
**Cylindrical shanks for milling cutters —
Part 2:
Dimensional characteristics of flatted
cylindrical shanks**

Queues cylindriques d'outils à fraiser —

iTeh STANDARD PREVIEW
*Partie 2: Caractéristiques dimensionnelles des queues cylindriques à
méplat*
(standards.iteh.ai)

ISO 3338-2:2007

<https://standards.iteh.ai/catalog/standards/sist/fa32de51-6db5-42e8-b4f6-59cab4ad9c81/iso-3338-2-2007>



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 STANDARD PREVIEW
(standards.iteh.ai)

[ISO 3338-2:2007](#)

<https://standards.iteh.ai/catalog/standards/sist/fa32de51-6db5-42e8-b4f6-59cab4ad9c81/iso-3338-2-2007>

© ISO 2007

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.org
Web www.iso.org

Published 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 2.

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 document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 3338-2 was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 2, *High speed steel cutting tools and their attachments*.

This sixth edition cancels and replaces the fifth edition (ISO 3338-2:2000), which has been technically revised.

ISO 3338 consists of the following parts, under the general title *Cylindrical shanks for milling cutters*:

- *Part 1: Dimensional characteristics of plain cylindrical shanks*
- *Part 2: Dimensional characteristics of flatted cylindrical shanks*
- *Part 3: Dimensional characteristics of threaded shanks*

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 3338-2:2007

<https://standards.iteh.ai/catalog/standards/sist/fa32de51-6db5-42e8-b4f6-59cab4ad9c81/iso-3338-2-2007>

Cylindrical shanks for milling cutters —

Part 2:

Dimensional characteristics of flatted cylindrical shanks

1 Scope

This part of ISO 3338 specifies the dimensions of flatted cylindrical shanks for milling cutters — of diameters 6 mm to 20 mm for single-flatted shanks, 25 mm to 63 mm for double-flatted shanks and 6 mm to 32 mm for shanks with an inclined clamping surface. In the case of single-flatted shanks, it is applicable to both single-ended cutters and double-ended cutters, as double-flatted shanks cannot admit single-ended cutters.

The dimensions of plain cylindrical shanks and threaded shanks are given in ISO 3338-1 and ISO 3338-3, respectively.

The two shank types covered by ISO 3338-1 and this part of ISO 3338 have the same dimensional characteristics (diameters and lengths) but different tolerances on diameters, namely:

- h8 for plain cylindrical shanks, commonly used for tools mounted in collets;
- h6 for flatted cylindrical shanks, intended to be mounted in chucks and secured with a clamping screw, and requiring an accuracy adjustment.

2 Normative references

[ISO 3338-2:2007](#)

[standards.iteh.ai/catalog/standards/sist/fa32de51-6db5-42e8-b4f6-59cab4ad9c81/iso-3338-2-2007](#)

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2768-1:1989, *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

3 Dimensions

3.1 General

All dimensions and tolerances are given in millimetres. Tolerances not specified shall be of tolerance class m, in accordance with ISO 2768-1:1989.

3.2 WE form — Flatted cylindrical shanks with single flat for diameter d_1 of 6 mm to 20 mm

The dimensions of flatted cylindrical shanks with a single flat are shown in Figure 1 and given in Table 1.

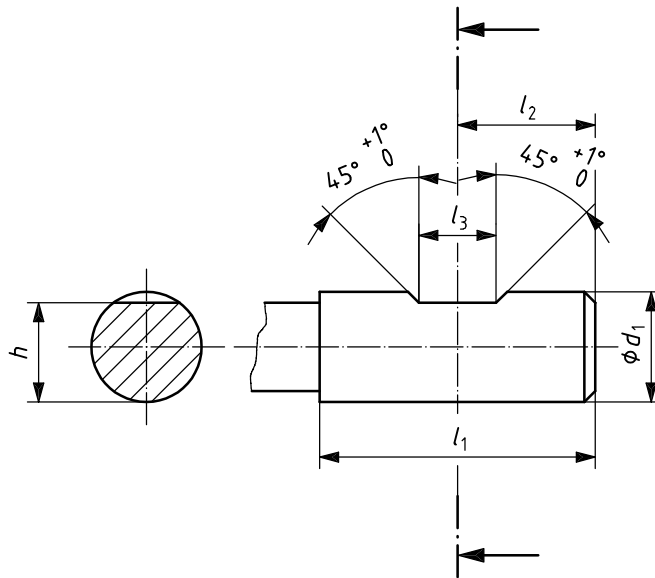


Figure 1 — WE form — Flatted cylindrical shanks with single flat
(standards.iteh.ai)

3.3 WE form — Flatted cylindrical shanks with double flat for diameter d_1 of 25 mm to 63 mm

The dimensions of flatted cylindrical shanks with a double flat are shown in Figure 2 and given in Table 1.

