

SVENSK STANDARD

SS-ISO 18084:2016



Fastställt/Approved: 2016-12-07
Publicerad/Published: 2016-12-15
Utgåva/Edition: 1
Språk/Language: engelska/English
ICS: 25.020; 25.120.10

Pressverktyg för tabletter – Stansar och dynor (ISO 18084:2011, IDT)

Press tools for tablets – Punches and dies (ISO 18084:2011, IDT)

This preview is downloaded from www.sis.se. Buy the entire standard via <https://www.sis.se/std-8023962>

Standarder får världen att fungera

SIS (Swedish Standards Institute) är en fristående ideell förening med medlemmar från både privat och offentlig sektor. Vi är en del av det europeiska och globala nätverk som utarbetar internationella standarder. Standarder är dokumenterad kunskap utvecklad av framstående aktörer inom industri, näringsliv och samhälle och befrämjar handel över gränser, bidrar till att processer och produkter blir säkrare samt effektiviserar din verksamhet.

Delta och påverka

Som medlem i SIS har du möjlighet att påverka framtida standarder inom ditt område på nationell, europeisk och global nivå. Du får samtidigt tillgång till tidig information om utvecklingen inom din bransch.

Ta del av det färdiga arbetet

Vi erbjuder våra kunder allt som rör standarder och deras tillämpning. Hos oss kan du köpa alla publikationer du behöver – allt från enskilda standarder, tekniska rapporter och standardpaket till handböcker och onlinetjänster. Genom vår webbtjänst e-nav får du tillgång till ett lättnavigerat bibliotek där alla standarder som är aktuella för ditt företag finns tillgängliga. Standarder och handböcker är källor till kunskap. Vi säljer dem.

Utveckla din kompetens och lyckas bättre i ditt arbete

Hos SIS kan du gå öppna eller företagsinterna utbildningar kring innehåll och tillämpning av standarder. Genom vår närhet till den internationella utvecklingen och ISO får du rätt kunskap i rätt tid, direkt från källan. Med vår kunskap om standarders möjligheter hjälper vi våra kunder att skapa verklig nytta och lönsamhet i sina verksamheter.

Vill du veta mer om SIS eller hur standarder kan effektivisera din verksamhet är du välkommen in på www.sis.se eller ta kontakt med oss på tel 08-555 523 00.



Standards make the world go round

SIS (Swedish Standards Institute) is an independent non-profit organisation with members from both the private and public sectors. We are part of the European and global network that draws up international standards. Standards consist of documented knowledge developed by prominent actors within the industry, business world and society. They promote cross-border trade, they help to make processes and products safer and they streamline your organisation.

Take part and have influence

As a member of SIS you will have the possibility to participate in standardization activities on national, European and global level. The membership in SIS will give you the opportunity to influence future standards and gain access to early stage information about developments within your field.

Get to know the finished work

We offer our customers everything in connection with standards and their application. You can purchase all the publications you need from us - everything from individual standards, technical reports and standard packages through to manuals and online services. Our web service e-nav gives you access to an easy-to-navigate library where all standards that are relevant to your company are available. Standards and manuals are sources of knowledge. We sell them.

Increase understanding and improve perception

With SIS you can undergo either shared or in-house training in the content and application of standards. Thanks to our proximity to international development and ISO you receive the right knowledge at the right time, direct from the source. With our knowledge about the potential of standards, we assist our customers in creating tangible benefit and profitability in their organisations.

If you want to know more about SIS, or how standards can streamline your organisation, please visit www.sis.se or contact us on phone +46 (0)8-555 523 00



Den internationella standarden ISO 18084:2011 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av ISO 18084:2011.

The International Standard ISO 18084:2011 has the status of a Swedish Standard. This document contains the official English version of ISO 18084:2011.

© Copyright/Upphovsrätten till denna produkt tillhör SIS, Swedish Standards Institute, Stockholm, Sverige. Användningen av denna produkt regleras av slutanvändarlicensen som återfinns i denna produkt, se standardens sista sidor.

© Copyright SIS, Swedish Standards Institute, Stockholm, Sweden. All rights reserved. The use of this product is governed by the end-user licence for this product. You will find the licence in the end of this document.

Uppllysningar om sakinnehållet i standarden lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00. Standarder kan beställas hos SIS Förlag AB som även lämnar allmänna upplysningar om svensk och utländsk standard.

Information about the content of the standard is available from the Swedish Standards Institute (SIS), telephone +46 8 555 520 00. Standards may be ordered from SIS Förlag AB, who can also provide general information about Swedish and foreign standards.

