



SLOVENSKI STANDARD
SIST EN 10207:1997

01-maj-1997

Jekla za enostavne tlačne posode - Tehnični dobavni pogoji za pločevine, trakove in palice

Steels for simple pressure vessels - Technical delivery requirements for plates, strips and bars

Stähle für einfache Druckbehälter - Technische Lieferbedingungen für Blech, Band und Stabstahl

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Aciers pour appareils a pression simple - Conditions techniques de livraison des tôles, bandes et barres

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23.020.30	Tlačne posode, plinske jeklenke	Pressure vessels, gas cylinders
77.140.30	Jekla za uporabo pod tlakom	Steels for pressure purposes
77.140.50	Ploščati jekleni izdelki in polizdelki	Flat steel products and semi-products

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EUROPEAN STANDARD

EN 10207:1991

NORME EUROPEENNE

EUROPAISCHE NORM

November 1991

UDC 669.14-41:621.642-98:620.1

Descriptors : Iron- and steel products, metal bars, metal plates, steels
strips, steels, pressure vessels, delivery conditions

English version

Steels for simple pressure vessels - Technical
delivery requirements for plates, strips and bars

Aciers pour appareils à pression simple Stähle für einfache Druckbehälter -
- Conditions techniques de livraison Technische Lieferbedingungen für
des tôles, bandes et barres Blech, Band und Stabstahl

This European Standard was approved by CEN on 1991-11-30.
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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 Central Secretariat 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
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Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

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NOTE - The clauses marked with a point (•) contain information relating to agreements which are to be made on ordering. The clauses marked with two points (••) contain information regarding agreements which may be made on ordering.



Foreword

This European Standard has been drawn up by Technical Committee ECISS/TC 22 "Steels for pressure purposes" for the reasons given in clause 1.

ECISS/TC 22 accepted this document in its meeting in February 1990. The following ECISS-member bodies were represented at that meeting : Austria, Belgium, Finland, France, Germany, Italy, Norway, Sweden and UK.

This European Standard EN 10207 was approved by CEN on 1991-09-26.

According to the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard :

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

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1 Scope

1.1 This European Standard has been established in order to provide complete technical delivery conditions for flat products and bars made of steel which must comply with the specifications for pressurized parts in simple pressure vessels as defined in the Directive 87/404/EEC (see Annex A) and standardized in EN 286.

1.2 The general technical delivery conditions of prEN 10021 also apply to deliveries in accordance with this EN.

2 Normative references

This European Standard incorporates by undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For undated references the latest edition of the publication referred to applies.

- DIRECTIVE 87/404/EEC - Council directive of 25 June 1987 on the harmonization of the laws of the Member States relating to simple pressure vessels
- EN 10002-1 - Metallic materials; tensile testing; Part 1: Method of test (at ambient temperature)
<https://standards.iteh.ai/standards/sist/d3e74ce2-c67c-46c2-b2af-ce34032605ed/sist-en-10207-1997>
- EN 10020 - Definition and classification of grades of steel
- EN 10029 - Hot rolled steel plates 3 mm thick or above; Tolerances on dimensions, shape and mass
- EN 10045-1 - Metallic Materials; Charpy impact test - Part 1: Test method
- EN 10163-2 - Delivery requirements for surface condition of hot rolled steel plates, wide flats and sections - Part 2: Plates and wide flats
- EURONORM 18¹⁾ - Selection and preparation of samples and test pieces for steel and steel products

¹⁾

Until these Euronorms are transferred into European Standards they can either be implemented or reference made to corresponding national standards, the list of which is given in annex B to this European Standard.

