
**Tool chucks (end mill holders) with clamp
screws for flatted cylindrical shank tools —**

Part 2:

**Connecting dimensions of chucks and
designation**

*Mandrins porte-outils, à vis de blocage, pour outils à queue cylindrique
à méplat —*

Partie 2: Dimensions d'encombrement des mandrins et désignation

ISO 5414-2:2002

<https://standards.iteh.ai/catalog/standards/iso/33b0fe62-45df-4db5-ae8f-f46be651b82a/iso-5414-2-2002>



Reference number
ISO 5414-2:2002(E)

© ISO 2002

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

ISO 5414-2:2002

<https://standards.iteh.ai/catalog/standards/iso/33b0fe62-45df-4db5-ae8f-f46be651b82a/iso-5414-2-2002>

© ISO 2002

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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

The main task of technical committees is to prepare International Standards. 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 5414 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 5414-2 was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 2, *Drills, reamers, milling cutters and milling machine accessories*.

This second edition cancels and replaces the first edition (ISO 5414-2:1982), which has been technically revised (in particular by the addition of shanks with diameters 14 mm and 18 mm, and of chucks with 7/24 taper shanks for automatic changers).

ISO 5414 consists of the following parts, under the general title *Tool chucks (end mill holders) with clamp screws for flatted cylindrical shank tools*:

— *Part 1: Dimensions of the driving system of tool shanks*

— *Part 2: Connecting dimensions of chucks and designation*

Tool chucks (end mill holders) with clamp screws for flatted cylindrical shank tools —

Part 2: Connecting dimensions of chucks and designation

1 Scope

This part of ISO 5414 specifies the dimensions of tool chucks (end mill holders) with clamp screws for tools with flatted cylindrical shanks in accordance with ISO 3338-2. It also specifies the designations of these chucks.

Two types of connection are defined:

- chucks with 7/24 taper shanks in accordance with ISO 297 for manual changers and with ISO 7388-1 for automatic changers, for tool shanks with either single flat or a double flat for manual and automatic changers;

NOTE 1 This part of ISO 5414 specifies the dimensions of tool chucks with 7/24 taper shanks No. 30 for automatic changers although these are not standardized.

- chucks with Morse taper shanks in accordance with ISO 296 and ISO 5413 for tool shanks with a single flat only.

NOTE 2 The dimensions of the driving system of the tool shanks are dealt with in ISO 5414-1.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 5414. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 5414 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 296, *Machine tools — Self-holding tapers for tool shanks*

ISO 297, *7/24 tapers for tool shanks for manual changing*

ISO 3338-2, *Cylindrical shanks for milling cutters — Part 2: Dimensional characteristics of flatted cylindrical shanks*

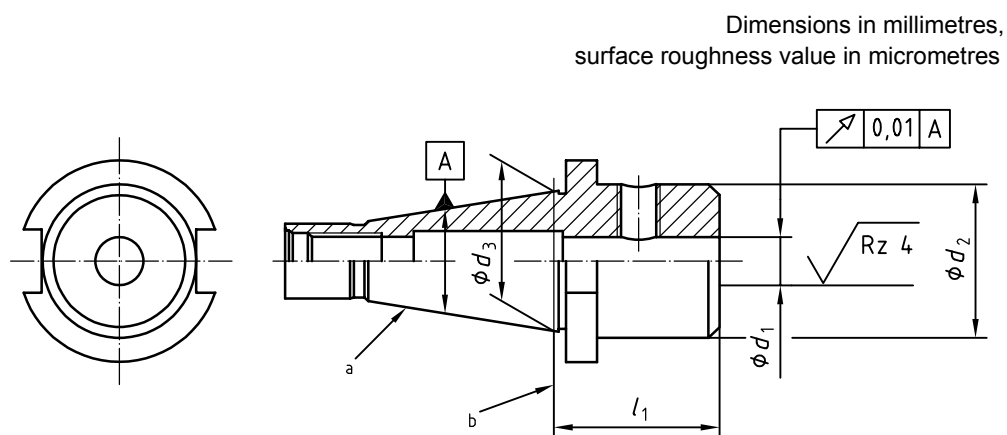
ISO 5413, *Machine tools — Positive drive of Morse tapers*

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

3 Chucks with 7/24 taper shanks for manual changers

3.1 Chucks for tool shanks with single flat

See Figure 1 and Table 1.



a 7/24 taper shank in accordance with ISO 297

b Gauge plane

iTeh Standards
Figure 1
(<https://standards.iteh.ai>)
Document Preview

ISO 5414-2:2002

<https://standards.iteh.ai/catalog/standards/iso/33b0fe62-45df-4db5-ae8f-f46be651b82a/iso-5414-2-2002>