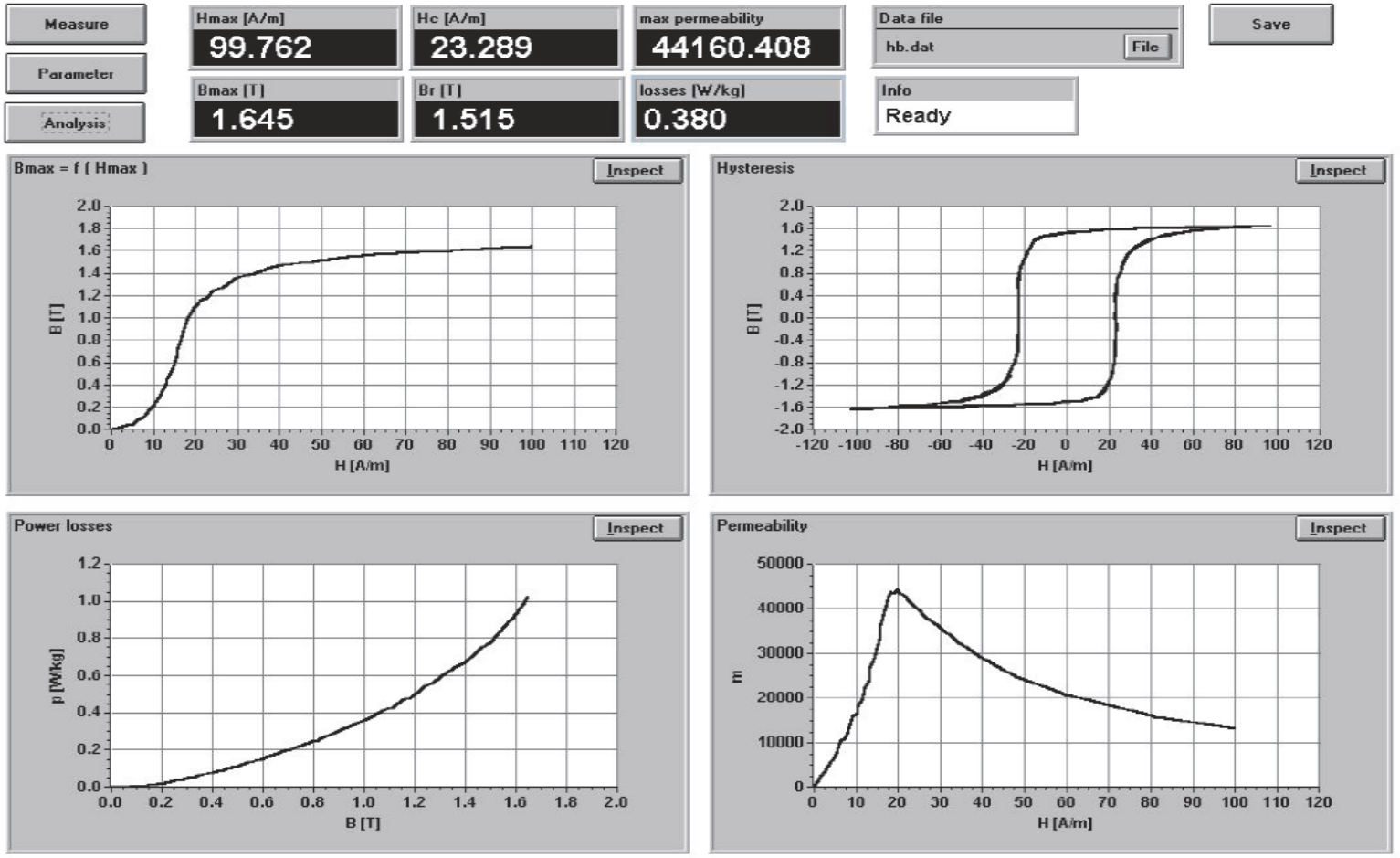
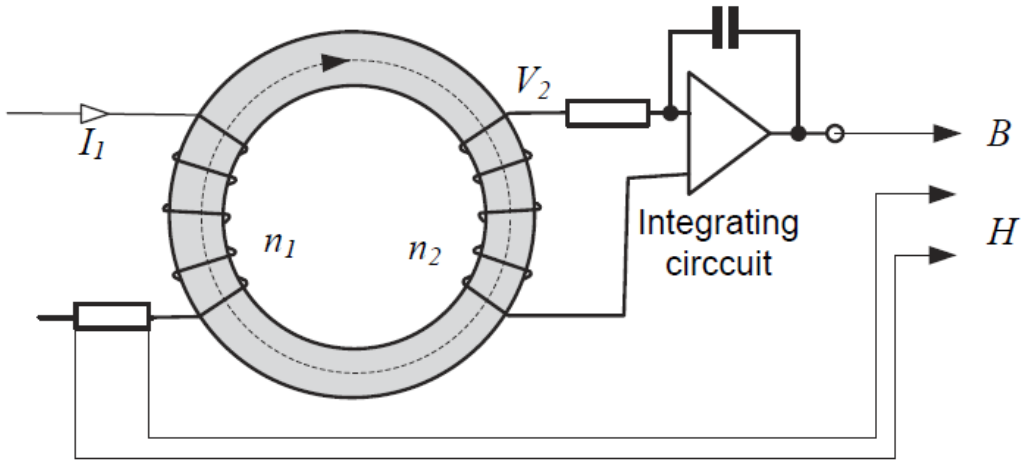
Badanie materiałów magnetycznych



