

INTERNATIONAL  
STANDARD

**ISO**  
**5413**

Second edition  
1993-11-01

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**Machine tools — Positive drive of Morse  
tapers**

*Machines-outils — Entraînement positif de cônes Morse*

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Reference number  
ISO 5413:1993(E)

## Foreword

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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.

International Standard ISO 5413 was prepared by Technical Committee ISO/TC 29, *Small tools*, Sub-Committee SC 7, *Milling cutters and milling machine accessories*.

This second edition cancels and replaces the first edition (ISO 5413:1976), in which the dimensions dealt with in ISO 296 have been deleted and the tolerances for  $b$  and  $b_1$  have been modified.

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International Organization for Standardization  
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

# Machine tools — Positive drive of Morse tapers

## 1 Scope

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

The Morse tapers are in accordance with ISO 296.

## 2 Normative reference

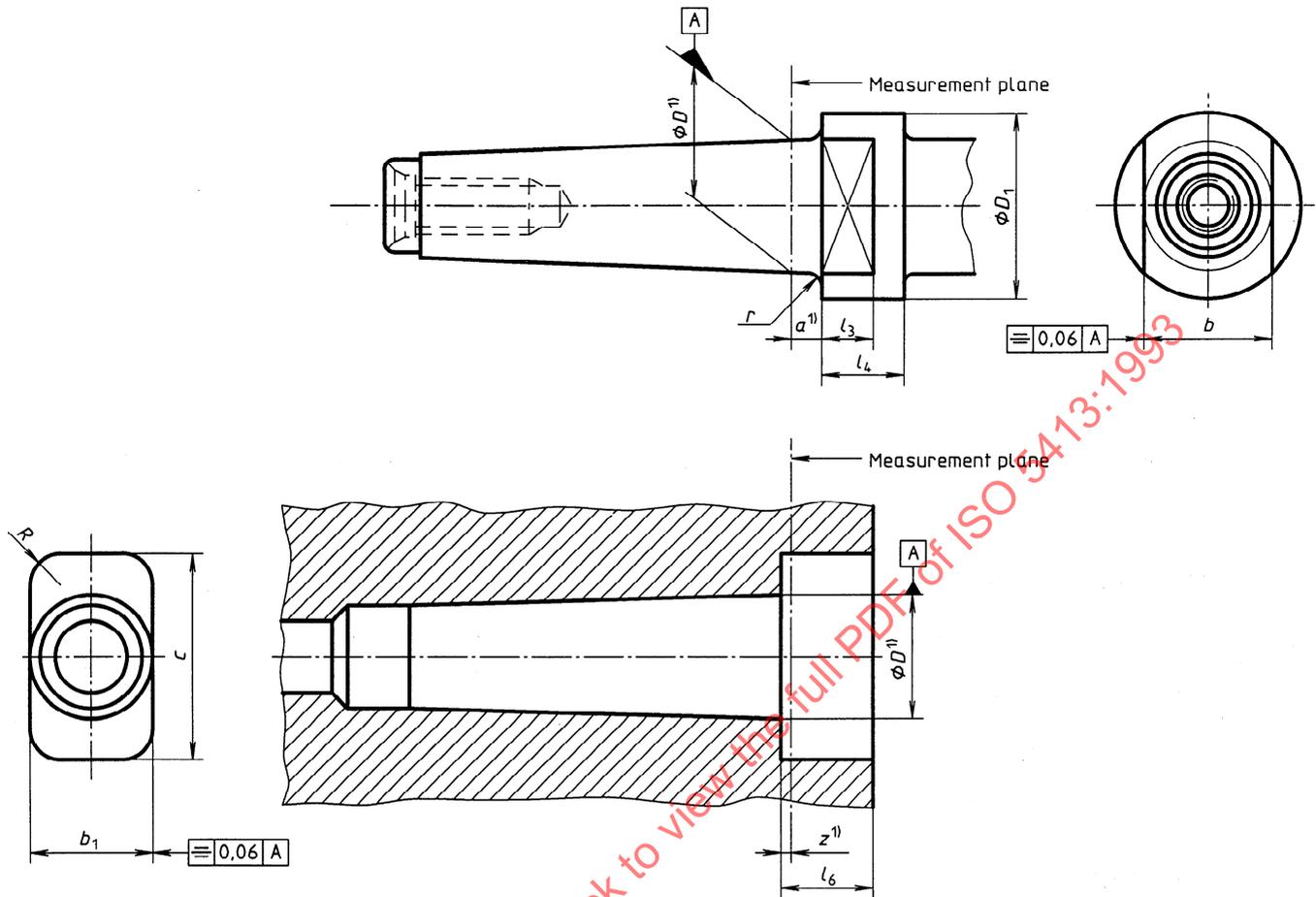
The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 296:1991, *Machine tools — Self-holding tapers for tool shanks.*

## 3 Dimensions

See figure 1 and table 1.

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1) For the dimensions  $D$ ,  $a$  and  $z$  and the other dimensions of external and internal Morse tapers, see ISO 296.

Figure 1

Table 1

Dimensions en millimètres

Morse taper No.	External taper					Internal taper			
	$D_1$	$b$ d9	$l_3$	$l_4$ min.	$r$	$b_1$ H9	$c$ min.	$l_6$	$R$
3	36	24	12	18	1,6	24	40	12	6
4	43	32	15	23	1,6	32	50	15	8
5	60	45	18	28	2	45	65	18	10
6	85	65	25	39	3	65	90	25	12

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