

---

---

**Tools for moulding — Shouldered ejector  
pins**

*Outillage de moulage — Éjecteurs épaulés*

**iTeh STANDARD PREVIEW  
(standards.iteh.ai)**

[ISO 8694:1998](https://standards.iteh.ai/catalog/standards/sist/b6a4d3e9-fbb1-462b-a99e-5d7e83900419/iso-8694-1998)

<https://standards.iteh.ai/catalog/standards/sist/b6a4d3e9-fbb1-462b-a99e-5d7e83900419/iso-8694-1998>



## 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 8694 was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee 8, *Tools for pressing and moulding*.

This second edition cancels and replaces the first edition (ISO 8694:1987), which has been technically revised.

Annex A of this International Standard is for information only.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[ISO 8694:1998](https://standards.iteh.ai/catalog/standards/sist/b6a4d3e9-fbb1-462b-a99e-5d7e83900419/iso-8694-1998)

<https://standards.iteh.ai/catalog/standards/sist/b6a4d3e9-fbb1-462b-a99e-5d7e83900419/iso-8694-1998>

© ISO 1998

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

International Organization for Standardization

Case postale 56 • CH-1211 Genève 20 • Switzerland

Internet central@iso.ch

X.400 c=ch; a=400net; p=iso; o=isocs; s=central

Printed in Switzerland

# Tools for moulding — Shouldered ejector pins

## 1 Scope

This International Standard specifies the dimensions and tolerances, in millimetres, of shouldered ejector pins with cylindrical head which are used in compression and injection moulds and in die casting dies.

It also gives material guidelines and hardness requirements, and specifies the designation of shouldered ejector pins.

Ejector pins with cylindrical head are specified in ISO 6751, flat ejector pins are specified in ISO 8693.

## 2 Dimensions

See figure 1 and table 1.

**iTeh STANDARD PREVIEW**  
(standards.iteh.ai)

## 3 Material and hardness

Shouldered ejector pins shall be made of hot worked steel or alloyed cold worked steel. The hardness of the shaft and head is given in table 2.

<https://standards.iteh.ai/catalog/standards/sist/b6a4d3e9-fbb1-462b-a99e-5d7e83900419/iso-8694-1998>

## 4 Designation

Shouldered ejector pins according to this International Standard shall be designated by

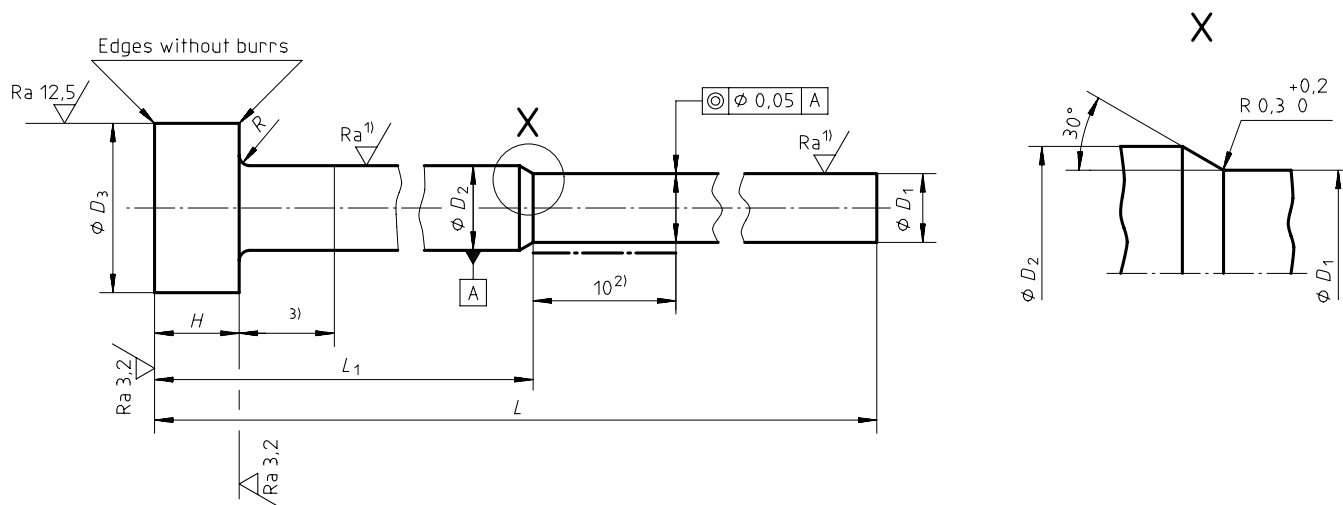
- “shouldered ejector pin”;
- reference to this International Standard, i.e. ISO 8694;
- ejector pin diameter,  $D_1$ , in millimetres;
- ejector pin length,  $L$ , in millimetres;
- ejector pin material.

