INTERNATIONAL STANDARD

ISO 10145-1

First edition
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End mills with brazed helical hardmetal tips —

Part 1:
Dimensions of end mills with parallel shank

Fraises cylindriques deux tailles à plaquettes hélicoïdales en métaux-durs, brasées —

Partie 1: Dimensions des fraises à queue cylindrique

Reference number
ISO 10145-1:1993(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 10145-1 was prepared by Technical Committee ISO/TC 29, *Small tools*, Sub-Committee SC 9, *Tools with cutting edges made of hard cutting materials*.

ISO 10145 consists of the following parts, under the general title *End mills with brazed helical hardmetal tips*:

— *Part 1: Dimensions of end mills with parallel shank*

— *Part 2: Dimensions of end mills with 7/24 taper shank*

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Case Postale 56 • CH-1211 Genève 20 • Switzerland

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End mills with brazed helical hardmetal tips —

Part 1:
Dimensions of end mills with parallel shank

1 Scope

This part of ISO 10145 specifies the general dimensions of end mills with brazed helical hardmetal tips, with parallel shank.

Two types of end mills with parallel shank are specified:

— end mills with plain parallel shank, in accordance with ISO 3338-1;

— end mills with flatted parallel shank, in accordance with ISO 3338-2.

This part of ISO 10145 applies to right-hand and left-hand end mills, irrespective of the helix angle and number of flutes.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 10145. 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 10145 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.

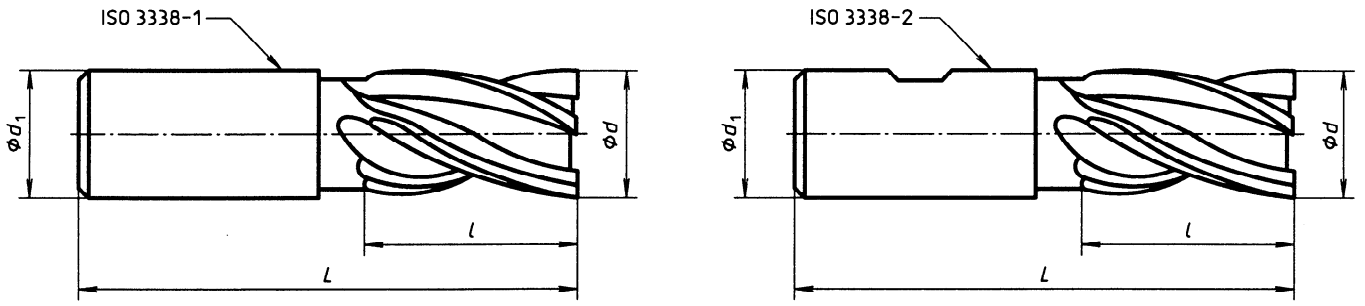
ISO 3338-1:—[1], *Parallel shanks for milling cutters — Part 1: Dimensions of plain parallel shanks.*

ISO 3338-2:1985, *Parallel shanks for milling cutters — Part 2: Dimensional characteristics of flatted parallel shanks.*

3 Dimensions

The dimensions for endmills as shown in figure 1 are specified in table 1.

1) To be published. (Revision of ISO 3338-1:1977)



Type 1: With plain parallel shank

Type 2: With flatted parallel shank

Figure 1

Table 1

Dimensions in millimetres

d k12	l nom.	l tol.	d_1	L $^{+2}_{0}$
12	20 25	$^{+2}_{0}$	12	75 80
16	25 32		16	88 95
20	32 40		20	97 105
25	40 50	$^{+3}_{0}$	25	111 121
32	40 50		32	120 130
40	50 63		40	140 153

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