
**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 des
mandrins porte-pièces —*

Partie 1: Assemblage conique



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Foreword

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

This third edition cancels and replaces the second edition (ISO 702-1:2001), Tables 1 and 2 and Figures 1 and 2 of which have been technically revised.

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*

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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 conical spindle noses and corresponding connecting faces of face plates of work holding chucks.

NOTE The “camlock type”, “bayonet type” and “cylindrical connection” are specified 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_2 and d_3 ;
- Type A2: One outer bolt circle of diameter d_3 (Type A2 for Nos. 3 and 4; types A1 and A2 for Nos. 5 to 28).