

AN AMERICAN NATIONAL STANDARD

T-Slots, Their Bolts, Nuts, and Tongues

ANSI/ASME B5.1M - 1985

(REVISION OF ANSI B5.1-1975)

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FOREWORD

(This Foreword is not part of ANSI/ASME B5.1M-1985.)

Work on the standardization of T-slots started in 1924 and a tentative standard was published in 1927. The first official American Standard for T-slots came in 1941. This was last revised in 1949.

The 1975 revision continued the basic sizes originally established. However, all dimensions except the nominal T-bolt size were converted to decimal inches in recognition of the increasing preference of industry for decimals.

Much material that was originally included to cover the transitional period has been deleted. A lettering system for the figures has been adopted that should facilitate cross reference between tables. In this system, comparable dimensions bear the same letter with a subscript indicating table number. Thus, A_1 is width of T-slot throat, A_2 is diameter of T-bolt to fit that throat, and A_3 is width of T-nut tongue to fit that throat.

Metric T-slots, as they have been standardized by ISO/TC39, Machine Tools, have been placed side by side with the inch-sized T-slots. Interchangeability is possible between corresponding sizes of the two measuring systems with the exception of the locating tongue and T-slot throat dimensions, and the difference in the fastening threads on T-bolts. The listing of T-slots and T-bolts in ISO 299-1973, although essentially identical to sizes listed in this Standard, are rejected because they are shown with fractional dimensions. The spacing of T-slots in machine tool components as given in ISO 299-1973 is likewise rejected following consensus of U.S. builders and users of machine tools. This Standard accepts the tolerance codes of ISO 286 for metric sizes of T-slots only.

Information relative to cutters for T-slots has been deleted to avoid duplication and possible conflict with information contained in ANSI/ASME B94.19, Milling Cutters and End Mills.

Following approval by the Standards Committee, the 1975 revision was presented to the sponsor organizations and to ANSI for approval and designation as an American National Standard. This was granted on August 8, 1975.

The 1985 revision was approved as an American National Standard on December 12, 1985.