Denna standard är framtagen av kommittén för Press- och formverktyg samt fixturdetaljer, SIS/TK 277.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Nomenclature	1
4 Dimensions and tolerances	3
4.1 Punches	3
4.2 Dies	9
4.3 Positioning of punch with key in relation to machine turret and tablet shape to be executed	11
5 Designation	11
5.1 Designation of punches	11
5.2 Designation of dies	12
6 Marking	12
6.1 Marking of punches	12
6.2 Marking of dies	12
7 Material	12
Annex A (normative) Detail of punch head	13
Bibliography	14

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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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.

ISO 18084 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 18084:2005), of which it constitutes a minor revision. In particular, key item 5 and key item 34 of Figure 1 and detail X of Figure 7 have been corrected.

Press tools for tablets — Punches and dies

1 Scope

This International Standard specifies the main dimensions, tolerances and characteristics of punches and dies for all kinds of tablets.

This International Standard deals with measures which are relevant for the interchangeability of the press punches between the different tableting machines of various manufacturers.

2 Normative references

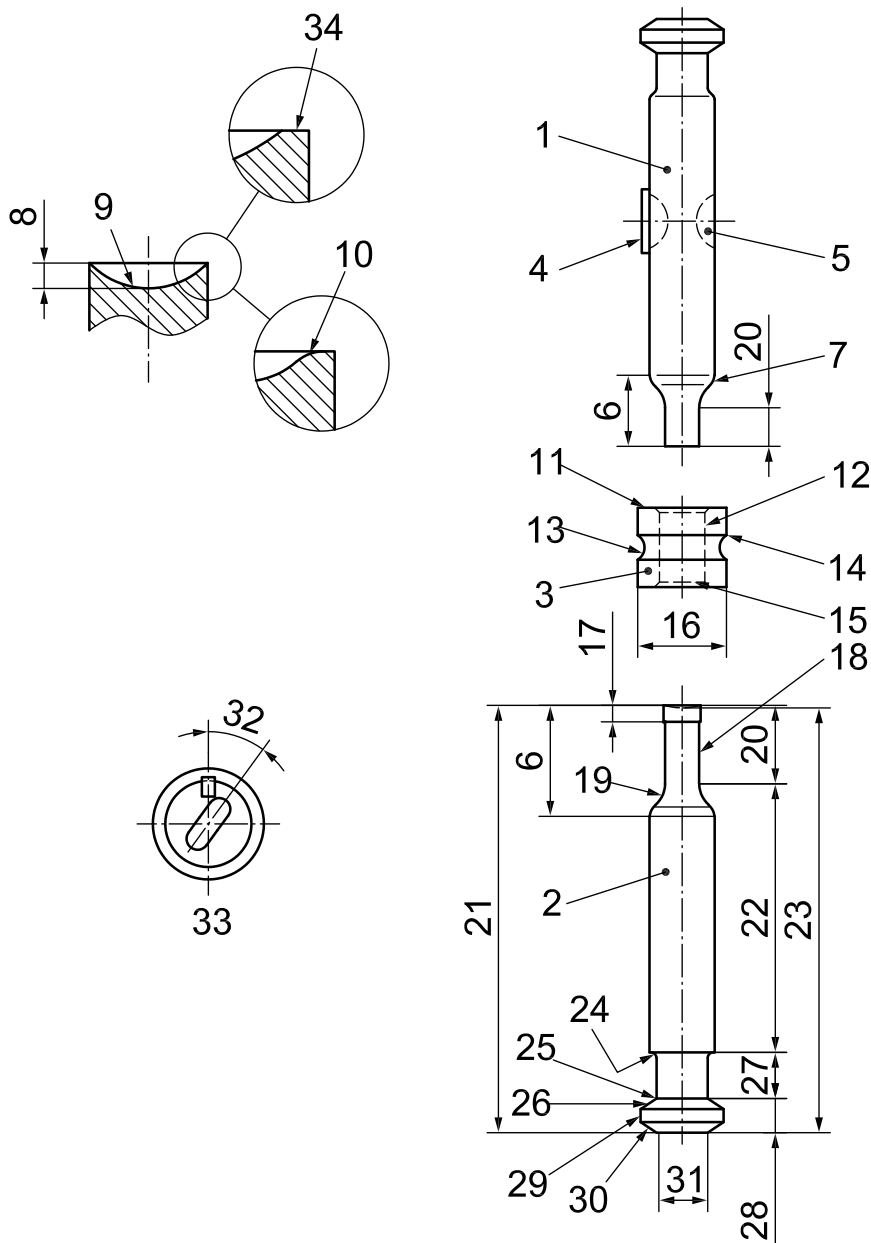
The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2768-1, *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

3 Nomenclature

See Figures 1 and 2.