### EXAMPLE

The designation for a shouldered ejector pin of diameter  $D_1 = 0,8$  mm, of length  $L = 100$  mm and of hot worked steel is as follows:

**Shouldered ejector pin ISO 8694 - 0,8 - 100 - Hot worked steel**

Surface roughness values in micrometres



- 1) Ra 0,8 for a hot worked steel Ra 0,4 for alloyed cold worked steel.
- 2) The concentricity tolerance of 0,05 mm is measured over a maximum distance of 10 mm immediately after the end of the radius joining  $D_1$  and  $D_2$ .
- 3) Providing the ejector pin with an alternative surface roughness or a small variation on the diameter,  $D_2$ , over a certain length is permitted.

**iTeh STANDARD PREVIEW**  
(standards.iteh.ai)

ISO 8694:1998  
**Figure 1 — Shouldered ejector pin**  
<https://standards.iteh.ai/catalog/standards/sist/60a4d3e9-fbb1-462b-a99e-5d7e83900419/iso-8694-1998>

Table 1 — Dimensions of shouldered ejector pins

Dimensions in millimetres

$D_1$ g6		$D_2$	$D_3$	$L$ +2 0					$H$	$R$
				100	125	160	200	250		
Standard size	Over-size	h11	0 -0,2	$L_1$ -1 -2					0 -0,05	+0,2 0
				50	50	63	80	100		
0,8		2	4	X	X	X			2	0,2
	0,9			X	X	X				
1				X	X	X				
	1,2			X	X	X				
1,5		3	6	X	X	X	X		3	0,3
	1,6			X	X	X	X			
2				X	X	X	X	X		
	2,2			X	X	X	X	X		
2,5				X	X	X	X	X		

ISO 8694:1998

<https://standards.iteh.ai/catalog/standards/sist/b6a4d3e9-fbb1-462b-a99e-5d7e83900419/iso-8694-1998>

Table 2 — Material and hardness

Material	Hardness <sup>1)</sup>	
	Shaft	Head
Hot worked steel	min 1 400 MPa core strength min 950 HV 0,3	45 ± 5 HRC hot forged
Alloyed cold worked steel	60 HRC ± 2 HRC	
1) The hardness measurement point is left to the manufacturer's discretion.		

## **Annex A** (informative)

### **Bibliography**

- [1] ISO 6751:1998, *Tools for moulding — Ejector pins with cylindrical head.*
- [2] ISO 8693:1998, *Tools for moulding — Flat ejector pins.*

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[ISO 8694:1998](https://standards.iteh.ai/catalog/standards/sist/b6a4d3e9-fbb1-462b-a99e-5d7e83900419/iso-8694-1998)

<https://standards.iteh.ai/catalog/standards/sist/b6a4d3e9-fbb1-462b-a99e-5d7e83900419/iso-8694-1998>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

ISO 8694:1998

<https://standards.iteh.ai/catalog/standards/sist/b6a4d3e9-fbb1-462b-a99e-5d7e83900419/iso-8694-1998>

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

ISO 8694:1998

<https://standards.iteh.ai/catalog/standards/sist/b6a4d3e9-fbb1-462b-a99e-5d7e83900419/iso-8694-1998>

---

---

**ICS 25.120.30**

**Descriptors:** moulding equipment, die casting, dies, tools, ejectors, pins, specifications, materials specifications, dimensions, designation.

Price based on 4 pages

---

---