



The MFA-2000L measures the magnetic field strength of magnets used inside mag rollers for electrophotographic printers. The system is computer controlled using a standard Windows computer. Measurements can be made in the axial direction to show the uniformity of magnet strength, and also radially to show peak flux magnitude and pole angle.

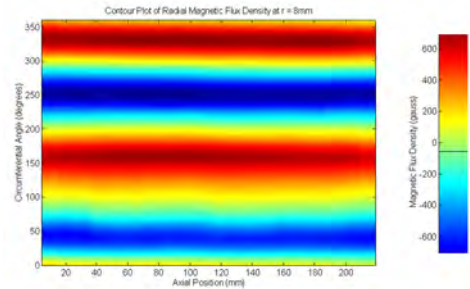
**The Magnetic Field Analysis System**

The magnetic roller is a critical component in magnetic development systems in electrophotography. It serves to meter and deliver a uniform layer of toner to the development zone and to control the amount of toner delivered onto the photoreceptor. To ensure good print quality, the magnetic field around the roller must be properly designed and carefully controlled otherwise poor tone reproduction and background toner development will occur.

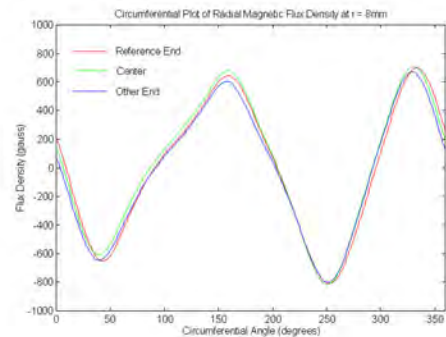
The MFA-2000L measures this magnetic flux density (Gauss) at a precise radial distance from the surface of the magnet. The system is computer controlled so that the Hall-effect probe can be positioned to any axial or angular position on the magnet. This allows the system to make both axial and circumferential scans of the magnet.

When making circumferential scans, a plot shows the magnetic pole angle (relative to the D-flat) and peak pole flux. When making axial scans, the flux uniformity can be measured along the length of the magnet.

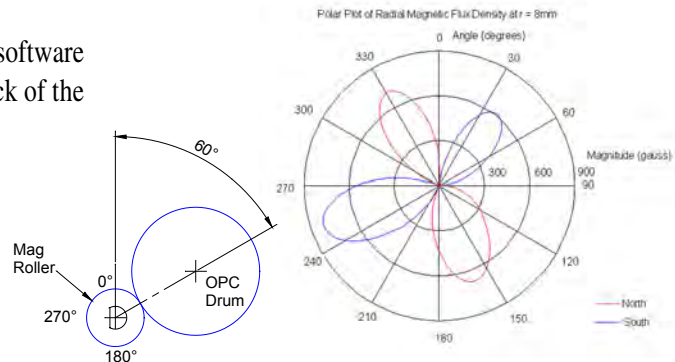
All measurements are made with an easy-to-use computer software interface with many measurements made with a single click of the mouse button.



**Map of Magnetic Flux Density**



**Circumferential Scan, Linear Plot**



**Circumferential Scan, Polar Plot**



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