

AN AMERICAN NATIONAL STANDARD

Machine Mounting Specifications for Abrasive Discs and Plate Mounted Wheels

ANSI/ASME B5.35 - 1983

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ERRATA
to
ANSI/ASME B5.35-1983
MACHINE MOUNTING SPECIFICATIONS FOR ABRASIVE DISCS
AND PLATE MOUNTED WHEELS

Page 2, Fig. 1.2 — *Correct socket head cap screw to show flat bottom, as illustrated below.*

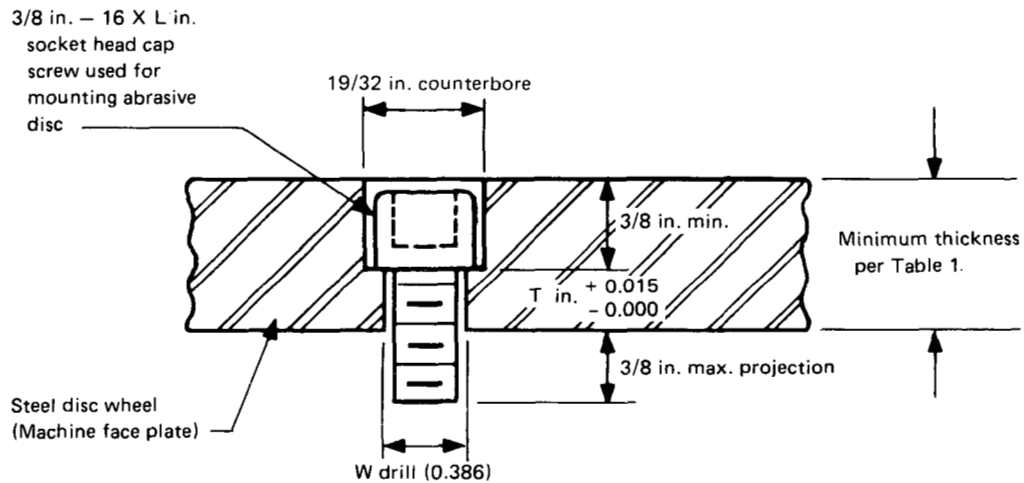


FIG. 1.2 DETAIL OF MOUNTING HOLE AND SCREW FOR INSERTED NUT TYPE MOUNTING

M0035E



FOREWORD

(This Foreword is not part of ANSI/ASME B5.35-1983, Machine Mounting Specifications for Abrasive Discs and Plate Mounted Wheels.)

This Standard, Machine Mounting Specifications for Abrasive Discs and Plate Mounted Wheels, was approved as an American Standard by the American Standards Association (now the American National Standards Institute) on September 17, 1957. The characteristic which makes this class of wheels different from the conventional grinding wheel is the method by which they are mounted on the grinding machine where grinding is done on the exposed flat side of the wheel. The principal difference is that the power is impacted to the grinding wheel through either inserted nuts, inserted washers, projecting studs anchored on one side of the abrasive wheel, or a mounting plate of steel or other rigid material cemented to one side of the wheel.

The steel wheels (machine face plates) on which these abrasive discs and plate mounted wheels are mounted must be drilled with holes to match the location and pattern of the holes of the mounting plates or other anchoring devices in the mounting side of the abrasive wheels.

This Standard was considered for reaffirmation in November 1963 by TC31. Certain revisions for clarification were recommended, and the text of the Standard was reorganized and indexed to conform to the B5 style manual.

Following approval by TC31 and the B5 Standards Committee, the proposed revision was approved by the sponsors. It was approved by the USA Standards Institute and redesignated a USA Standard on January 3, 1969.

The present revision was approved by the American National Standards Institute on October 17, 1983.

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AN AMERICAN NATIONAL STANDARD

**MACHINE MOUNTING SPECIFICATIONS FOR ABRASIVE DISCS AND
PLATE MOUNTED WHEELS****1 PURPOSE**

To provide standards to be used in the design of machine face plates matching the location of nuts, washers, studs of abrasive discs, or plain or tapped holes of plate mounted wheels.

2 SCOPE

This Standard covers ANSI Standard practice for location and size of bolt holes for mounting abrasive discs and plate mounted wheels.

3 GENERAL

3.1 Abrasive discs are bonded abrasives which are molded with inserted nuts, inserted washers, projecting studs, or a tapped mounting plate on the mounting side of the abrasive disc. The nuts, washers, studs, or tapped holes are located in a pattern to match the spacing of corresponding holes in the machine face plate.

3.2 For standard diameters and minimum thicknesses of steel disc wheels, see Table 1.

3.3 Inserted nut type discs (see Fig. 1.1) are those having threaded nuts anchored in the mounting side of the disc which are located in a pattern to match the spacing of corresponding holes in the machine face plate (see Fig. 1.2).

3.4 Inserted washer type discs (see Table 2 and Fig. 2) are those having washers anchored in the mounting side of the disc which are located in a pattern to match the corresponding holes in the machine face plate.

3.5 Tapped mounting plate type discs (see Table 3 and Fig. 3) are those having a mounting plate cemented to the mounting side of the disc which has

tapped holes located in a pattern to match the corresponding holes in the machine face plate.

3.6 Projecting stud type discs (see Table 4 and Fig. 4) are those having studs enclosed in the mounting side of the disc which are located in a pattern to match the corresponding holes in the machine face plate.

3.7 Cylinder type discs (see Table 5 and Fig. 5) are similar in shape to Type 2 abrasive wheels. Mounting may be by means of inserted nuts, projecting studs, or tapped mounting plate. The mounting means are located in a pattern to match the corresponding holes in the machine face plate.

3.8 Plate mounted wheels (see Tables 6 and Fig. 6) are bonded abrasives having mounting plates of steel or other rigid material cemented to the mounting side of the wheel which has mounting holes located in a pattern to match corresponding holes in the machine face plate. The mounting holes are always located within the inside diameter of the abrasive section. Grinding is done on the exposed flat side.

**4 STANDARD HOLE SPACING FOR STEEL
WHEELS (MACHINE FACE PLATES) FOR
10 in. TO 30 in. DIAMETER ABRASIVE
DISCS**

See ANSI B7.1, American National Standard Safety Requirements for the Use, Care, and Protection of Abrasive Wheels, Table 2, Minimum Thickness of Machine Face Plates (Steel Disc Wheels) for Mounting Abrasive Discs.

4.1 For 10 in. to 30 in. diameter discs, see Figs. 7, 8, and 9.

4.1.1 Holes on each bolt circle are equally spaced.