INTERNATIONAL STANDARD

ISO 3337

Third edition
2000-07-15

T-slot cutters with cylindrical shanks and with Morse taper shanks having tapped hole

Fraises pour rainures à T, à queue cylindrique et à queue cône Morse à trou taraudé

Reference number
ISO 3337:2000(E)

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

International Standard ISO 3337 was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 2, *Drills, reamers, milling cutters and milling machine accessories*.

This third edition cancels and replaces the second edition (ISO 3337:1978), which has been technically revised in particular with the addition of threaded shanks.

T-slot cutters with cylindrical shanks and with Morse taper shanks having tapped hole

1 Scope

This International Standard specifies the dimensions of T-slot cutters with plain or flatted cylindrical shanks, with threaded shanks and with Morse taper shanks having tapped hole.

It applies to those tools which are intended for manufacturing T-slots for machine tools for equipment, in accordance with ISO 299.

T-slot cutters with plain cylindrical shanks or flatted cylindrical shanks and with threaded shanks are suitable for the production of slots in accordance with ISO 299 from 5 mm to 36 mm inclusive; those with Morse taper shanks are suitable for the production of slots in accordance with ISO 299 from 10 mm to 54 mm inclusive.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard 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 299, *Machine tool tables — T-slots and corresponding bolts.*

ISO 3338-1, *Cylindrical shanks for milling cutters — Part 1: Dimensional characteristics of plain cylindrical shanks.*

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

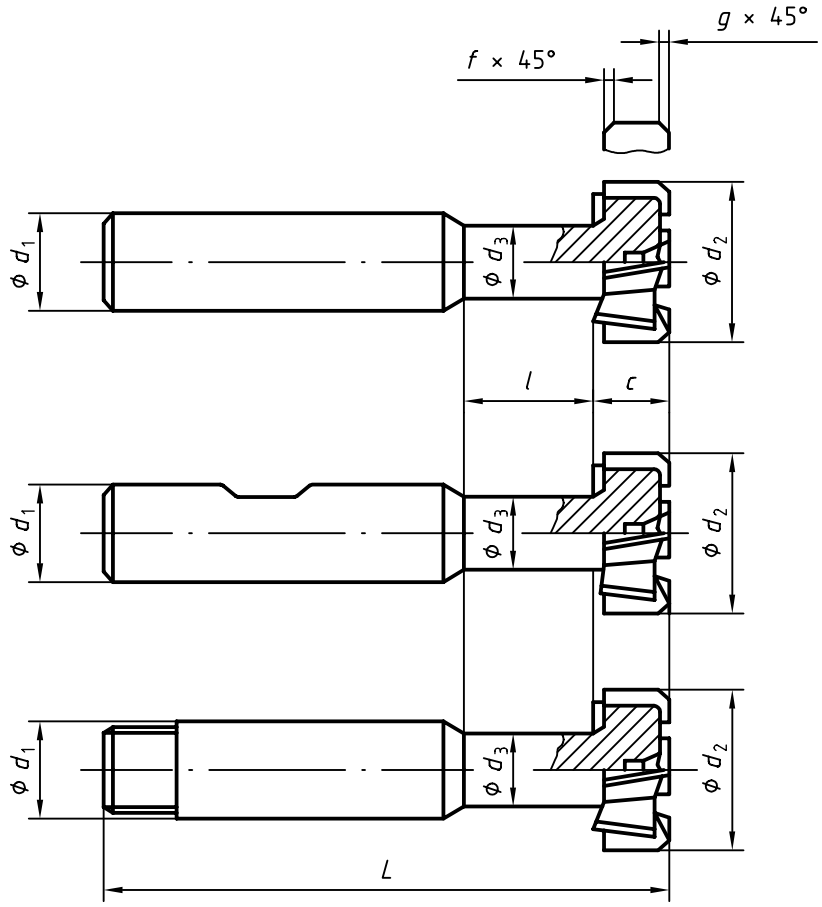
ISO 3338-3, *Cylindrical shanks for milling cutters — Part 3: Dimensional characteristics of threaded shanks.*

3 Dimensions

3.1 T-slot cutters with plain cylindrical shanks, with flatted cylindrical shanks and with threaded shanks

See Figure 1 and Table 1.

