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Metal Balls for Unground Bearings and Other Uses ANSI/ABMA 10A:2001 (R2015)



Secretariat

**American Bearing
Manufacturers Association**

ANSI/ABMA 10A:2001 (R2015)



ABMA
2025 M Street, NW
Suite 800
Washington, DC 20036
Ph: 202-367-1155
Fax: 202-367-2155
E-mail: info@americanbearings.org
www.americanbearings.org

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Metal Balls for Unground Bearings and Other Uses

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METAL BALLS FOR UNGROUND BEARINGS AND OTHER USES

1. Scope. This standard establishes the requirements for metal balls for unground rolling contact bearings and other uses. The requirements for finished balls for roiling contact bearings are contained in ANSI/ABMA/ISO 3290.

2. Normative references. The following standards contain provisions, which through reference in this text constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards below.

ANSI B89.3.1-1972 (R1988), *Out-Of Roundness, Measurement of*

ANSI/ASME B46.1-1995, *Surface Texture (Surface Roughness, Waviness and Lay)*

ANSI/ASQC Z1.4- 1993, *Sampling Procedures and Tables for Inspection by Attributes*

ASTM E 18-98, *Test Methods for Rockwell Hardness and Rockwell Superficial Hardness of Metallic Materials*

ASTM E140-97e1, *Hardness Conversion Tables for Metals (Relationship Between Brinell Hardness, Vickers Hardness, Rockwell Hardness, Rockwell Superficial Hardness, Knoop Hardness and Scleroscope Hardness)*

ASTM E384-89 (1997), *Standard Test Method for Microhardness of Materials*

Federal Specification GGG-G-15C (March 20, 1975), *Gage Blocks and Accessories (Inch and Metric)*

ISO 3290: 1998, *Rolling bearings - Balls - Dimensions and Hardness*

ISO 4288: 1996, *Geometrical Product Specifications (GPS) - Surface texture: Profile method - Rules and procedures for the assessment of surface texture*

ISO 4291: 1985, *Methods for the assessment of departure from roundness - Measurement of variations in radius*

ISO 6508-1: 1999, *Metallic materials - Hardness test - Rockwell test (scales A - B - C - D - E - F - G - H - K)*

3. Definitions and symbols. The following definitions and symbols will apply to terms used in this standard.

3.1 Nominal ball diameter, D_w . The diameter value that is used for the purpose of general identification of a ball size; e.g., $\frac{1}{4}$ inch, 6 mm, etc.

