

USING COERCIVITY TO MONITOR THE QUALITY OF ALNICO PERMANENT MAGNETS

Verifying coercivity (H_cJ) of AlNiCo magnets is essential for quality. KOERZIMAT 1.097 HCJ enables fast, geometry-independent measurement.



THE CHALLENGE

AlNiCo permanent magnets remain widely used due to their thermal stability and reliable magnetic performance. Coercive field strength (H_cJ) is a key parameter defining magnet quality and resistance to demagnetization. For production control and delivery inspection, fast and geometry-independent verification of H_cJ is essential to ensure compliance with specified magnetic properties

THE SOLUTION

Coercivity measurement is performed using the KOERZIMAT 1.097 HCJ system in accordance with IEC 60404-7. With pulse magnetization and a 40 mm coil, field strengths up to 450 kA/m can be generated. The system enables geometry-independent determination of H_cJ for AlNiCo magnets with coercivity up to 100 kA/m and defined magnetizing field limits.



THE RESULT

The solution allows precise monitoring of H_cJ within the typical AlNiCo range of 30 to 150 kA/m. High field capability ensures reliable saturation and accurate measurement. Fast and reproducible testing supports stable production processes and verified magnetic performance of permanent magnets in industrial applications.

THE PRODUCTS

KOERZIMAT 1.097 HCJ/J-H

System for measuring coercive field strength HCJ, J(H) hysteresis and relative permeability $\mu_r(H)$



foerstergroup.com



The FOERSTER Group is represented by subsidiaries and representatives in over 60 countries worldwide. You can find a complete overview on our website.

Headquarters

Institut Dr. Foerster GmbH & Co. KG

In Laisen 70
72766 Reutlingen
Germany

+49 7121 140 0
info@foerstergroup.com