



BSI Standards Publication

**Tools for moulding — Components of compression
and injection moulds and diecasting dies —
List of equivalent terms and symbols**

National foreword

This British Standard is the UK implementation of ISO 12165:2019. It supersedes BS ISO 12165:2000, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MTE/12, Tools for pressing and moulding.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2019
Published by BSI Standards Limited 2019

ISBN 978 0 539 00595 0

ICS 01.040.25; 25.120.30

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 November 2019.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

INTERNATIONAL
STANDARD

ISO
12165

Second edition
2019-11

**Tools for moulding — Components of
compression and injection moulds and
diecasting dies — List of equivalent
terms and symbols**

*Outillage de moulage — Composants des moulages par compression,
moules d'injection et moules pour fonderie sous pression — Termes et
symboles*



Reference number
ISO 12165:2019(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2019

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Nomenclature for components	1
4.1 Plates.....	1
4.2 Accessories.....	3
4.3 Components for gating.....	6
4.4 Components for cooling/heating.....	8
4.5 Components for ejection, knock-out operations.....	11
4.6 Further particular parts for moulds and dies.....	13
5 Nomenclature of particular parts for diecasting	16
6 Symbols used for mould design (simplified representation for technical drawings)	18
7 Summary of typical mould base configurations	20
8 Types of clamping plate	21
9 Mounting positions for risers or riser segments	23
10 Various designs of injection mould	24
11 Various designs of diecasting die	31
Bibliography	34

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

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

This second edition cancels and replaces the first edition (ISO 12165:2000) which has been technically revised.

The main change compared to the previous edition is the addition of the reference to ISO 16915.

In addition to text written in two of the three official ISO languages (English and French), this document gives text in German and Swedish. This text is published under the responsibility of the member bodies for Germany (DIN) and Sweden (SIS) and is given for information only. Only the text given in the official languages can be considered as ISO text.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Tools for moulding — Components of compression and injection moulds and diecasting dies — List of equivalent terms and symbols

1 Scope

This document specifies the terms generally in use for components of compression and injection moulds and diecasting dies. The function of these components is shown in [Figure 1](#) to [Figure 30](#).

NOTE The figures are given as examples.

The purpose of this document is to introduce coherent terms in professional terminology particularly with regard to the use in CAD (Computer Aided Drafting).

Various symbols are specified for simplified representation on technical drawings.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

4 Nomenclature for components

4.1 Plates

[Table 1](#) gives the equivalent terms related to plates in English, French, German and Swedish and provides for each listed component, the key and the reference of the figure where this component is shown and the reference of ISO standard of this component, when it exists.