Badanie metoda pośrediną



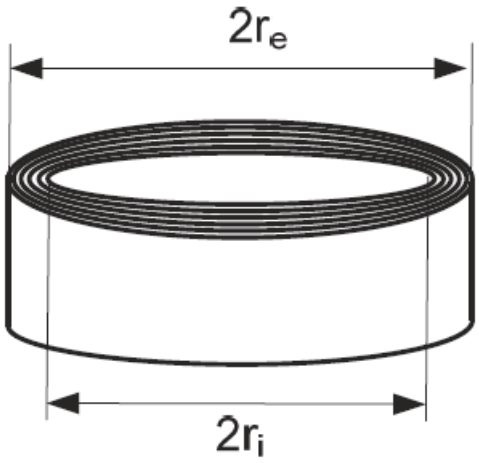
$$Hl = n_1 I_1$$

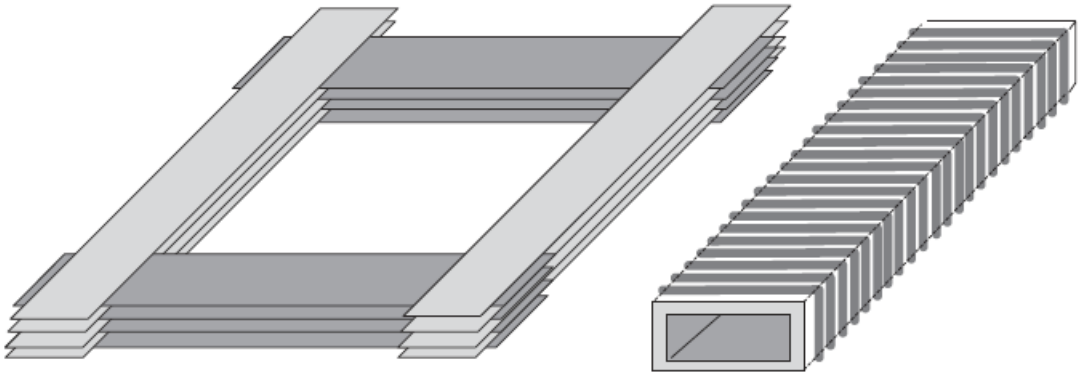
$$V_2 = n_2 A \frac{dB}{dt}$$

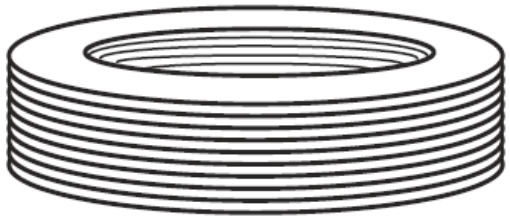
$$P = \frac{V}{T}\int_0^T \left| H \frac{dB}{dt} dt \right|$$

