
INTERNATIONAL STANDARD



5413

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

Machine tools — Positive drive of Morse tapers

Machines-outils — Entraînement positif de cônes Morse

First edition — 1976-11-01

STANDARDSISO.COM : Click to view the full PDF of ISO 5413:1976

UDC 621.9.06-229

Ref. No. ISO 5413-1976 (E)

Descriptors : machine tools, tools, machine tapers, Morse taper shanks, specifications, dimensions.

Price based on 1 page

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 5413 was drawn up by Technical Committee ISO/TC 29, *Small tools*, and was circulated to the Member Bodies in November 1975.

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

Austria	India	South Africa, Rep. of
Belgium	Israel	Sweden
Bulgaria	Italy	Switzerland
Czechoslovakia	Japan	Turkey
Egypt, Arab Rep. of	Korea, Dem. P. Rep. of	United Kingdom
France	Mexico	U.S.S.R.
Germany	Poland	
Hungary	Romania	

No Member Body expressed disapproval of the document.

Machine tools – Positive drive of Morse tapers

1 SCOPE AND FIELD OF APPLICATION

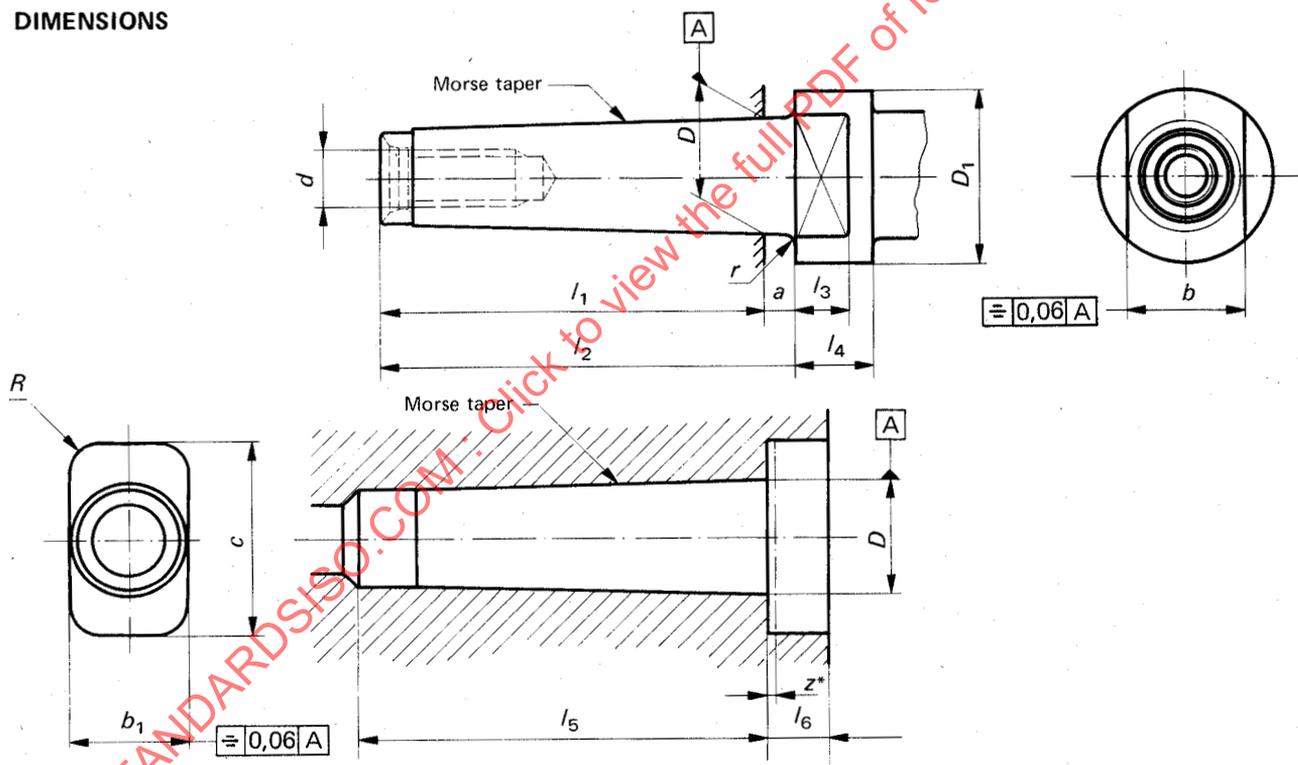
This International Standard specifies dimensions for positive drive of external and internal Morse tapers.

The Morse tapers conform to ISO 296.

2 REFERENCE

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

3 DIMENSIONS



Dimensions in millimetres

Morse taper No.	D	External taper									Internal taper					
		D ₁	l ₄ min.	b d11	l ₃	a	l ₁ max.	l ₂ max.	d	r	c min.	b ₁ H11	l ₆	l ₅ min.	R	z*
3	23,825	36	18	24	12	5	81	86	M 12	1,6	40	24	12	84	6	1
4	31,267	43	23	32	15	6,5	102,5	109	M 16	1,6	50	32	15	107	8	1,5
5	44,399	60	28	45	18	6,5	129,5	136	M 20	2,0	65	45	18	135	10	1,5
6	63,348	85	39	65	25	8	182	190	M 24	3,0	90	65	25	188	12	2

*z : Maximum permissible deviation, outwards only, of the position of the gauge plane containing dimension D from the nominal position of coincidence with the leading face.