

# INTERNATIONAL STANDARD



# 4202

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

## Reduction sleeves with external 7/24 taper for tools with Morse taper shanks

*Douilles de réduction au cône extérieur 7/24 pour outils à queue cône Morse*

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**Descriptors** : tools, Morse taper shanks, chuck bushings, adapter sleeves, 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 4202 was drawn up by Technical Committee ISO/TC 29, *Small tools*, and was circulated to the Member Bodies in December 1975.

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

Australia	Israel	Sweden
Austria	Italy	Switzerland
Belgium	Japan	Turkey
Czechoslovakia	Mexico	United Kingdom
France	Poland	U.S.S.R.
Germany	Romania	Yugoslavia
Hungary	South Africa, Rep. of	
India	Spain	

No Member Body expressed disapproval of the document.

# Reduction sleeves with external 7/24 taper for tools with Morse taper shanks

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the dimensions of reduction sleeves with external 7/24 taper (Nos. 30, 40, 50 and 60) for tools with Morse taper shanks (Nos. 1 to 6). Reduction sleeves with external 7/24 taper No. 45 will be the subject of an addendum.

All these sleeves allow driving of tools with Morse taper shanks with tenon drive; some sleeves also permit driving of tools with Morse taper shanks with tapped hole :

- with the use of an incorporated screw for sleeves 30 × 1 – 40 × 1 – 40 × 2 – 50 × 2 – 50 × 3 – 50 × 4 – 60 × 3 – 60 × 4 – 60 × 5;

- with the use of a draw bar for sleeves 30 × 1 – 30 × 2 – 40 × 1 – 40 × 2 – 40 × 3 – 50 × 2 – 50 × 3 – 50 × 4 – 50 × 5 – 60 × 3 – 60 × 4 – 60 × 5 – 60 × 6.

Morse tapers conform to ISO 296 and 7/24 tapers are in accordance with ISO 297 and ISO 2583.

## 2 REFERENCES

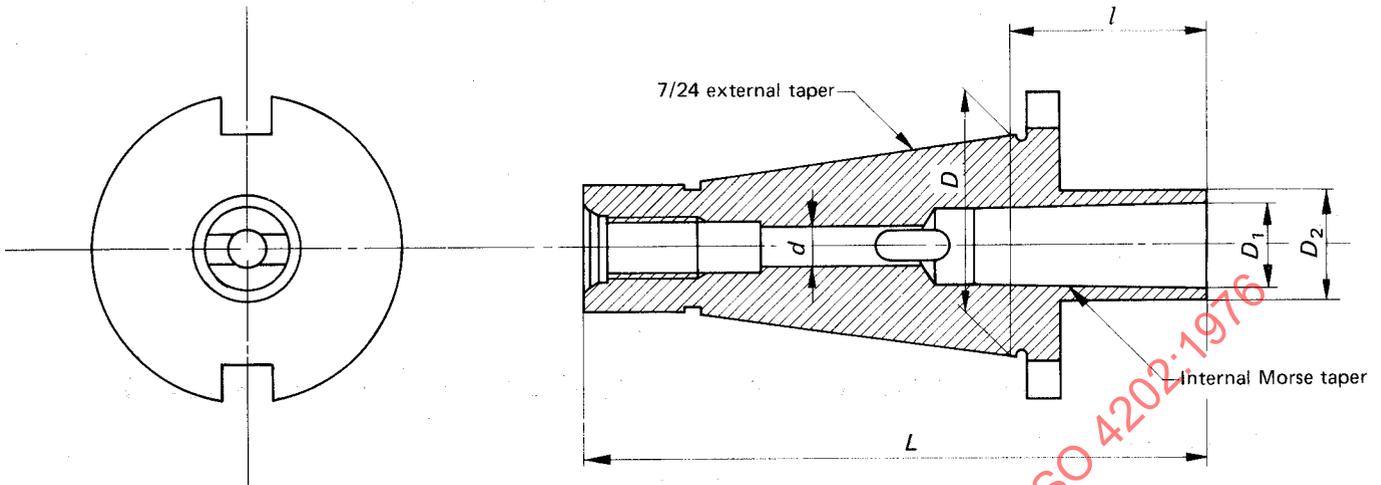
ISO 296, *Machine tools – Self-holding tapers for tool shanks.*

ISO 297, *7/24 tapers for tool shanks.*<sup>1)</sup>

ISO 2583, *Tool shanks and equipment with 7/24 tapers – Collar dimensions.*

1) At present at the stage of draft. (Revision of ISO/R 297-1963 and addenda 1,2 and 3.)

3 DIMENSIONS



NOTE — The sketch is diagrammatic and is not intended to show design details.

Dimensions in millimetres

Designation		D	D <sub>1</sub>	D <sub>2</sub>	d	l max. ≈	L max.
7/24 external taper	Internal Morse taper						
30	1	31,750	12,065	25	6,2	50	118
	2		17,780	32	10,3	50	118
	3		23,825	40	12,5	70	138
40	1	44,450	12,065	25	6,2	50	143
	2		17,780	32	10,3	50	143
	3		23,825	40	12,5	65	158
	4		31,267	48	17,0	95	188
50	2	69,850	17,780	32	10,3	60	187
	3		23,825	40	12,5	65	192
	4		31,267	48	17,0	70	197
	5		44,399	63	21,0	105	232
60	3	107,950	23,825	40	12,5	70	277
	4		31,267	48	17,0	70	277
	5		44,399	63	21,0	70	277
	6		63,348	80	25,0	100	307