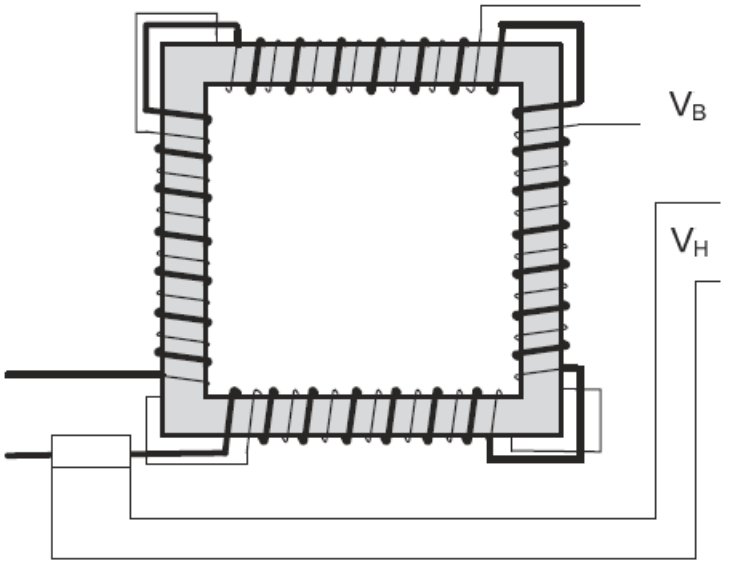
$$\mu = \frac{B}{H}$$

Obwody magnetyczne

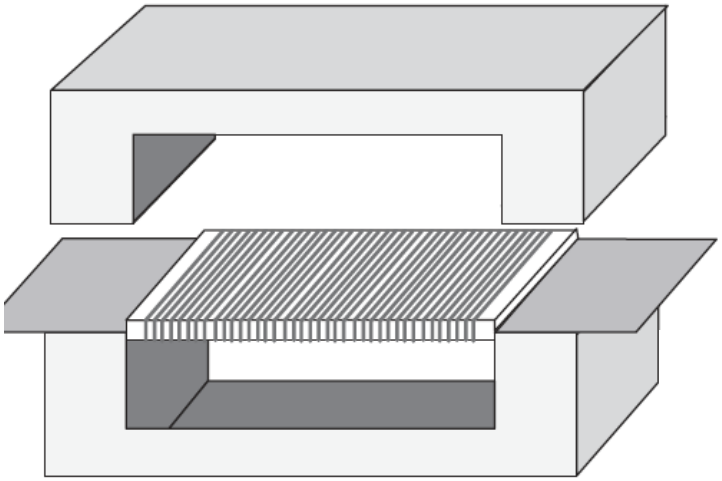


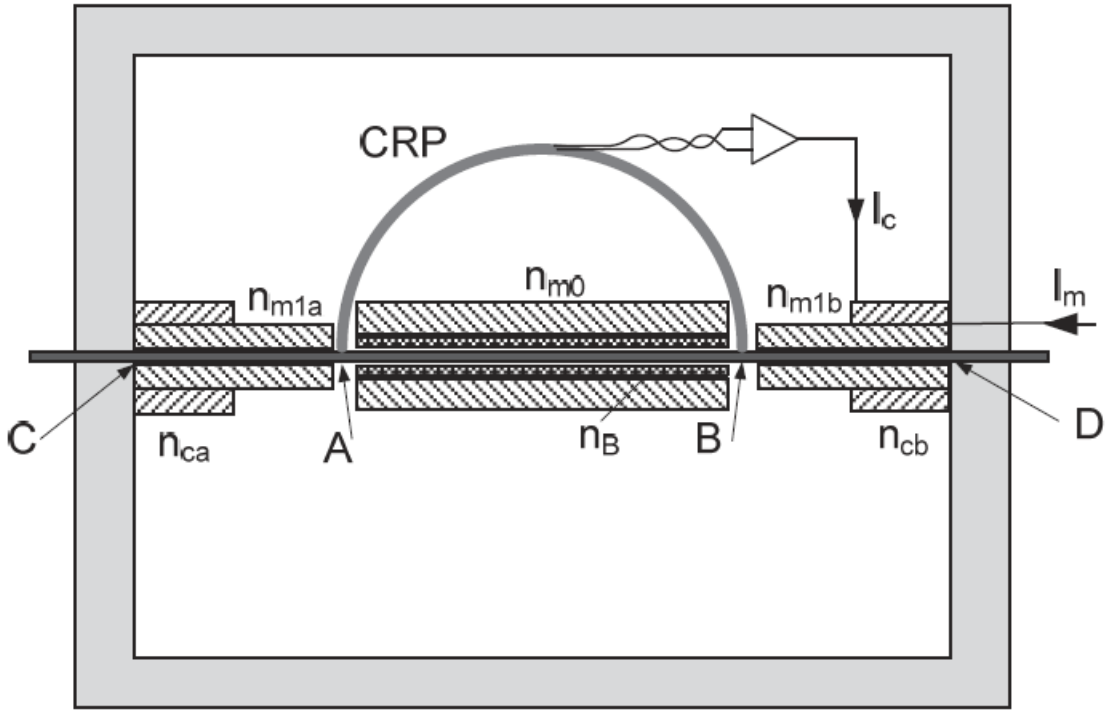




