

INTERNATIONAL STANDARD

ISO
9182-2

First edition
1992-06-15

Tools for pressing — Guide pillars —

Part 2:

Type A, straight pillars

Outillage de presse — Colonnes de guidage —

Partie 2: Type A, colonnes droites



Reference number
ISO 9182-2:1992(E)

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.

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 9182-2 was prepared by Technical Committee ISO/TC 29, *Small tools*, Sub-Committee SC 8, *Tools for pressing and moulding*.

ISO 9182 consists of the following parts, under the general title *Tools for pressing — Guide pillars*:

- Part 1: *Types*
- Part 2: *Type A, straight pillars*
- Part 3: *Type B, end-locking pillars*
- Part 4: *Type C, pillars with taper lead and bush*
- Part 5: *Type D, end-locking pillars with flange*

Annex A of this part of ISO 9182 is for information only.

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

Printed in Switzerland

Tools for pressing — Guide pillars —

Part 2:

Type A, straight pillars

1 Scope

This part of ISO 9182 specifies the dimensions and tolerances, in millimetres, of guide pillars, type A, intended for use in press tools. These guide pillars may be straight, type A1 [see figure 1 a)], or straight with end-locking and locking ring, type A2 [see figure 1 b)].

It gives guidance on materials and specifies the hardness and the designation of guide pillars which meet the requirements of this part of ISO 9182.

2 Dimensions

See figure 1 and table 1.

3 Material and hardness

The material is left to the manufacturer's discretion. The hardness shall be (62^{+2}_{-1}) HRC.

4 Designation

Guide pillars for press tools in accordance with this part of ISO 9182 shall be designated by

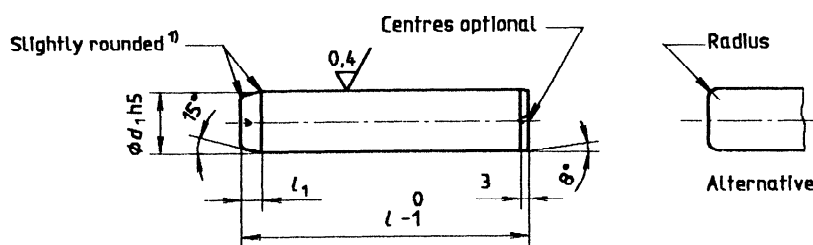
- "Guide pillar";
- reference to this part of ISO 9182;
- its type;
- its diameter, d_1 , in millimetres;
- its overall length, l , in millimetres.

EXAMPLE

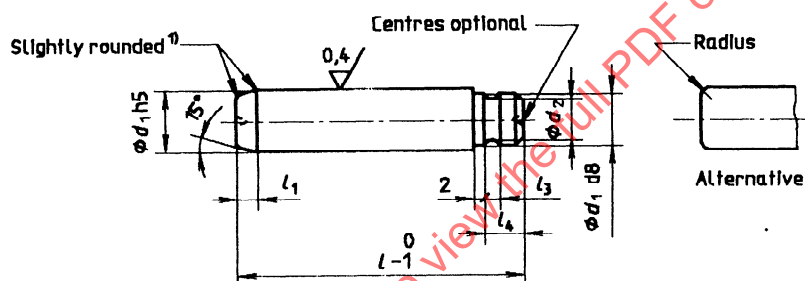
The designation for a guide pillar, type A1, of diameter $d_1 = 12$ mm and overall length $l = 80$ mm is as follows:

Guide pillar ISO 9182-2 - A1 - 12 × 80

Surface roughness values in micrometres



a) Type A1, straight guide pillar



b) Type A2, straight guide pillar with end-locking and locking ring

1) The values of the radii are left to the manufacturer's discretion.

Figure 1 — Straight guide pillars

Table 1

d_1		12	16	20	25	32	40	50	63	80	100
d_2		10,3	14,3	17,3	22,3	27,8	35,8	45,8	56,8	73,8	93,8
l_1 min.		4	4	4	6	6	6	8	8	8	8
l_3		1,7	1,7	2,7	2,7	4,2	4,2	4,2	6,2	6,2	6,2
l_4		4	4	6	6	10	10	10	16	16	16
l 0 -1	80	×									
	90	×	×								
	100	×	×	×	×						
	112	×	×	×	×						
	125	×	×	×	×	×					
	140	×	×	×	×	×					
	160		×	×	×	×	×				
	180		×	×	×	×	×	×			
	200		×	×	×	×	×	×			
	224			×	×	×	×	×			
	250				×	×	×	×	×		
	280					×	×	×	×		
	315					×	×	×	×	×	
	355						×	×	×	×	×
	400						×	×	×	×	×
	450							×	×	×	×
	500							×	×	×	×

NOTES

1 × standardized dimensions.

2 To prevent an incorrect assembly of the upper and lower plates of the die set in relation to each other, the following values for diameter d_1 are recommended: 11, 15, 19, 24, 30, 38, 48 and 60.

Annex A
(informative)

Bibliography

- [1] ISO 6508:1986, *Metallic materials — Hardness test — Rockwell test (scales A - B - C - D - E - F - G - H - K)*.
- [2] ISO 9182-1:1992, *Tools for pressing — Guide pillars — Part 1: Types*.

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