

This is a preview of "BS EN 10269:2013". [Click here to purchase the full version from the ANSI store.](#)

BS EN 10269:2013



BSI Standards Publication

Steels and nickel alloys for fasteners with specified elevated and/or low temperature properties

bsi.

...making excellence a habit.™

This is a preview of "BS EN 10269:2013". [Click here to purchase the full version from the ANSI store.](#)

This British Standard is the UK implementation of EN 10269:2013. It supersedes BS EN 10269:1999+A1:2006 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ISE/107, Steels for Pressure Purposes.

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 2013. Published by BSI Standards Limited 2013

ISBN 978 0 580 76784 5

ICS 77.120.40; 77.140.20

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 31 October 2013.

Amendments issued since publication

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

This is a preview of "BS EN 10269:2013". [Click here to purchase the full version from the ANSI store.](#)

EUROPÄISCHE NORM

October 2013

ICS 77.120.40; 77.140.20

Supersedes EN 10269:1999

English Version

Steels and nickel alloys for fasteners with specified elevated and/or low temperature properties

Aciers et alliages de nickel pour éléments de fixation
utilisés à température élevée et/ou basse température

Stähle und Nickellegierungen für Befestigungselemente für
den Einsatz bei erhöhten und/oder tiefen Temperaturen

This European Standard was approved by CEN on 24 August 2013.

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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

This is a preview of "BS EN 10269:2013". Click here to purchase the full version from the ANSI store.

Contents

Page

Foreword.....	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	6
4 • Dimensions and tolerances on dimensions	6
5 Calculation of mass	7
6 Classification and designation.....	7
6.1 Classification.....	7
6.2 Designation	7
7 Information to be supplied by the purchaser	7
7.1 Mandatory information.....	7
7.2 Options	8
7.3 Example of ordering	8
8 Requirements	9
8.1 • Melting process	9
8.2 Delivery condition.....	9
8.3 Chemical composition	9
8.4 Mechanical properties.....	9
8.5 • Surface condition	10
8.6 • Internal soundness.....	10
9 Inspection	10
9.1 Types of inspection and inspection documents	10
9.2 Verification tests to be carried out.....	11
9.3 Re-tests.....	11
10 Sampling.....	11
10.1 Frequency of testing	11
10.2 Selection and preparation of samples and test pieces.....	12
11 Test methods.....	12
11.1 • Chemical analysis	12
11.2 Hardness test	12
11.3 Tensile test at room temperature	12
11.4 • Tensile test at elevated temperature	13
11.5 Impact test	13
11.6 Other testing.....	13
12 Marking	13
Annex A (informative) Reference data on some physical properties	33
Annex B (informative) Guidance for heat treatment	35
Annex C (informative) Reference data of strength values for 1 % (plastic) creep strain and creep rupture	37
Annex D (informative) Reference data for the relaxation properties	44
Annex E (informative) Significant changes to the previous version EN 10269:1999	47

This is a preview of "BS EN 10269:2013". [Click here to purchase the full version from the ANSI store.](#)

Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 97/23/EC.....	48
Bibliography.....	49

This is a preview of "BS EN 10269:2013". [Click here to purchase the full version from the ANSI store.](#)

Foreword

This document (EN 10269:2013) has been prepared by Technical Committee ECISS/TC 107 "Steels for pressure purposes", 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 April 2014, and conflicting national standards shall be withdrawn at the latest by April 2014.

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

This document supersedes EN 10269:1999 and EN 10269:1999/A1:2006.

For a list of significant changes that have been made in this new version, see Annex E.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 97/23/EC.

For relationship with EU Directive 97/23/EC, see informative Annex ZA, which is an integral part of this document.

NOTE The clauses marked with a point (●) contain information relating to agreements which are to be made at the time of enquiry and order. The clauses marked by two points (●●) contain information relating to agreements that may be made at the time of enquiry and order.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

This is a preview of "BS EN 10269:2013". [Click here to purchase the full version from the ANSI store.](#)

1 Scope

This European Standard specifies requirements for semi-finished products, bars and rods for fasteners with properties specified at elevated and/or low temperatures made of non-alloy and alloy (including stainless) steels and nickel alloys as given in Table 1.

The requirements of this standard may be applied also to the finished fasteners.

The general technical delivery conditions in EN 10021 also apply to products supplied in accordance with this European Standard.

NOTE Once this European Standard is published in the EU Official Journal (OJEU) under Directive 97/23/EC, presumption of conformity to the Essential Safety Requirements (ESRs) of Directive 97/23/EC is limited to technical data of materials in this European Standard and does not presume adequacy of the material to a specific item of equipment. Consequently, the assessment of the technical data stated in this material standard against the design requirements of this specific item of equipment to verify that the ESRs of Directive 97/23/EC are satisfied, needs to be done.

2 Normative references

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

EN 10020:2000, *Definition and classification of grades of steel*

EN 10021, *General technical delivery conditions for steel products*

EN 10027-1, *Designation systems for steels — Part 1: Steel names*

EN 10027-2, *Designation systems for steels — Part 2: Numerical system*

EN 10052:1993, *Vocabulary of heat treatment terms for ferrous products*

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

EN 10061, *Hot rolled hexagon steel bars for general purposes — Dimensions and tolerances on shape and dimensions*

EN 10079:2007, *Definition of steel products*

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

EN 10168, *Steel products — Inspection documents — List of information and description*

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

EN 10221, *Surface quality classes for hot-rolled bars and rods — Technical delivery conditions*

CEN/TR 10261, *Iron and steel — European standards for the determination of chemical composition*