

INTERNATIONAL  
STANDARD

**ISO**  
**10072**

First edition  
1993-11-15

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**Tools for moulding — Sprue bushes —  
Dimensions**

**iTeh STANDARD PREVIEW**  
*Outillage de moulage — Buses d'injection — Dimensions*  
**(standards.iteh.ai)**

ISO 10072:1993

<https://standards.iteh.ai/catalog/standards/sist/fe90ac83-64d0-4183-b93e-663003127a44/iso-10072-1993>



Reference number  
ISO 10072:1993(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 10072 was prepared by Technical Committee ISO/TC 29, *Small tools*, Sub-Committee SC 8, *Tools for pressing and moulding*.

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# Tools for moulding — Sprue bushes — Dimensions

## 1 Scope

This International Standard specifies the main dimensions and tolerances, in millimetres, of sprue bushes which are used mainly in injection moulds for plastics and rubbers.

It also specifies the hardness and designation of sprue bushes conforming to this International Standard.

## 2 Dimensions

See figure 1 and table 1.

## 3 Material and corresponding hardness

The material is left to the manufacturer's discretion, but shall be a through-hardened material. The hardness shall be  $(50 \pm 5)$  HRC.

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## 4 Designation

Sprue bushes in accordance with this International Standard shall be designated by

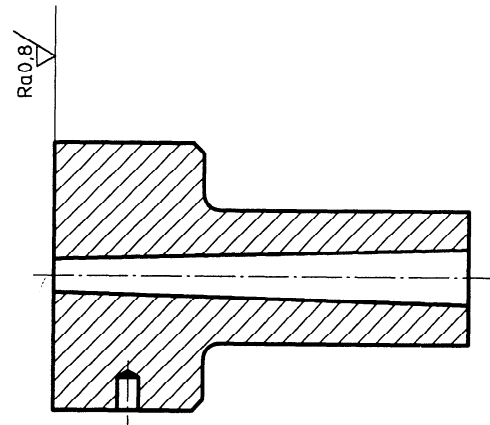
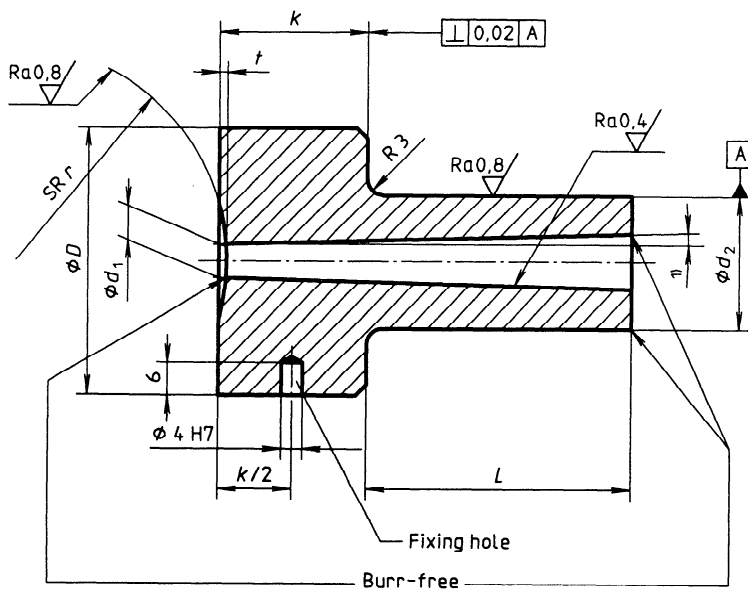
- a) "Sprue bush";
- b) reference to this International Standard;
- c) type (A or B);
- d) diameter  $d_2$ , in millimetres;
- e) diameter  $d_1$ , in millimetres;
- f) radius  $r$  (for type A only), in millimetres;
- g) length  $L$ , in millimetres.

### EXAMPLE

The designation for a sprue bush of type A with diameter  $d_2 = 12$  mm, diameter  $d_1 = 2,5$  mm, radius  $r = 15,5$  mm and length  $L = 20$  mm is as follows:

**Sprue bush ISO 10072 A 12 × 2,5 × 15,5 × 20**

Values of surface roughness in micrometres



a) Type A - With radius to match machine nozzle

b) Type B - Straight to match flat machine nozzle

1) 1° or 1° 30' is left to the manufacturer's discretion.

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Figure 1  
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Table 1

$d_2$	$d_1$	$r$	$L$								$D$	$k$	$t$
			20	25	32	40	50	63	80	100			
k6	$\begin{matrix} +0,3 \\ +0,1 \end{matrix}$						$\begin{matrix} +0,5 \\ +0,3 \end{matrix}$				$\begin{matrix} 0 \\ -0,5 \end{matrix}$	$\begin{matrix} +0,15 \\ +0,05 \end{matrix}$	$\pm 0,1$
12	$\begin{matrix} 2,5 \\ 3 \\ 3,5 \end{matrix}$	15,5 or 40	X	X	X	X	X				28	12	1,5
16	$\begin{matrix} 3,5 \\ 4 \\ 4,5 \end{matrix}$			X	X	X	X	X			32	16	
20	$\begin{matrix} 3,5 \\ 4 \\ 4,5 \end{matrix}$					X	X	X	X	X	40	21	
25	$\begin{matrix} 4,5 \\ 5,5 \\ 6,5 \end{matrix}$						X	X	X	X	50	28	

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**Descriptors:** tools, moulding equipment, moulds, injector nozzles, specifications, dimensions, designation.

Price based on 2 pages

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