INTERNATIONAL STANDARD

ISO 3338-3

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Cylindrical shanks for milling cutters —

Part 3:
Dimensional characteristics of threaded shanks

Queues cylindriques d'outils à fraiser —

Partie 3: Caractéristiques dimensionnelles des queues filetées

Reference number
ISO 3338-3:1996(E)

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.

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.

International Standard ISO 3338-3 was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 2, *Drills, reamers, milling cutters and milling machine accessories*.

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*

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Cylindrical shanks for milling cutters —

Part 3:
Dimensional characteristics of threaded shanks

1 Scope

This part of ISO 3338 specifies the dimensions of threaded shanks for milling cutters (of diameters 6 mm to 32 mm).

The dimensions of plain and flatted cylindrical shanks are the subject of ISO 3338-1 and ISO 3338-2 respectively.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 3338. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 3338 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

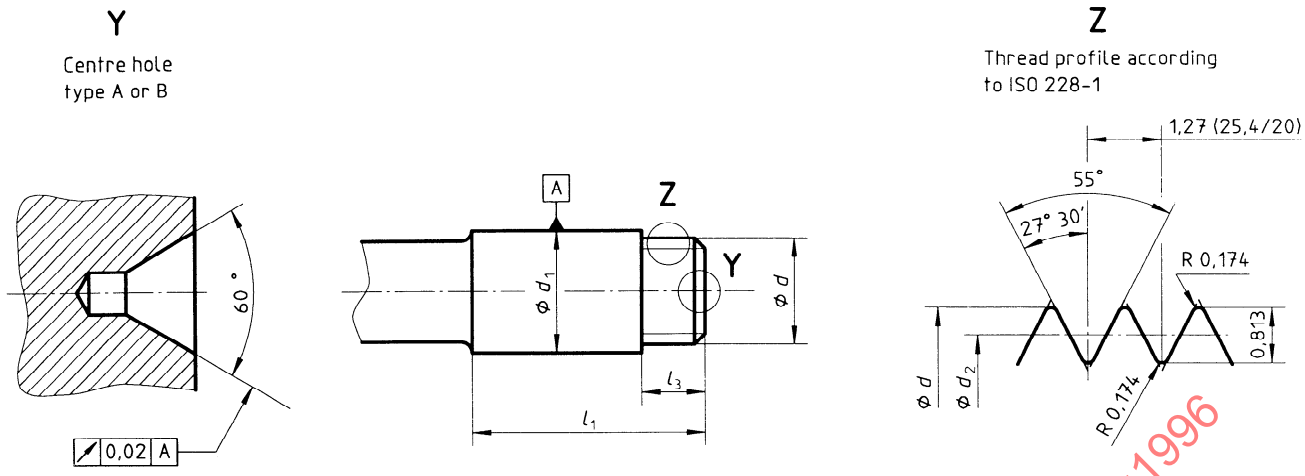
ISO 228-1:1994, *Pipe threads where pressure-tight joints are not made on the threads — Part 1: Dimensions, tolerances and designation.*

ISO 866:1975, *Centre drills for centre holes without protecting chamfers — Type A.*

ISO 2540:1973, *Centre drills for centre holes with protecting chamfer — Type B.*

3 Dimensions

See figure 1 and table 1.



NOTE — The run-out tolerance between the centre hole and the shank axis is intended to ensure a correct centring of the end mill into the chuck, subject to having a chuck with the appropriate precision. This chuck is not standardized.

Figure 1

Table 1

Dimensions in millimetres

d_1 h8	d		d_2		l_1 +2 0	l_3 +2 0	**Centre hole**[1]
6[2]	5,9	0 −0,1	5,087	0 −0,1	36	10	A 1,6/4[3] or B 1,6/6,3
10	9,9		9,087		40		
12[2]	11,9		11,087		45		
16	15,9		15,087		48		A 2/5 or B 2/8
20	19,9	0 −0,15	19,087	0 −0,15	50	15	A 2,5/6,3 or B 2,5/10
25	24,9		24,087		56		
32[2]	31,9		31,087		60		A 3,15/8 or B 3,15/11,2

1) According to ISO 866 or ISO 2540.

2) Not in conformity with ISO 237:1975, *Rotating tools with parallel shanks — Diameters of shanks and sizes of driving squares.*

3) For the shank diameter of 6 mm, the length of the centre hole of Ø 1,6 mm shall be limited in order to obtain a diameter of the cone equal to 2,5 mm (instead of 3,35 mm in ISO 866).

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