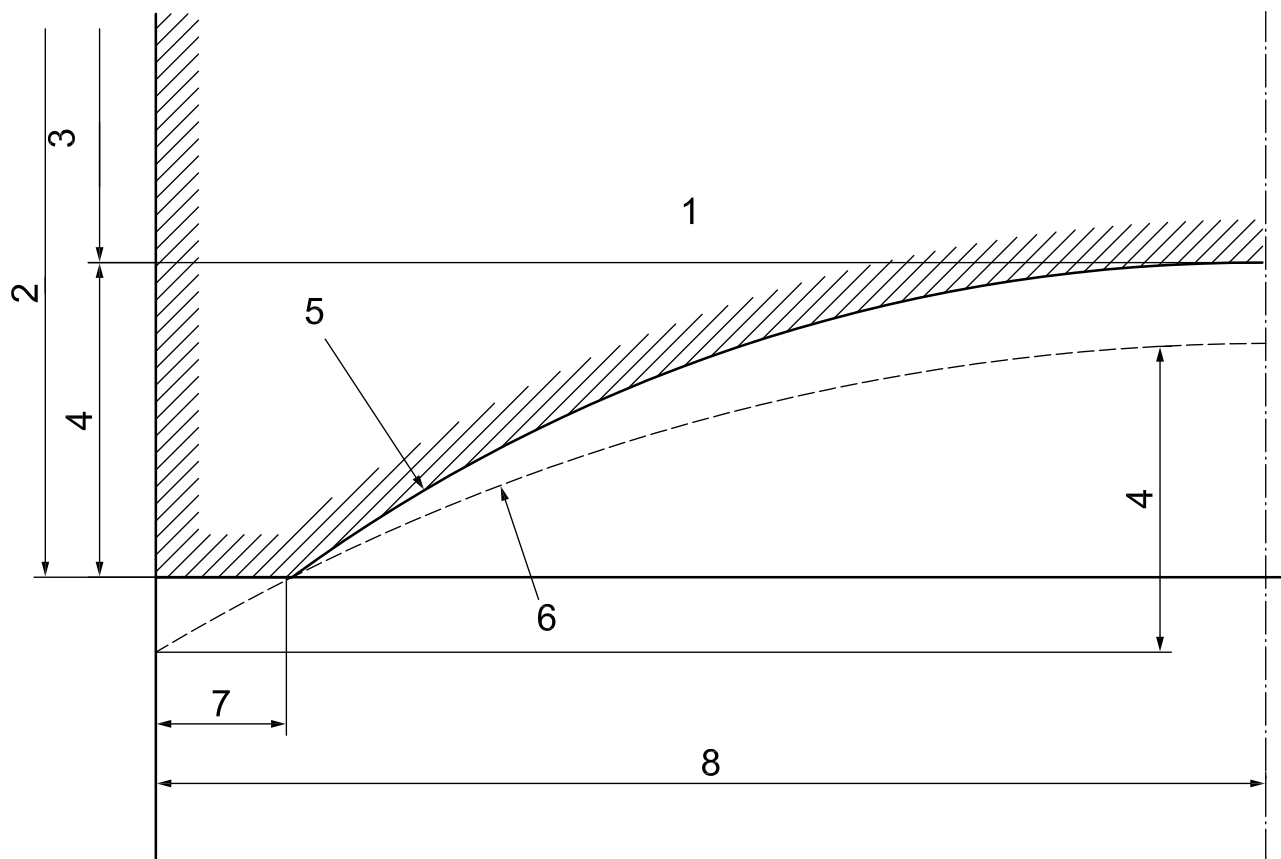
SS-ISO 18084:2016 (E)



Key

- | | | |
|-----------------------------|----------------------------------|----------------------------------|
| 1 upper punch | 13 die groove | 25 neck-to-head radius |
| 2 lower punch | 14 protection radius or shoulder | 26 inside head angle |
| 3 die | 15 chamfer or radius | 27 neck under head |
| 4 key | 16 outer diameter | 28 head |
| 5 keyway | 17 tip straight | 29 head outer diameter |
| 6 stem (tip to full barrel) | 18 relief | 30 outside head angle |
| 7 barrel-to-stem chamfer | 19 barrel-to-stem radius | 31 head flat |
| 8 cup depth | 20 working length of the tip | 32 key orientation angle |
| 9 tip face | 21 overall length | 33 upper punch face key position |
| 10 blended land | 22 barrel | 34 land |
| 11 face | 23 working length | |
| 12 bore | 24 barrel-to-neck radius | |

