

Magnetic Particle Testing Lecture Guide second edition

Errata – second printing 06/18

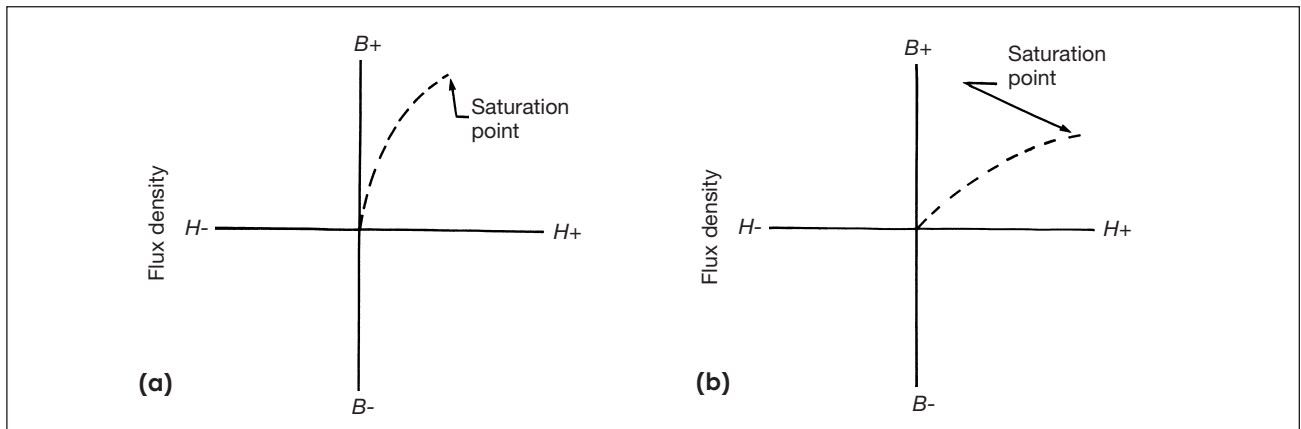
The following text correction pertains to the second edition of the *Magnetic Particle Testing Lecture Guide*. Subsequent printings of the document will incorporate the corrections into the published text.

The attached corrected page applies to the second printing 06/18. In order to verify the print run of your book, refer to the copyright page. Ebooks are updated as corrections are found.

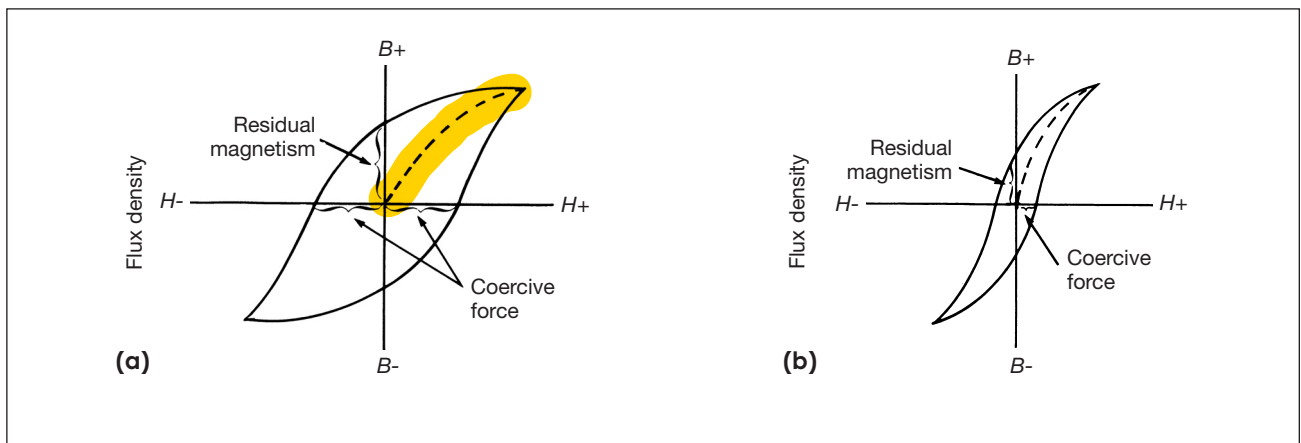
Page	Correction
35	In the bottom figure (a), the dashed line should appear top right quadrant as shown below, rather than the bottom left.

Magnetic Permeability

1. Permeability is how easily a material can be magnetized. More specifically, it is the ratio between the flux density and the magnetizing force.
2. Magnetic properties and hysteresis loops vary between materials, material conditions, shape, chemical composition, microstructure, and grain size.
3. The following figure shows permeability curves of (a) high-permeability (easy-to-magnetize) and (b) low-permeability (hard-to-magnetize) material.



4. The next figure (a) is a hysteresis loop for a low-permeability (hard-to-magnetize) material and illustrates the higher residual magnetism and the higher coercive force required to demagnetize.



5. Shown in (b) is a hysteresis loop for a high-permeability (easy-to-magnetize) material and illustrates the lower residual magnetism and lower coercive force required to demagnetize.