ASTM Volume 03.07, October 2017

Magnetic Properties

Table of Contents

A34/A34M-06(2012) Standard Practice for Sampling and Procurement Testing of Magnetic Materials

A340-16 Standard Terminology of Symbols and Definitions Relating to Magnetic Testing

A341/A341M-16 Standard Test Method for Direct Current Magnetic Properties of Soft Magnetic Materials Using D-C Permeameters and the Point by Point (Ballistic) Test Methods

A342/A342M-14 Standard Test Methods for Permeability of Weakly Magnetic Materials

A343/A343M-14 Standard Test Method for Alternating-Current Magnetic Properties of Materials at Power Frequencies Using Wattmeter-Ammeter-Voltmeter Method and 25cm Epstein Test Frame

A345-14 Standard Specification for Flat-Rolled Electrical Steels for Magnetic Applications

A348/A348M-05(2015) Standard Test Method for Alternating Current Magnetic Properties of Materials Using the Wattmeter-Ammeter-Voltmeter Method, 100 to 10 000 Hz and 25-cm Epstein Frame

A596/A596M-14 Standard Test Method for Direct-Current Magnetic Properties of Materials Using the Ballistic Method and Ring Specimens

A598/A598M-02(2015) Standard Test Method for Magnetic Properties of Magnetic Amplifier Cores

A664-15 Standard Practice for Identification of Standard Electrical Steel Grades in ASTM

Specifications

A677-16 Standard Specification for Nonoriented Electrical Steel Fully Processed Types

A683-16 Standard Specification for Nonoriented Electrical Steel, Semiprocessed Types

A697/A697M-13 Standard Test Method for Alternating Current Magnetic Properties of Laminated Core Specimen Using Voltmeter-Ammeter-Wattmeter Methods

A698/A698M-15 Standard Test Method for Magnetic Shield Efficiency in Attenuating Alternating Magnetic Fields

A712-14 Standard Test Method for Electrical Resistivity of Soft Magnetic Alloys

A717/A717M-12 Standard Test Method for Surface Insulation Resistivity of Single-Strip Specimens

A719/A719M-14 Standard Test Method for Lamination Factor of Magnetic Materials

A720/A720M-02(2016)e1 Standard Test Method for Ductility of Nonoriented Electrical Steel

A721/A721M-02(2016) Standard Test Method for Ductility of Oriented Electrical Steel

A726-05(2010) Standard Specification for Cold-Rolled Magnetic Lamination Quality Steel, Semiprocessed Types

A753-08(2013) Standard Specification for Wrought Nickel-Iron Soft Magnetic Alloys (UNS K94490, K94840, N14076, N14080)

A772/A772M-00(2016) Standard Test Method for AC Magnetic Permeability of Materials Using Sinusoidal Current

A773/A773M-14 Standard Test Method for Direct

Current Magnetic Properties of Low Coercivity Magnetic Materials Using Hysteresigraphs

A801-14 Standard Specification for Wrought Iron-Cobalt High Magnetic Saturation Alloys (UNS R30005 and K92650)

A804/A804M-04(2015) Standard Test Methods for Alternating-Current Magnetic Properties of Materials at Power Frequencies Using Sheet-Type Test Specimens

A811-15 Standard Specification for Soft Magnetic Iron Parts Fabricated by Powder Metallurgy Techniques

A838-02(2013) Standard Specification for Free-Machining Ferritic Stainless Soft Magnetic Alloy Bar for Relay Applications

A839-15 Standard Specification for Iron-Phosphorus Powder Metallurgy Parts for Soft Magnetic Applications

A848-01(2011) Standard Specification for Low-Carbon Magnetic Iron

A867-03(2013) Standard Specification for Iron-Silicon Relay Steels

A876-12 Standard Specification for Flat-Rolled, Grain-Oriented, Silicon-Iron, Electrical Steel, Fully Processed Types

A889/A889M-14 Standard Test Method for Alternating-Current Magnetic Properties of Materials at Low Magnetic Flux Density Using the Voltmeter-Ammeter-Wattmeter-Varmeter Method and 25-cm Epstein Frame

A893/A893M-03(2015) Standard Test Method for Complex Dielectric Constant of Nonmetallic Magnetic Materials at Microwave Frequencies

A894/A894M-00(2011)e1 Standard Test Method

for Saturation Magnetization or Induction of Nonmetallic Magnetic Materials

A900/A900M-01(2012) Standard Test Method for Lamination Factor of Amorphous Magnetic Strip

A901-12 Standard Specification for Amorphous Magnetic Core Alloys, Semi-Processed Types

A904-14 Standard Specification for 50 Nickel-50 Iron Powder Metallurgy Soft Magnetic Parts

A912/A912M-11 Standard Test Method for Alternating-Current Magnetic Properties of Amorphous Materials at Power Frequencies Using Wattmeter-Ammeter-Voltmeter Method with Toroidal Specimens

A927/A927M-11 Standard Test Method for Alternating-Current Magnetic Properties of Toroidal Core Specimens Using the Voltmeter-Ammeter-Wattmeter Method

A932/A932M-01(2012) Standard Test Method for Alternating-Current Magnetic Properties of Amorphous Materials at Power Frequencies Using Wattmeter-Ammeter-Voltmeter Method with Sheet Specimens

A937/A937M-12 Standard Test Method for Determining Interlaminar Resistance of Insulating Coatings Using Two Adjacent Test Surfaces

A971/A971M-10 Standard Test Method for Measuring Edge Taper and Crown of Flat-Rolled Electrical Steel Coils

A976-13 Standard Classification of Insulating Coatings for Electrical Steels by Composition, Relative Insulating Ability and Application

A977/A977M-07(2013) Standard Test Method for Magnetic Properties of High-Coercivity Permanent Magnet Materials Using Hysteresigraphs A1009-05(2010) Standard Specification for Soft Magnetic MnZn Ferrite Core Materials for High Frequency (10 kHz-1 MHz) Power Transformer and Filter Inductor Applications

A1013-00(2013)e1 Standard Test Method for High-Frequency (10 kHz-1 MHz) Core Loss of Soft Magnetic Core Components at Controlled Temperatures Using the Voltmeter-Ammeter-Wattmeter Method

A1036-04(2015) Standard Guide for Measuring Power Frequency Magnetic Properties of Flat-Rolled Electrical Steels Using Small Single Sheet Testers

A1054-16 Standard Specification for Sintered Ferrite Permanent Magnets

A1070-16 Standard Specification for Cast and Sintered Alnico Permanent Magnets

A1071/A1071M-11(2015) Standard Test Method for Evaluating Hygrothermal Corrosion Resistance of Permanent Magnet Alloys

A1086-13 Standard Specification for Thin-Gauge Nonoriented Electrical Steel Fully Processed Types

A1101-16 Standard Specification for Sintered and Fully Dense Neodymium Iron Boron (NdFeB) Permanent Magnets

A1102-16 Standard Specification for Sintered Samarium Cobalt (SmCo) Permanent Magnets