
INTERNATIONAL STANDARD



3293

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

Morse taper shank countersinks for angles 60°, 90° and 120° inclusive

Outils à chanfreiner à queue cône Morse, à angle au sommet de 60°, 90° et 120°

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Descriptors : tools, countersinks, Morse taper shanks, dimensions.

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 3293 was drawn up by Technical Committee ISO/TC 29, *Small tools*, and circulated to the Member Bodies in December 1973.

It has been approved by the Member Bodies of the following countries:

Australia	India	Sweden
Austria	Ireland	Switzerland
Belgium	Israel	Thailand
Canada	Italy	Turkey
Chile	Japan	United Kingdom
Czechoslovakia	Netherlands	U.S.A.
Egypt, Arab Rep. of	New Zealand	U.S.S.R.
France	Poland	Yugoslavia
Germany	Romania	
Hungary	South Africa, Rep. of	

No Member Body expressed disapproval of the document.

Morse taper shank countersinks for angles 60°, 90° and 120° inclusive

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the dimensions of Morse taper shank countersinks for angles 60°, 90° and 120° inclusive.

It specifies dimensions in metric units only, these being regarded as the only recommended dimensions in the future, for countersinks with cutting diameters in the range 16 to 80 mm.

The dimensions given apply only to tools made from high speed steel. However, if the method of production allows, the shanks may be manufactured from a suitable alternative material, such as a carbon steel.

The Morse taper shanks shall be in accordance with ISO 296.

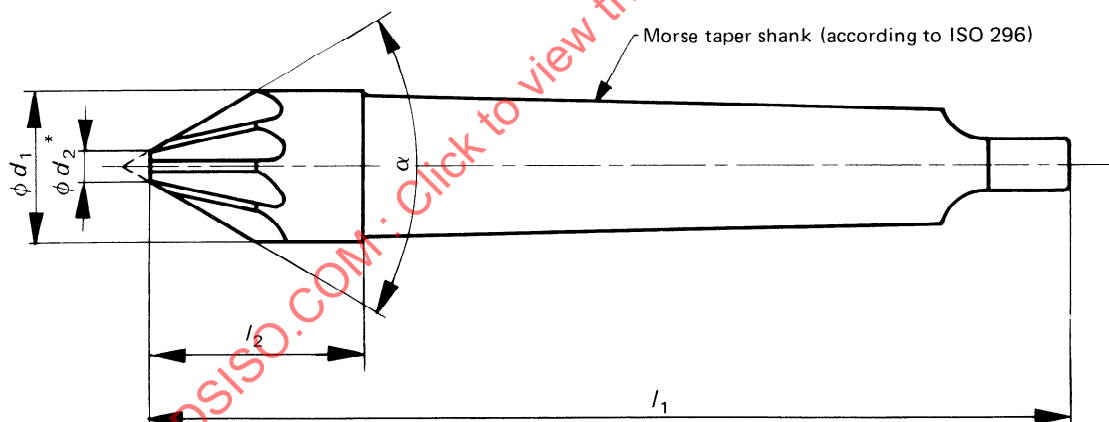
Unless otherwise indicated, the countersinks will be right-hand cutting.

Parallel shank countersinks are the subject of ISO 3294.

2 REFERENCES

ISO 296, *Machine tools — Self-holding tapers for tool shanks*

ISO 3294, *Parallel shank countersinks for angles 60°, 90° and 120° inclusive*.



$\alpha = 60^\circ, 90^\circ \text{ or } 120^\circ \text{ inclusive (tolerance : } \begin{smallmatrix} 0 \\ -1^\circ \end{smallmatrix} \text{)}$

Dimensions in millimetres

Nominal size d_1	Small diameter d_2^*	Overall length l_1		Body length l_2		Morse taper shank No.
		$\alpha = 60^\circ$	$\alpha = 90^\circ \text{ \& } 120^\circ$	$\alpha = 60^\circ$	$\alpha = 90^\circ \text{ \& } 120^\circ$	
16	3,2	97	93	24	20	1
20	4	120	116	28	24	2
25	7	125	121	33	29	2
31,5	9	132	124	40	32	2
40	12,5	160	150	45	35	3
50	16	165	153	50	38	3
63	20	200	185	58	43	4
80	25	215	196	73	54	4

* Front end design optional.