# **INTERNATIONAL STANDARD**

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# Milling cutters – Designation –<br/>Shank-type and bore-type milling<br/>cutters of solid or tipped design or<br/>with indexable cutting edges "\*\*aises – Désignation – Fraises deux tailles, à queue monob<br/>\*\* fraises à alésage à plaquettes amovibles

rs – De sou fraise. Fraises — Désignation — Fraises deux tailles, à queue monobloc ou à



Reference number ISO 11529:2013(E)



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# Contents

Page

Forew	ord		iv
1	Scop	е	1
2	Normative references		1
3	Sumi	nary explanation of the designation system	1
4	Designation symbols		2
	4.1	Symbol identifying the diameter — Position 1	2
	4.2	Symbol identifying the type of milling cutter — Position 2	
	4.3	Symbol identifying the number of effective cutting edges	
	4.4	Symbol identifying the hand of cutting	
	4.5	Symbol identifying the cutting-edge angle, $\kappa_r$	
	4.6	Symbol identifying the design of end mill or milling cutter	5
	4.7	Symbol identifying the maximum cutting depth or width, <i>a</i> <sub>p</sub>	6
	4.8	Symbol identifying the helix angle or shape of insert	6
	4.9	Symbol identifying the type (symbol 9) and the style (symbol 10) of shank	7
	4.10	Symbol identifying the size of shank	10
5	Manu	ıfacturer's information	10
6	Addi	tional information on cutting part material	11
Annex		formative) Relationship between designations in this International Standard and	
		3399 (all parts)	12
Biblio	Bibliography		

# 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 11529 was prepared by Technical Committee ISO/TC 29, Small tools, Subcommittee SC 9, Tools with cutting edges made of hard cutting materials.

The first edition of ISO 11529 cancels and replaces ISO 11529-1:2005 and ISO 11529-2:2005, which have been technically revised.

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# Milling cutters — Designation — Shank-type and bore-type milling cutters of solid or tipped design or with indexable cutting edges

# 1 Scope

This International Standard establishes a designation system for shank-type and bore-type milling cutters of either solid or tipped design or with indexable cutting edges with the purpose of simplifying communication between the users and suppliers of such tools.

# 2 Normative references

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

ISO 3002-1, Basic quantities in cutting and grinding — Part 1: Geometry of the active part of cutting tools — General terms, reference systems, tool and working angles, chip breakers

ISO 3002-3, Basic quantities in cutting and grinding — Part 3: Geometric and kinematic quantities in cutting

# 3 Summary explanation of the designation system

Shank-type and bore-type milling cutters are designated by codes comprising symbols which identify the important features of the mills.

Extensions to the designation codes to include manufacturer's or supplier's information about the milling cutters are described in <u>Clause 5</u>.

No addition to or extension of the designation system given in this International Standard shall be made without consultation with ISO/TC 29 and without its agreement. The designation code shall consist of the following:

## Position Definition of designation symbols

- 1 Number symbol identifying the diameter,  $\emptyset$  (see <u>4.1</u>)
- 2 Letter symbol identifying the type of milling cutter (see <u>4.2</u>)
- 3 Number symbol identifying the number of effective cutting edges (see <u>4.3</u>)
- 4 Letter symbol identifying the hand of cutting (see <u>4.4</u>)
- 5 Number symbol identifying the cutting-edge angle,  $\kappa_r$  (see <u>4.5</u>)
- 6 Letter symbol identifying the design of end mill or milling cutter (see <u>4.6</u>)
- 7 Number symbol identifying the maximum cutting depth or width,  $a_p$  (see 4.7)
- 8 Letter symbol identifying the helix angle or shape of insert (see <u>4.8</u>)
- 9 Letter symbol identifying the type of shank (see <u>4.9</u>)