

DETECTING MAGNETIC INKS DURING BANKNOTE QUALITY INSPECTIONS

Weak magnetic ink signatures on banknotes are hard to detect at speed. MAGNETOMAT reliably detects hotspots below 100 nT.



THE CHALLENGE

Modern banknotes integrate magnetic inks as invisible security features. During quality control, these weak magnetic signatures – typically below 100 nT – must be reliably detected and differentiated from non-magnetic areas. High inspection speeds and large sheet volumes require highly sensitive and automation-ready magnetic measurement systems.

THE SOLUTION

Magnetic remanence testing is performed using the MAGNETOMAT system with the PD-100-20 probe. The high-sensitivity probe detects faint magnetic hotspots up to approximately 100 nT. With 4-channel sensor electronics and a 2 kHz sampling rate, the system is designed for seamless integration into automated banknote inspection lines.



THE RESULT

The solution enables precise localization and differentiation of magnetic ink signatures from ink-free regions. High sampling rates ensure reliable inspection even at elevated production speeds. Automated data transfer and control functions support efficient quality assurance in banknote manufacturing and testing equipment environments.

THE PRODUCTS

MAGNETOMAT

PC-supported magnetometer for measuring magnetic flux density and relative permeability



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