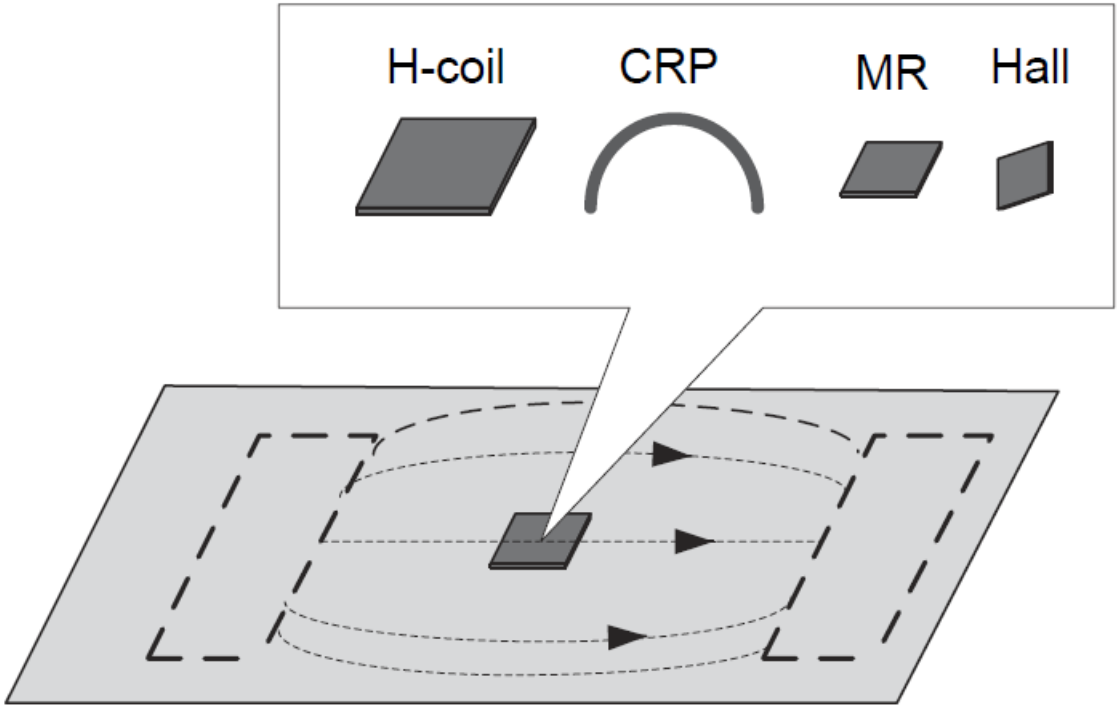


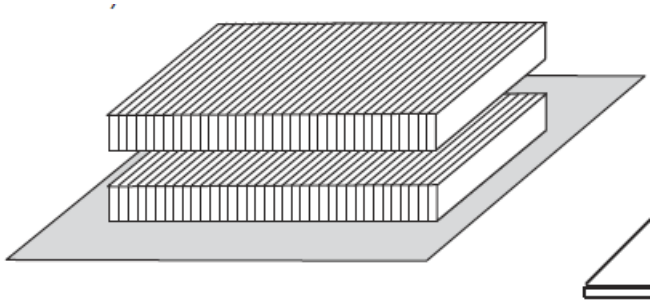
Tester próbek paskowych i arkuszowych



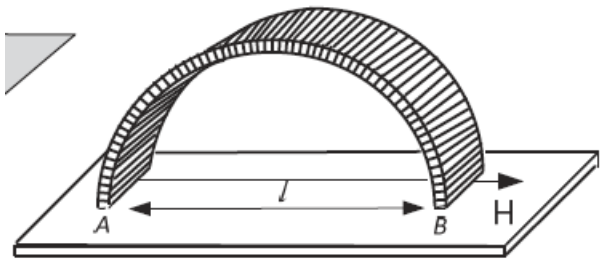


