

**SLOVENSKI STANDARD
SIST EN ISO 683-5:2021****01-julij-2021****Nadomešča:
SIST EN 10085:2002**

Toplotno obdelana, legirana in avtomatna jekla - 5. del: Jekla za nitridiranje (ISO 683-5:2017)

Heat treatable steels, alloy steels and free-cutting steels - Part 5: Nitriding steels (ISO 683-5:2017)

Für eine Wärmebehandlung bestimmte Stähle, legierte Stähle und Automatenstähle - Teil 5: Nitrierstähle (ISO 683-5:2017)

Aciers pour traitement thermique, aciers alliés et aciers pour décolletage - Partie 5: Aciers pour nituration (ISO 683-5:2017)

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Ta slovenski standard je istoveten z: EN ISO 683-5:2021**ICS:**

77.140.10	Jekla za toplotno obdelavo	Heat-treatable steels
77.140.20	Visokokakovostna jekla	Stainless steels

SIST EN ISO 683-5:2021**en,fr,de**

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EUROPEAN STANDARD

EN ISO 683-5

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2021

ICS 77.140.10; 77.140.20

Supersedes EN 10085:2001

English Version

Heat treatable steels, alloy steels and free-cutting steels - Part 5: Nitriding steels (ISO 683-5:2017)

Aciers pour traitement thermique, aciers alliés et
aciers pour décolletage - Partie 5: Aciers pour
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Für eine Wärmebehandlung bestimmte Stähle, legierte
Stähle und Automatenstähle - Teil 5: Nitrierstähle (ISO
683-5:2017)

This European Standard was approved by CEN on 9 May 2021.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents	Page
European foreword.....	3

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SIST EN ISO 683-5:2021

<https://standards.iteh.ai/catalog/standards/sist/38cd9995-dd9d-4499-9173-96f2a66fdc36/sist-en-iso-683-5-2021>

European foreword

The text of ISO 683-5:2017 has been prepared by Technical Committee ISO/TC 17 "Steel" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 683-5:2021 by Technical Committee CEN/TC 459/SC 5 "Steels for heat treatment, alloy steels, free-cutting steels and stainless steels" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2021, and conflicting national standards shall be withdrawn at the latest by November 2021.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 10085:2001.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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Endorsement notice

The text of ISO 683-5:2017 has been approved by CEN as EN ISO 683-5:2021 without any modification.

The European steel numbers to the steel grades are to be found in informative Annex C.

The references to following European standards are given for information:

EN 10017, *Steel rod for drawing and/or cold rolling – Dimensions and tolerances*

EN 10029, *Hot-rolled steel plates 3 mm thick or above – Tolerances on dimensions and shape*

EN 10048, *Hot-rolled narrow steel strip – Tolerances on dimensions and shape*

EN 10051, *Continuously hot-rolled strip and plate/sheet cut from wide strip of non-alloy and alloy steels – Tolerances on dimensions and shape*

EN 10058, *Hot rolled flat steel bars and steel wide flats for general purposes – Dimensions and tolerances on shape and dimensions*

EN 10059, *Hot rolled square steel bars for general purposes – Dimensions and tolerances on shape and dimensions*

EN 10060, *Hot rolled round steel bars - Dimensions and tolerances on shape and dimensions*

EN 10061, *Hot rolled hexagon steel bars – Dimensions and tolerances on shape and dimensions*

EN 10108, *Round steel rod for cold heading and cold extrusion - Dimensions and tolerances*

EN ISO 683-5:2021 (E)

EN 10140, *Cold rolled narrow steel strip - Tolerances on dimensions and shape*

EN 10160, *Ultrasonic testing of steel flat product of thickness equal to or greater than 6 mm (reflection method)*

EN 10204, *Metallic products - Types of inspection documents*

EN 10308, *Non-destructive testing – Ultrasonic testing of steel bars*

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INTERNATIONAL STANDARD

ISO 683-5

Second edition
2017-07

Heat treatable steels, alloy steels and free-cutting steels —

Part 5: Nitriding steels

*Aciers pour traitement thermique, aciers alliés et aciers pour
décolletage —*

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Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
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Contents

Page

Foreword	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Classification and designation	3
4.1 Classification.....	3
4.2 Designation.....	3
5 Information to be supplied by the purchaser	3
5.1 Mandatory information.....	3
5.2 Options/supplementary or special requirements.....	3
5.3 Ordering example.....	4
6 Manufacturing process	4
6.1 General.....	4
6.2 Deoxidization.....	4
6.3 Heat treatment and surface condition at delivery.....	4
6.3.1 Normal condition at delivery.....	4
6.3.2 Particular heat-treatment condition.....	4
6.3.3 Particular surface conditions.....	4
6.4 Traceability of the cast.....	4
7 Requirements	4
7.1 Chemical composition, hardness and mechanical properties.....	4
7.1.1 General.....	4
7.1.2 Chemical composition.....	5
7.1.3 Mechanical properties.....	5
7.2 Machinability.....	5
7.3 Cold shearability.....	5
7.4 Grain size.....	5
7.5 Non-metallic inclusions.....	5
7.5.1 Microscopic inclusions.....	5
7.5.2 Macroscopic inclusions.....	5
7.6 Internal soundness.....	5
7.7 Surface quality.....	5
7.8 Decarburization.....	6
7.9 Shape, dimensions and tolerances.....	6
8 Inspection	6
8.1 Testing procedures and types of documents.....	6
8.2 Frequency of testing.....	7
8.3 Specific inspection and testing.....	7
8.3.1 Verification of the hardness and mechanical properties.....	7
8.3.2 Visual and dimensional inspection.....	7
9 Test methods	7
9.1 Chemical analysis.....	7
9.2 Hardness and mechanical tests.....	7
9.2.1 Hardness.....	7
9.2.2 Mechanical tests.....	7
9.2.3 Impact test.....	7
9.3 Retests.....	8
10 Marking	8
Annex A (normative) Ruling sections for mechanical properties	18
Annex B (normative) Supplementary or special requirements	22

ISO 683-5:2017(E)

Annex C (informative) Designation of steels given in this document and of comparable grades covered in various designation systems	24
Annex D (informative) Dimensional standards applicable to products complying with this document	25
Bibliography	26

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 683-5:2021](https://standards.iteh.ai/catalog/standards/sist/38cd9995-dd9d-4499-9173-96f2a66fdc36/sist-en-iso-683-5-2021)

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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 on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 4, *Heat treatable and alloy steels*.

This second edition cancels and replaces the first edition (ISO 683-5:2014), of which it constitutes a minor revision.

The main changes compared to the previous edition are as follows:

- in the Scope, “see [5.2](#)” has been added as a cross reference;
- in [3.1](#), note 1 to entry has been revised;
- in [5.2](#), the ordering example has been moved into a new subclause, as [5.3](#);
- in [7.7.3](#), the surface class given has been changed from A to 1z2;
- in [9.2.3](#), the option for retesting has been revised;
- Figure 3 has been renamed as [Table 9](#);
- in [A.2.1](#), the cross references have been corrected to [A.2.2](#) to [A.2.4](#).

A list of all parts in the ISO 683 series can be found on the ISO website.

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SIST EN ISO 683-5:2021

<https://standards.iteh.ai/catalog/standards/sist/38cd9995-dd9d-4499-9173-96f2a66fdc36/sist-en-iso-683-5-2021>