainless steel, $l = 150$ mm	02030.15	1
Connecting cable, 4 mm plug, 32 A, red, $l = 75$ cm	07362.01	4
Connecting cable, 4 mm plug, 32 A, blue, $l = 75$ cm	07362.04	4
Cobra3 BASIC-UNIT	12150.00	1
Power supply 12V/2A	12151.99	1
Cobra3 measuring module Tesla	12109.00	1
Software Cobra3 Force/Tesla	14515.61	1
Data cable 2 x SUB-D, plug/socket, 9 pole	14602.00	1
PC, Windows® 95 or higher		

Complete Equipment Set, Manual on CD-ROM included
Ferromagnetic hysteresis
with PC interface system P2430711



Hysteresis for a massive iron core.

Tasks:

Record the hysteresis curve for a massive iron core and for a laminated one.