Bezpośredni pomiar natężenia pola magnetycznego

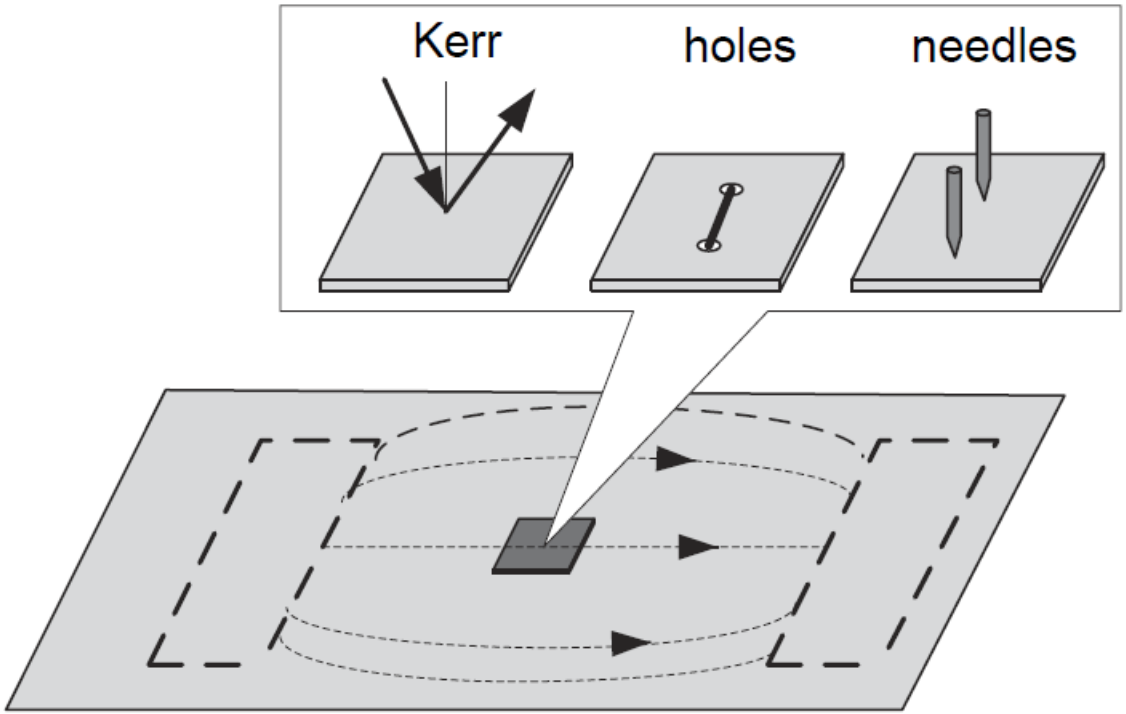


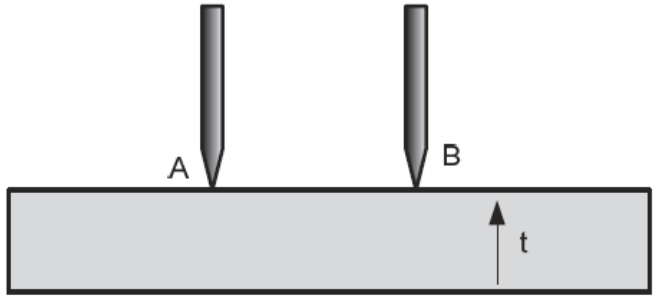


b)

