



Designation: A 343/A 343M – 9703

Standard Test Method for Alternating-Current Magnetic Properties of Materials at Power Frequencies Using Wattmeter-Ammeter-Voltmeter Method and 25-cm Epstein Test Frame¹

This standard is issued under the fixed designation A 343/A 343M; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This test method covers tests for the magnetic properties of basic flat-rolled magnetic materials at power frequencies (25 to 400 Hz) using a 25-cm Epstein test frame and the 25-cm double-lap-jointed core. It covers the determination of core loss, rms exciting power, rms and peak exciting current, and several types of ac permeability and related properties of flat-rolled magnetic materials under ac magnetization.

1.2 This test method shall be used in conjunction with Practice A 34/A 34M.

¹ This test method is under the jurisdiction of ASTM Committee A06 on Magnetic Properties and is the direct responsibility of Subcommittee A6.01 on Test Methods. Current edition approved April 10, 1997; 2003. Published December 1997; July 2003. Originally published as A 343 – 49; approved in 1949. Last previous edition approved in 1997 as A 343 – 93a7.