

TERASED LIHTSATE SURVEANUMATE
VALMISTAMISEKS. PLAATIDE, RIBADE JA VARRASTE
TEHNILISED TARNETINGIMUSED

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 10207:2017 sisaldab Euroopa standardi EN 10207:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 10207:2017 consists of the English text of the European standard EN 10207:2017.
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English Version

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

Aciers pour appareils à pression simples - Conditions techniques de livraison des tôles, bandes et barres

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

This European Standard was approved by CEN on 28 August 2017.

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European foreword

This document (EN 10207:2017) 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of an identical text or by endorsement, at the latest by May 2018, and conflicting national standards shall be withdrawn at the latest by May 2018.

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 10207:2005.

A list of the main changes between this document and EN 10207:2005 can be found in Annex B.

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 2014/29/EU.

For relationship with EU Directive 2014/29/EU, see informative Annex ZA, which is an integral part of this document.

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1 Scope

This European Standard specifies the technical delivery requirements for plates, strips and bars made of steel in accordance with the specifications for pressurized parts in simple pressure vessels as defined in the Directive 2014/29/EU (see Annex A) and standardized in EN 286-1 to EN 286-3.

NOTE Once this European Standard is published in the EU Official Journal (OJEU) under Directive 2014/29/EU, presumption of conformity to the Essential Safety Requirements (ESRs) of Directive 2014/29/EU 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 2014/29/EU 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 10021:2006, *General technical delivery conditions for steel products*

EN 10027-1:2016, *Designation systems for steels - Part 1: Steel names*

EN 10027-2:2015, *Designation systems for steels - Part 2: Numerical system*

EN 10029:2010, *Hot-rolled steel plates 3 mm thick or above - Tolerances on dimensions and shape*

EN 10048:1996, *Hot rolled narrow steel strip - Tolerances on dimensions and shape*

EN 10051:2010, *Continuously hot-rolled strip and plate/sheet cut from wide strip of non-alloy and alloy steels - Tolerances on dimensions and shape*

EN 10058:2003, *Hot rolled flat steel bars for general purposes - Dimensions and tolerances on shape and dimensions*

EN 10059:2003, *Hot rolled square steel bars for general purposes - Dimensions and tolerances on shape and dimensions*

EN 10060:2003, *Hot rolled round steel bars for general purposes - Dimensions and tolerances on shape and dimensions*

EN 10061:2003, *Hot rolled hexagon steel bars for general purposes - Dimensions and tolerances on shape and dimensions*

EN 10079:2007, *Definition of steel products*

EN 10160:1999, *Ultrasonic testing of steel flat product of thickness equal or greater than 6 mm (reflection method)*

EN 10163-2:2004, *Delivery requirements for surface condition of hot-rolled steel plates, wide flats and sections - Part 2: Plate and wide flats*

EN 10168:2004, *Steel products - Inspection documents - List of information and description*

EN 10204:2004, *Metallic products - Types of inspection documents*

EN 10221:1995, *Surface quality classes for hot-rolled bars and rods - Technical delivery conditions*

EN 10308:2001, *Non destructive testing - Ultrasonic testing of steel bars*

EN ISO 148-1:2016, *Metallic materials - Charpy pendulum impact test - Part 1: Test method (ISO 148-1:2016)*

EN ISO 377:2017, *Steel and steel products - Location and preparation of samples and test pieces for mechanical testing (ISO 377:2017)*

EN ISO 2566-1:1999, *Steel - Conversion of elongation values - Part 1: Carbon and low alloy steels (ISO 2566-1:1984)*

EN ISO 6892-1:2016, *Metallic materials - Tensile testing - Part 1: Method of test at room temperature (ISO 6892-1:2016)*

EN ISO 6892-2:2011, *Metallic materials - Tensile testing - Part 2: Method of test at elevated temperature (ISO 6892-2:2011)*

EN ISO 14284:2002, *Steel and iron - Sampling and preparation of samples for the determination of chemical composition (ISO 14284:1996)*

CEN/TR 10261:2013, *Iron and steel - European standards for the determination of chemical composition*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 10020:2000, EN 10021:2006, EN 10079:2007 and EN 10204:2004 and the following apply.

3.1

normalizing rolling

rolling process in which the final deformation process is carried out in a certain temperature range leading to a material condition equivalent to that obtained after normalizing so that the specified mechanical properties are still met even after subsequent normalizing

4 Classification and designation

4.1 Classification

In accordance with the classification system in EN 10020, the steel grades P235S and P265S are non-alloy quality steels and the steel grade P275SL is a non-alloy special steel.

4.2 Designation

The steel grades are designated with steel names and steel numbers. The steel names are allocated in accordance with EN 10027-1. The steel numbers are allocated in accordance with EN 10027-2.