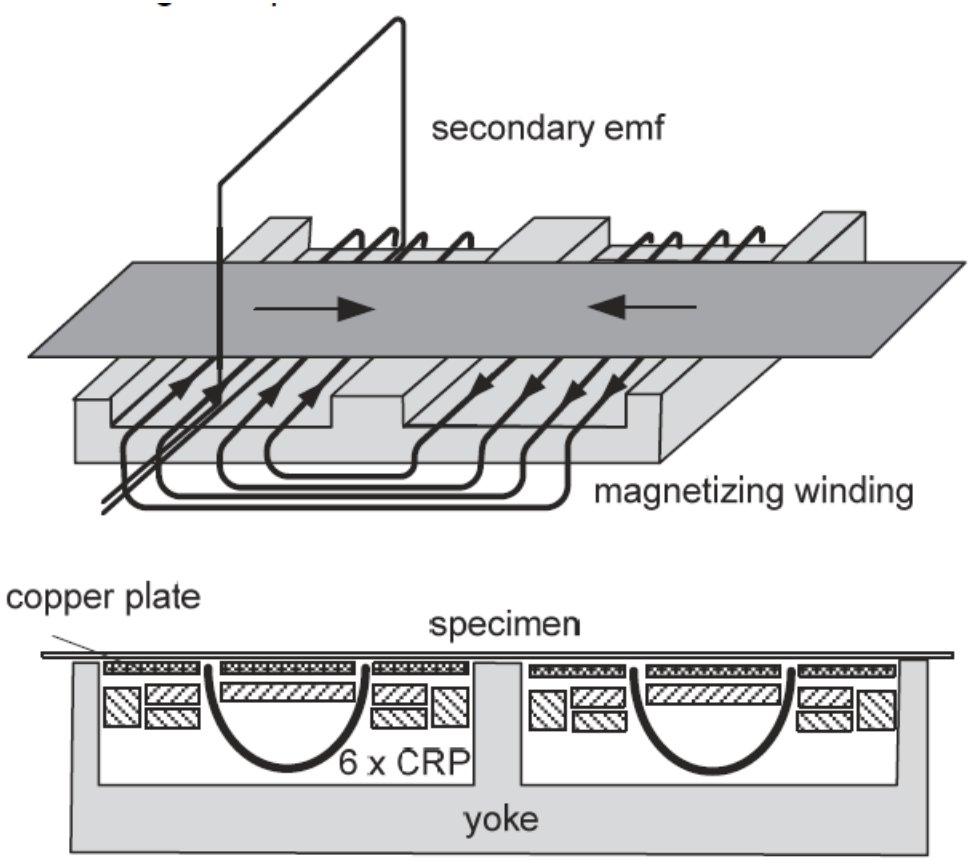


Bezpośredni pomiar indukcji

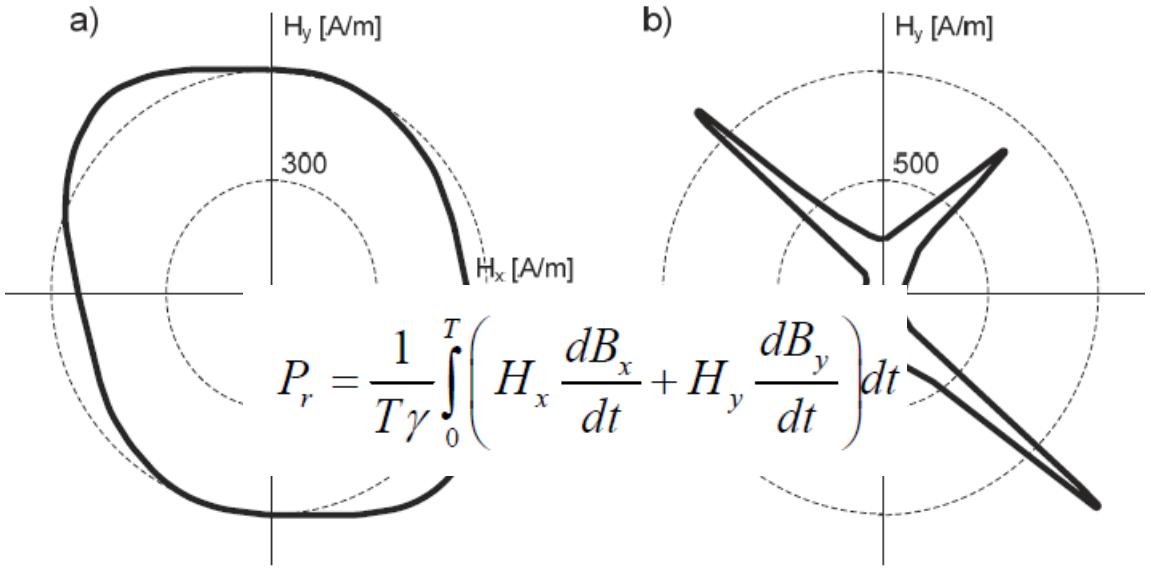




Tester on-line



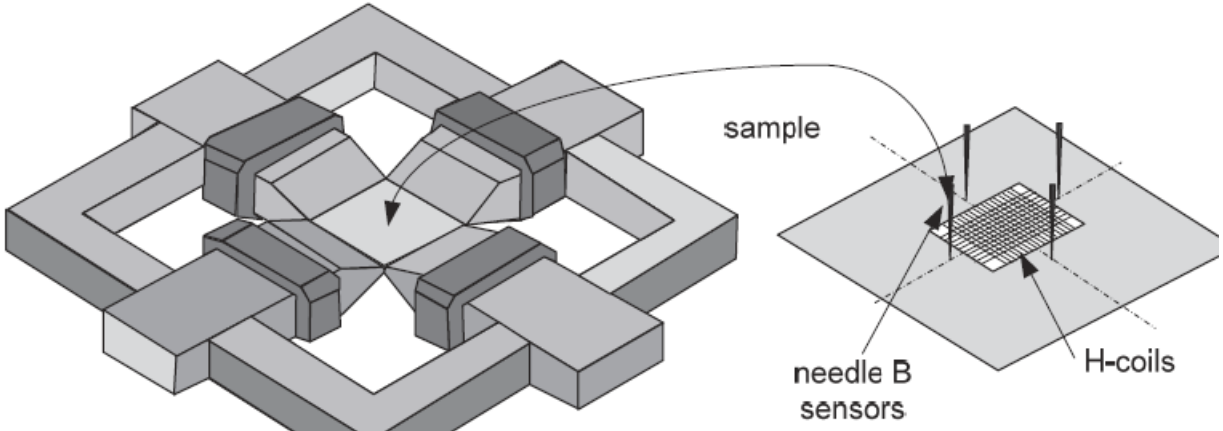
Anizotropia

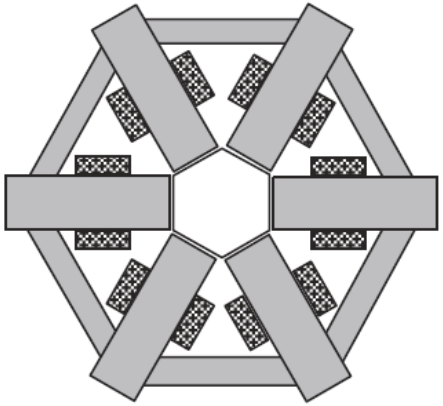


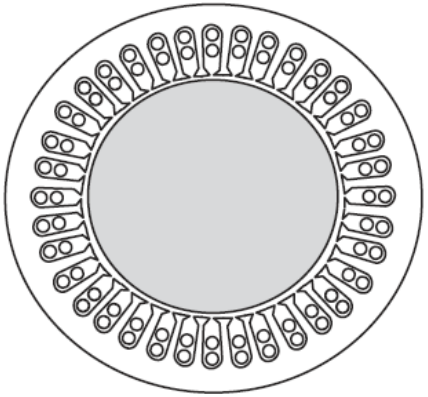
$$P_r = \frac{1}{T\gamma}\int_0^T \left(H_x \frac{dB_x}{dt} + H_y \frac{dB_y}{dt} \right) dt$$

$$P_r = \frac{1}{T\gamma}\int_0^T \left(H_x \frac{dB_x}{dt} + H_y \frac{dB_y}{dt} \right) dt$$

