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ISO 7388-2:
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Tool shanks with 7/24 taper for automatic tool changers —

Part 2: Specification for retention knobs for shanks Nos. 40, 45 and 50

[ISO title: Tool shanks with 7/24 taper for automatic tool
changers — Part 2: Retention knobs for shanks Nos. 40, 45
and 50 — Dimensions and mechanical characteristics]

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Committees responsible for this British Standard

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

- Gauge and Tool Makers' Association
- Institution of Production Engineers
- Machine Tool Industry Research Association
- Milling Cutter Association
- Twist Drill and Reamer Association
- Coopted member

This British Standard, having been prepared under the direction of the Machine and Hand Tool Standards Committee, was published under the authority of the Board of BSI and comes into effect on 29 March 1985

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The following BSI references relate to the work on this standard:
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National foreword

This Part of BS 6607 has been prepared under the direction of the Machine and Hand Tool Standards Committee. It is identical with ISO 7388-2:1984 “*Tool shanks with 7/24 taper for automatic tool changers — Part 2: Retention knobs for shanks Nos. 40, 45 and 50 — Dimensions and mechanical characteristics*” published by the International Organization for Standardization (ISO).

BS 6607-1 is identical with ISO 7388-1 “*Tool shanks with 7/24 taper for automatic tool changers — Part 1: Shanks Nos. 40, 45 and 50 — Dimensions*”.

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 especially drawn to the following.

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

Wherever the words “this part of ISO 7388” appear, referring to this standard, they should be read as “this Part of BS 6607”.

Cross-reference

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, 56 and 50</i> (Identical)

Additional information

Dimensions. It should be noted that, when assembled with a tool shank complying with BS 6607-1, the retention knobs specified in this standard provide combinations generally interchangeable with existing equipment conforming with the American National Standard ANSI B5.50-1978. These retention knobs are not, however, suitable replacements for knobs conforming to ANSI B5.50.

In the interests of rationalization, and to reduce the risk of confusion between types A and B, with the consequent possibility of accidents, it is preferable that all new equipment is designed to accept type B retention knobs.

Proprietary rights

The ISO Central Secretariat has advised BSI that the patent referred to in clause 0 of this Part of BS 6607 is United States Patent 3,975,984 dated August 24, 1976 “*Self aligning collet for machine tools*”, the owner of which is Caterpillar Tractor Co., Peoria, Illinois 61629, USA. The latter has advised the ISO Central Secretariat, in a letter dated 6 February 1980, that licenses would be granted free of royalty and non-exclusive to any and all machine tool manufacturers upon request.

The above patent concerns improvements to a collet assembly for gripping a retention knob which provide a self-aligning collet assembly using a floating collar located in the machine spindle and detail modifications to the machine spindle bore behind the 7/24 taper.

The purpose of these improvements is stated in the patent as “preventing the failure of the collet leaves due to the added stress caused by their misalignment relative to the machine spindle”. The patent makes no claim regarding improvement of the tool shank or retention knob.