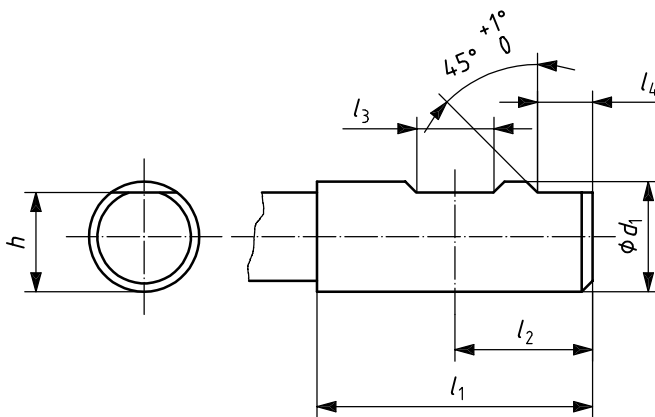


Figure 2 — WE form — Flatted cylindrical shanks with double flat

Table 1 — WE form — Flatted cylindrical shanks with single or double flat

Dimensions in millimetres

d_1 h6	l_1 $\begin{matrix} +2 \\ 0 \end{matrix}$	l_2 $\begin{matrix} 0 \\ -1 \end{matrix}$	l_3 $\begin{matrix} +0,05 \\ 0 \end{matrix}$	l_4 $\begin{matrix} +1 \\ 0 \end{matrix}$	h h11	
6	36	18	4,2	—	4,8	
8			5,5		6,6	
10	40	20	7		8,4	
12	45	22,5	8		10,4	
14					12,7	
16	48	24	10		14,2	
18					16,2	
20	50	25	11		18,2	
25	56	32	12		17	23
32	60	36	14		19	30
40	70	40		38		
50	80	45	18	23	47,8	
63	90	50			60,8	

3.4 WN form — Flatted cylindrical shanks with inclined clamping surface

The dimensions of flatted cylindrical shanks with an inclined clamping surface are shown in Figure 3 and given in Table 2.

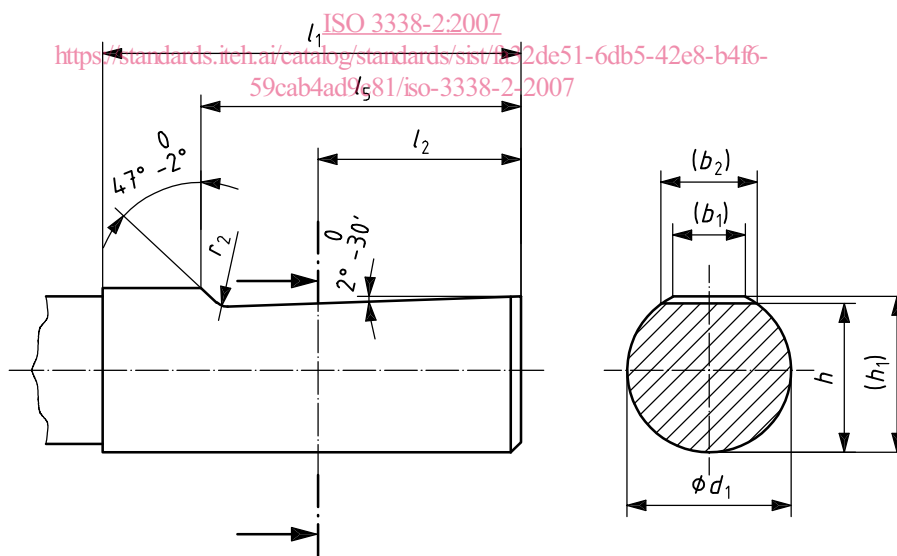


Figure 3 — WN form — Flatted cylindrical shanks with inclined clamping surface

Table 2 — WN form — Flatted cylindrical shanks with inclined clamping surface

Dimensions in millimetres

d_1 h6	l_1 $\begin{smallmatrix} +2 \\ 0 \end{smallmatrix}$	l_2	l_5 $\begin{smallmatrix} 0 \\ -1 \end{smallmatrix}$	h h11	h_1	b_1	b_2	r_2
6	36	18	25	4,8	5,4	3,5	4,8	1,2
8				6,6	7,2	4,7	6,1	
10	40	20	28	8,4	9,1	5,7	7,3	
12	45	22,5	33	10,4	11,2	6	8,2	
14				12,7	—	—	8,1	
16	48	24	36	14,2	15	7,6	10,1	
18				16,2	—	—	10,8	
20	50	25	38	18,2	19,1	8,4	11,5	
25	56	32	44	23	24,1	9,3	13,6	
32	60	36	48	30	31,2	9,9	15,5	

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[ISO 3338-2:2007](https://standards.iteh.ai/catalog/standards/sist/fa32de51-6db5-42e8-b4f6-59cab4ad9c81/iso-3338-2-2007)

<https://standards.iteh.ai/catalog/standards/sist/fa32de51-6db5-42e8-b4f6-59cab4ad9c81/iso-3338-2-2007>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 3338-2:2007

<https://standards.iteh.ai/catalog/standards/sist/fa32de51-6db5-42e8-b4f6-59cab4ad9c81/iso-3338-2-2007>