
**Machine tools — Connecting dimensions of
spindle noses and work holding chucks —**

**Part 1:
Conical connection**

*Machines-outils — Dimensions d'assemblage des nez de broche et
mandrins porte-pièces —*

Partie 1: Assemblage conique



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Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this part of ISO 702 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 702-1 was prepared by Technical Committee ISO/TC 39, *Machine tools*, Subcommittee SC 8, *Work holding spindles and chucks*.

This second edition cancels and replaces the first edition (ISO 702-1:1975), of which it constitutes a technical revision.

ISO 702 consists of the following parts, under the general title *Machine tools — Connecting dimensions of spindle noses and work holding chucks*:

- *Part 1: Conical connection*
- *Part 2: Camlock type*
- *Part 3: Bayonet type*
- *Part 4: Cylindrical connection*

Machine tools — Connecting dimensions of spindle noses and work holding chucks —

Part 1: Conical connection

1 Scope

This part of ISO 702 specifies the sizes for interchangeability of tapered (type A) lathe spindle noses and corresponding connecting faces of face plates or work holding chucks.

NOTE The “Camlock”, “bayonet” and cylindrical types are dealt with in ISO 702-2, ISO 702-3 and ISO 702-4, respectively.

2 Interchangeability

In this part of ISO 702, all dimensions and tolerances are expressed in millimetres.

Although there are differences in the values of dimensions and assembly screws in metric and inch series, the connecting dimensions in Tables 1 and 2 allow for interchangeability between metric- and inch-based chucks (see also footnote a in Table 2).

3 Sizes for interchangeability

3.1 Spindle noses

See Figure 1 and Table 1.

Type A₁: Two bolt circles of diameter D_1 and D_2

Type A₂: One outer bolt circle of diameter D_2
(Type A₂ for Nos. 3 and 4; types A₁ and A₂ for Nos. 5 to 28)