Figure 1 — Punch and die terminology



Key

- | | | | | | |
|---|----------------|---|------------------|---|-------------------|
| 1 | punch | 4 | depth cup | 7 | land |
| 2 | overall length | 5 | practical radius | 8 | tip face diameter |
| 3 | working length | 6 | nominal radius | | |

Figure 2 — Terminology related to tip face profile

4 Dimensions and tolerances

4.1 Punches

4.1.1 Upper punches

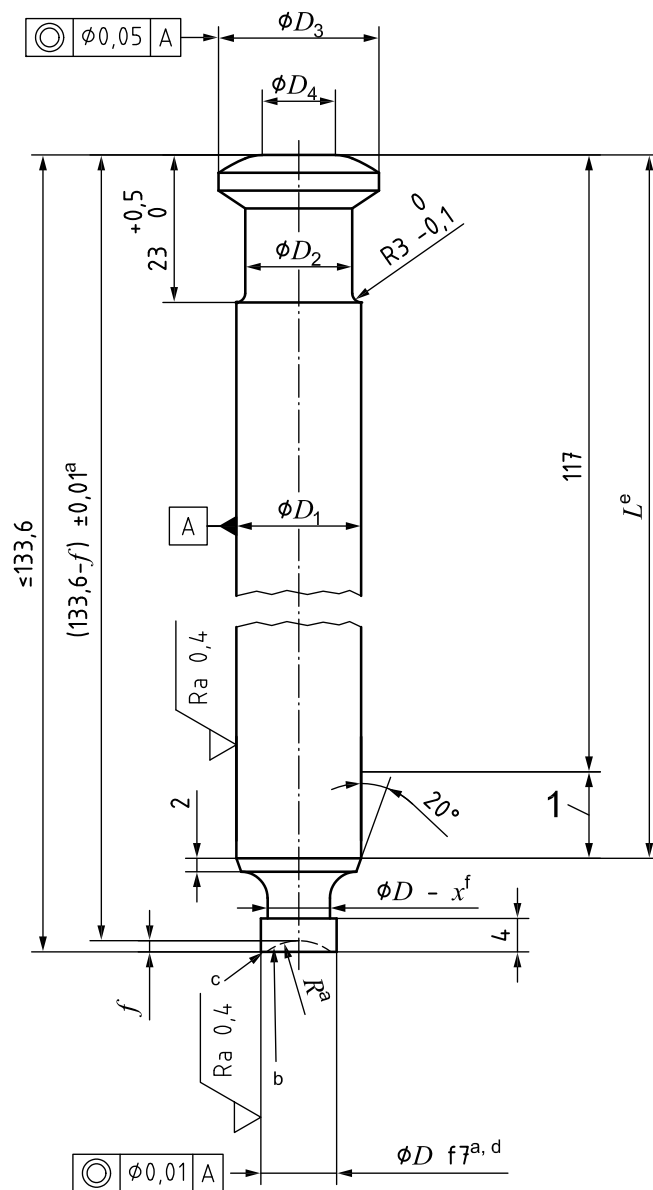
4.1.1.1 Upper punches without key

The dimensions and tolerance of upper punches without key shall be in accordance with the indications of Figure 3 and Table 1. The dimensions and tolerance of punch head shall be in accordance with the indications of Annex A.

4.1.1.2 Upper punches with key

The dimensions and tolerance of upper punches with key shall be in accordance with the indications of Figure 4 and Table 1. The dimensions and tolerance of punch head shall be in accordance with the indications of Annex A.

Dimensions in millimetres,
Surface roughness values in micrometres
General tolerance: ISO 2768-m



Key

1 dust cup place

^a The values of D , R and $(133,6 - f) \pm 0,01$ shall be defined by the user.

^b The appearance of the cup radius and the land shall correspond to a polished mirror (i.e. $0,025 \mu\text{m} \leq Ra \leq 0,10 \mu\text{m}$).

^c The land (see Figure 2, key item 7) varies according to D and the tablet dimensions, and should be equal to:

- 0,05 for $D < 5$
- 0,1 for $5 \leq D < 20$
- 0,2 for $D \geq 20$.

^d For shape tooling, the tolerance of all dimensions of the tip should correspond to f7 applied to the largest dimension.

^e The values of L shall be subject to agreement between the manufacturer and the user.

^f x shall be subject to agreement between the manufacturer and the user.

Figure 3 — Upper punches without key

