

Machine tapers —

Part 4: Specification for spindle noses and tool shanks with self-release 7/24 tapers

[ISO title: 7/24 tapers for tool shanks for manual changing]

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Machine, Engineers and Hand Tools Standards Policy Committee (MTE/-) to Technical Committee MTE/7, upon which the following bodies were represented:

- Advanced Manufacturing Technology Research Institute
- Gauge and Tool Makers' Association
- Institution of Production Engineers
- Milling Cutter Association
- Twist Drill and Reamer Association

This British Standard, having been prepared under the direction of the Machine, Engineers and Hand Tools Standards Policy Committee, was published under the authority of the Board of BSI and comes into effect on 31 May 1989

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National foreword

This Part of BS 1660 has been prepared under the direction of the Machine, Engineers and Hand Tools Standards Policy Committee. It is identical with ISO 297:1988 “7/24 tapers for tool shanks for manual changing” which was prepared jointly by Technical Committees ISO/TC 39 and ISO/TC 29 of the International Organization for Standardization (ISO) and in the development of which the United Kingdom played an active part.

This Part of BS 1660 includes tapers of sizes 55, 65, 70, 75 and 80. Size 55 tapers, however, are non-preferred.

Other Parts of BS 1660 currently published are as follows.

- *Part 1: Specification for shanks and sockets with self-holding tapers (Morse and metric 5 %);*
- *Part 2: Specification for reduction sleeves and extension sockets for tools with Morse taper shanks;*
- *Part 3: Specification for turret sockets and reduction sleeves with tapped ends for tools with Morse taper shanks;*
- *Part 5: Specification for adaptors with 7/24 internal and external tapers;*
- *Part 6: Specification for adaptors with external 7/24 tapers for tools with Morse taper shanks;*
- *Part 7: Specification for extension adaptors with external 7/24 tapers for tools with Morse taper shanks;*
- *Part 9: Specification for cotter slots;*
- *Part 10: Specification for drill chuck tapers (Jacob and short Morse).*

BS 1660-1 to BS 1660-10 collectively superseded BS 1660:1972 which was withdrawn in 1988. This Part supersedes BS 1660-4:1988 and BS 1660-8:1988 which are withdrawn.

Terminology and conventions. The text of the International Standard has been approved as suitable for publication as a British Standard without deviation. Some terminology and certain conventions are not identical with those used in British Standards; attention is drawn especially to the following.

The comma has been used as a decimal marker. In British Standards it is current practice to use a full point on the baseline as the decimal marker.

Wherever the words “International Standard” appear, referring to this standard, they should be read as “British Standard”.

Inch dimensions. In accordance with the UK policy of metrication, inch dimensions given in this standard are not used and are included for information purposes only.

Cross-references

International standard	Corresponding British Standard
ISO 7388-1:1983	BS 6607 <i>Tool shanks with 7/24 taper for automatic tool changers</i> Part 1:1985 <i>Specification for shanks Nos. 40, 45 and 50</i> (Identical)

The Technical Committee has reviewed the provisions of ISO 4762:1977, to which reference is made in the text, and has decided that they are acceptable for use in conjunction with this standard. A related British Standard to ISO 4762:1977 is BS 4168 “Hexagon socket screws and wrench keys: metric series” Part 1:1981 “Specification for hexagon socket head cap screws”.

Additional information. The concentricity tolerance should be of AT4 quality as given in BS 4500 *“ISO limits and fits”* Part 5 *“Systems of cone tolerances for conical workpieces from $C = 1 : 3$ to $1 : 500$ and lengths from 6 mm to 600 mm”*.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 6, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.