- EURONORM 48¹⁾ - Hot rolled narrow steel and strip -
Tolerances on dimensions and shape
- EURONORM 52¹⁾ - Vocabulary of the heat treatment for ferrous
products
- EURONORM 58¹⁾ - Hot rolled flats or general purposes
- EURONORM 59¹⁾ - Hot rolled square bars for general purposes
- EURONORM 60¹⁾ - Hot rolled round bars for general purposes
- EURONORM 61¹⁾ - Hot rolled steel hexagons
[SIST EN 10207:1997](https://standards.iteh.ai/catalog/standards/sist/d3e74ce2-e67c-46c2-b2af-10207-1997)
- EURONORM 160¹⁾ - Ultrasonic testing of steel plate of
thickness equal to or greater than 6 mm
(reflection method)
- EURONORM 168¹⁾ - Iron and steel products - Inspection
documents - Contents
- prEN 286-1 - Simple unfired pressure vessels to contain
air or nitrogen; Part 1: Design and manu-
facture of simple pressure vessels
- prEN 10002-5 - Metallic materials; tensile testing -
Part 5: Method of test at elevated
temperature
- prEN 10021 - General technical delivery requirements
for steel and iron products

1)
See page 4

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- EN 10027-1 - Designation system for steel;
Part 1: Steel names
- EN 10051 - Continuously hot rolled uncoated sheet and
strip of non-alloyed and alloyed steels;
tolerances on dimensions and shape
- EN 10079 - Definition of steel products
- EN 10204 - Steel and iron and steel products; Inspec-
tion documents.

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3 Definitions

3.1 Non-alloy steel, quality steel and special steel

The definitions given in EN 10020 apply.

3.2 Product forms

The definitions in prEN 10079 apply.

3.3 Type of heat treatment

3.3.1 The definitions in EURONORM 52 apply.

3.3.2 Under the term "normalizing rolling" is understood a rolling process in which the final deformation is carried out in a certain temperature range leading to a material condition equivalent to that obtained after normalizing so that the specified values of the mechanical properties are retained even after normalizing.

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The short form of this condition of delivery and of the normalized condition is N.

NOTE 1 - In international publications for both the normalizing rolling, as well as thermomechanical, the expression "controlled rolling" may be found. However in view of the different applicability of the products a distinction of the terms is necessary.

NOTE 2 - It may be that in the future the symbol "N" for normalizing or normalizing rolling will be replaced by "TN" (see prEN 10027-1, table 1).

3.4 Simple pressure vessel

(See Annex A).

• 4 Dimensions and tolerances on dimensions

The nominal dimensions and tolerances on dimensions for the product shall be agreed on ordering with reference to the following dimensional standards:

4.1 In the case of hot rolled steel plates 3 mm thick or above with reference to EN 10 029, thickness tolerance class B.

4.2 In the case of

- continuously hot rolled wide strip (rolled width > 600 mm)
 - or hot rolled slit strip in width < 600 mm made of wide strip
 - or hot rolled sheet in thicknesses under 3 mm
- with reference toprEN 10 051.

4.3 In the case of hot rolled narrow strip (rolled width < 600 mm) reference to EURONORM 48.

4.4 In the case of bars with

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- rectangular section to EURONORM 58
 - square section to EURONORM 59
 - round section to EURONORM 60
 - hexagonal section to EURONORM 61
- SIST EN 10207:1997
https://standards.iteh.ai/catalog/standards/sist/d3e74ce2-c67c-46c2-b2af-cc54032603cd/sist-en-10207-1997

5 Calculation of mass

A density of 7,85 kg/dm³ shall be used as the basis for the calculation of the nominal mass from the nominal dimensions of all steels included in table 1.

6 Designation and ordering

6.1 Designation of the steel grades

The steel names (see table 1) have been formulated in accordance with prEN 10 027-1.

NOTE - As long as prEN 10 027-1 is not finally adopted, the steel names should be regarded as preliminary.

6.2 • Ordering

The order of a product conforming to this EN shall include the following information:

- a) the quantity required,
- b) the product form
- c) the European Standard or document specifying the tolerances on dimensions, shape and mass (see clause 4) and, if the relevant European Standard or document permits the purchaser certain options, e. g. regarding finishes or tolerance grades, specific information on these aspects,
- d) the nominal dimensions of the product to be delivered.
- e) the number of this EN,
- f) the designation of the steel grade,

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Special agreements regarding the subclauses marked with two points (••) may be made on ordering.

7 Classification and selection of steels

7.1 The classification of the steels according to EN 10 020 is indicated in table 1.

7.2•The selection of steel is the responsibility of the purchaser.