Plain cylindrical shanks, flatted cylindrical shanks and threaded shanks are in accordance with ISO 3338-1, ISO 3338-2 and ISO 3338-3 respectively.



NOTE Chamfers f and g may be replaced by radii of the same value. These are optional configurations.

Figure 1

Table 1

Dimensions in millimetres

d_2 h12	c h12	d_3 max.	l +1 0	d_1[a]	L	f max.	g max.	**For slot of**
11	3,5	4	6,5	10	53,5	0,6	1	5
12,5	6	5	7		57			6
16	8	7	10		62			8
18		8	13	12	70			10
21	9	10	16		74			12
25	11	12	17	16	82		1,6	14
32	14	15	22		90	1		18
40	18	19	27	25	108		2,5	22
50	22	25	34	32	124			28
60	28	30	43		139			36

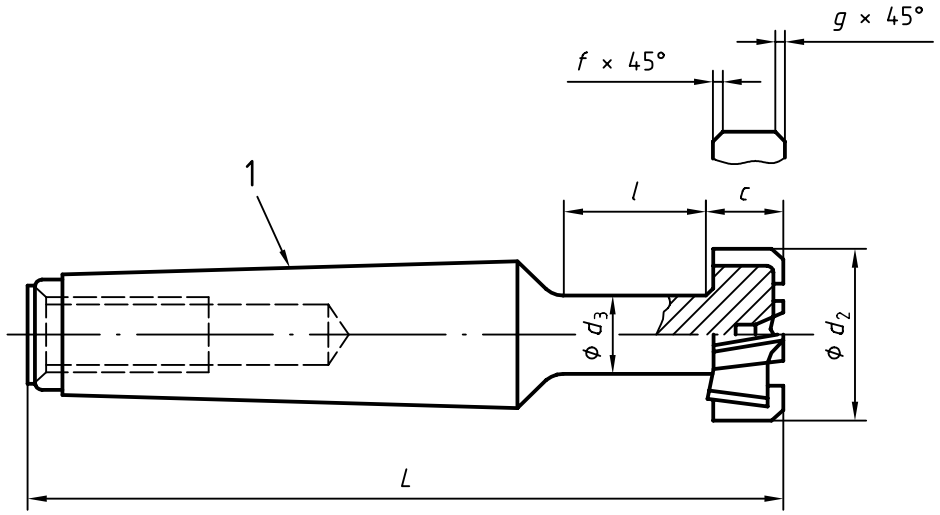
[a] Tolerance on d_1 (in accordance with ISO 3338-1, ISO 3338-2 and ISO 3338-3):

h8 for plain cylindrical shanks;
h6 for flatted cylindrical shanks;
h8 for threaded shanks.

3.2 T-slot cutters with Morse taper shanks with tapped hole

See Figure 2 and Table 2.

Morse taper shanks have tapers with tapped hole in accordance with ISO 296.



Key

1 Morse taper

NOTE Chamfers f and g may be replaced by radii of the same value. These are optional configurations.

Figure 2

Table 2

Dimensions in millimetres

d_2 h12	c h12	d_3 max.	l $^{+1}_{0}$	L	f max.	g max.	**Morse taper No.**	**For slot of**
18	8	8	13	82	0,6	1	1	10
21	9	10	16	98			2	12
25	11	12	17	103		1,6		14
32	14	15	22	111	1			18
40	18	19	27	138		2,5	3	22
50	22	25	34	173			4	28
60	28	30	43	188				36
72	35	36	50	229	1,6	4	5	42
85	40	42	55	240	2	6		48
95	44	44	62	251				54

Bibliography

[1] ISO 11529-1:1998, *Milling cutters — Designation — Part 1: Shank type end mills of solid or tipped design.*

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