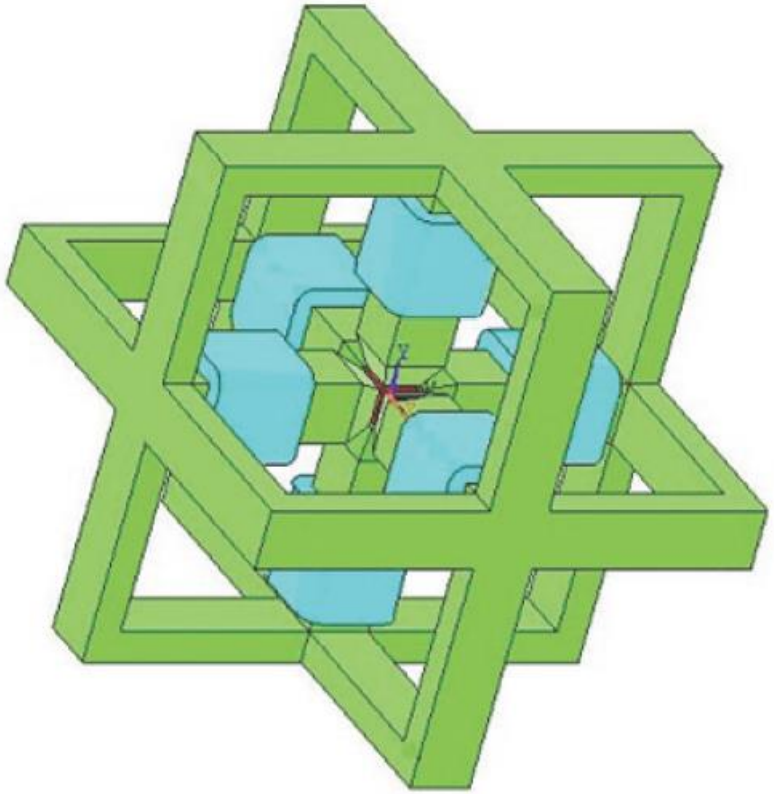
Pomiar strat rotacyjnych







Pomiar 3D



Właściwości blach GO i NO

Table 1. Performances of typical grain-oriented steel samples [11

Name	Thickness [mm]	Loss at 1.7 T, 50 Hz [W/kg]	Polarization for 800 A/m [T]
M080-23N	0.23	1.27	1.75
M089-27N	0.27	1.40	1.75
M097-30N	0.30	1.50	1.75
M111-35N	0.35	1.65	1.75
M120-23S	0.23	1.20	1.78
M130-27S	0.27	1.30	1.78
M140-30S	0.30	1.40	1.78
M150-35S	0.35	1.50	1.78
M100-23P	0.23	1.00	1.85
M103-27P	0.27	1.03	1.88
M105-30P	0.30	1.05	1.88
M111-30P	0.30	1.11	1.88
M117-30P	0.30	1.17	1.85

Table 1. Performances of typical non-oriented steel samples [12]

Name	Thick-ness [mm]	Loss at 1.5 T, 50 Hz [W/kg]	Polariz ation for 5000 A/m [T]	Anizo-tropy of loss %
M235-35A	0.35	2.35	1.6o	17
M250-35A		2.50		
M270-35A		2.70		
M300-35A		3.00		
M330-35A		3.30		
M250-50A	0.50	2.50	1…60	17
M270-50A		2.70	1.60	17
M290-50A		2.90	1.60	17
M310-50A		3.10	1.60	14
M330-50A		3.30	1.60	14
M350-50A		3.50	1.60	12
M400-50A		4.00	1.63	12
M470-50A		4.70	1.64	10
M530-50A		5.30	1.65	10
M600-50A		6.00	1.66	10
M700-50A		7.00	1.69	10
M800-50A		8.00	1.70	10
M940-50A		9.40	1.72	8