INTERNATIONAL STANDARD

ISO 11903

First edition
1996-12-01

Tools for pressing — Guide pillar mountings

Outillage de presse — Embases de guidage

Reference number
ISO 11903:1996(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 11903 was prepared by Technical Committee ISO/TC 29, *Small tools,* Subcommittee SC 8, *Tools for pressing and moulding.*

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

Printed in Switzerland

Tools for pressing — Guide pillar mountings

1 Scope

This International Standard specifies the dimensions and tolerances, in millimetres, of guide pillar mountings intended for mounting with or without guide bushes according to ISO 9448-2, ISO 9448-3 and ISO 9448-6 to ISO 9448-11 on guide pillars according to ISO 9182-2 to ISO 9182-5.

It gives guidance relative to material and specifies the designation of guide pillar mountings in accordance with this International Standard.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were 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 editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 185:1988, *Grey cast iron — Classification.*

ISO 9182-2:1992, *Tools for pressing — Guide pillars — Part 2: Type A, straight pillars.*

ISO 9182-3:1992, *Tools for pressing — Guide pillars — Part 3: Type B, end-locking pillars.*

ISO 9182-4:1992, *Tools for pressing — Guide pillars — Part 4: Type C, pillars with taper lead and bush.*

ISO 9182-5:1992, *Tools for pressing — Guide pillars — Part 5: Type D, end-locking pillars with flange.*

ISO 9448-2:1991, *Tools for pressing — Guide bushes — Part 2: Form A, gliding bushes, plain, type 1.*

ISO 9448-3:1991, *Tools for pressing — Guide bushes — Part 3: Form B, ball cage bushes, plain, type 1.*

ISO 9448-6:1991, *Tools for pressing — Guide bushes — Part 6: Form E, gliding bushes, flanged, type 1.*

ISO 9448-7:1991, *Tools for pressing — Guide bushes — Part 7: Form F, ball cage bushes, flanged, type 1.*

ISO 9448-8:1991, *Tools for pressing — Guide bushes — Part 8: Form G, gliding bushes, stepped, type 1.*

ISO 9448-9:1992, *Tools for pressing — Guide bushes — Part 9: Form B, ball cage bushes, plain, type 2.*

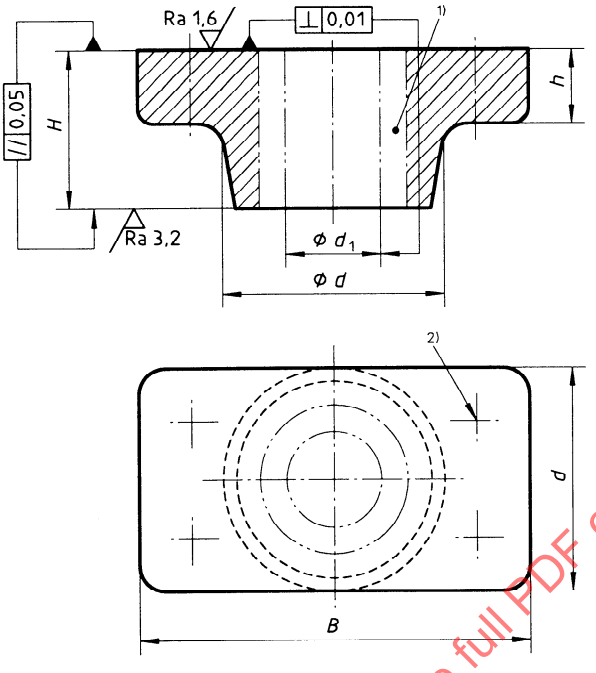
ISO 9448-10:1992, *Tools for pressing — Guide bushes — Part 10: Form E, gliding bushes, flanged, type 2.*

ISO 9448-11:1992, *Tools for pressing — Guide bushes — Part 11: Form F, ball cage bushes, flanged, type 2.*

3 Dimensions

See figures 1 and 2 and table 1.

Surface roughness values in micrometres

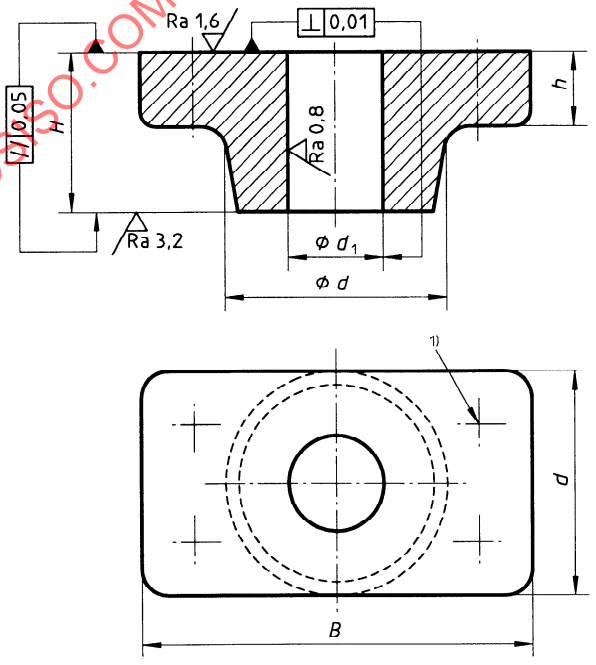


1) The bush is left to the manufacturer's discretion or is chosen among bushes defined in ISO 9448-2, ISO 9448-3 and ISO 9448-6 to ISO 9448-11 and according to the guide pillar chosen in ISO 9182-2 to ISO 9182-5.

2) The mounting holes are left to the manufacturer's discretion.

Figure 1 — Guide pillar mounting with bush

Surface roughness values in micrometres



1) The mounting holes are left to the manufacturer's discretion.

Figure 2 — Guide pillar mounting without bush

Table 1

Dimensions in millimetres

d_1 [1]	B	d	H ± 0,05	h min.
12	56	32	25	12,5
16	71	40	25	16
20	80	45	32	18
25	90	56	40	18
32	112	71	50	20
40	132	85	63	25
50	160	112	80	28
63	200	132	100	36
80	224	140	125	40
100	250	160	140	45

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

4 Material

Guide pillar mountings shall be manufactured from grey cast iron, quality 250 as defined in ISO 185 or any material with equivalent mechanical characteristics.

5 Designation

Guide pillar mountings in accordance with this International Standard shall be designated by

a) "guide pillar mounting";

b) reference to this International Standard, i.e. ISO 11903;

c) guide pillar diameter, in millimetres;

d) when applicable, identification of guide bush or the number of the relevant part of ISO 9448.

EXAMPLE 1

The designation for a guide pillar mounting without bush of a guide pillar diameter d_1 = 25 is as follows:

Guide pillar mounting ISO 11903 - 25

EXAMPLE 2

The designation for a guide pillar mounting of a guide pillar diameter d_1 = 25 with a type 1 gliding flanged guide bush, form E (ISO 9448-6) is as follows:

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