
INTERNATIONAL STANDARD



3859

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Inverse dovetail cutters and dovetail cutters with parallel shanks

Fraises coniques à cône renversé et à cône direct, à queue cylindrique

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[ISO 3859:1977](#)

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Descriptors : tools, milling cutters, single angle cutters, parallel shanks, specifications, dimensions, diameter.

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 3859 was developed by Technical Committee ISO/TC 29, *Small tools*, and was circulated to the member bodies in July 1975.

It has been approved by the member bodies of the following countries :

Australia	India	Spain
Austria	Israel	Switzerland
Belgium	Italy	Turkey
Bulgaria	Mexico	United Kingdom
Canada	Netherlands	U.S.A.
France	Poland	U.S.S.R.
Germany	Romania	
Hungary	South Africa, Rep. of	

The member body of the following country expressed disapproval of the document on technical grounds :

Czechoslovakia

Inverse dovetail cutters and dovetail cutters with parallel shanks

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1 SCOPE AND FIELD OF APPLICATION

This International Standard lays down the dimensions of inverse dovetail cutters and dovetail cutters with plain parallel and flattened parallel shanks.

Inverse dovetail cutters and dovetail cutters have the same design characteristics.

This International Standard applies to 45° and 60° dovetail cutters and inverse dovetail cutters with cutting diameters of $D = 16$ to 31,5 mm.

Parallel shanks are in accordance with ISO 3338/I and ISO 3338/II.

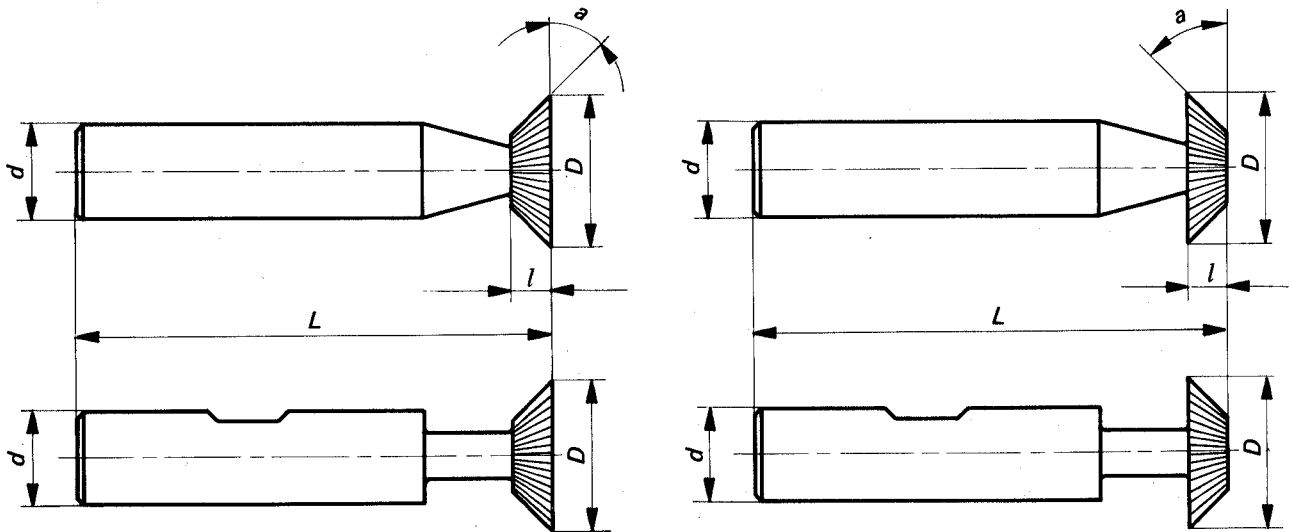
2 REFERENCES

ISO 523, *Milling cutters* – Recommended range of outside diameters.

ISO 3338/I, *Parallel shanks for milling cutters – Part I : Dimensional characteristics of plain parallel shanks.*

ISO 3338/II, *Parallel shanks for milling cutters – Part II : Dimensional characteristics of flattened parallel shanks.*

3 DIMENSIONS



Dovetail cutters

Inverse dovetail cutters

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Dimensions in millimetres

D j_{S16}	L	l	$d^{1)}$	$a^{2)}$ $\pm 30'$
16	60	4	12	45°
20	63	5	16	
25	67	6,3		
31,5 ³⁾	71	8	12	60°
16	60	6,3		
20	63	8		
25	67	10		
31,5 ³⁾	71	12,5	16	

1) Tolerances on d : h8 for plain parallel shanks;
h6 for flatted parallel shanks.

2) This angle corresponds to the cutting edge angle κ_r in the case of inverse dovetail cutters and to the included angle ϵ_r in the case of dovetail cutters.

3) In accordance with ISO 523, the more rounded value of 32 mm is also allowed instead of this dimension.