This preview is downloaded from www.sis.se. Buy the entire standard via https://www.sis.se/std-17203

STANDARDISERINGEN I SVERIGE
SWEDISH STANDARDS INSTITUTION

SVENSK STANDARD SS-EN 10 248-1

Handläggande organ	Fastställd	Utgåva	Sida
MATERIAL- OCH MEKANSTANDARDISERINGEN, MMS	1995-09-08	1	1 (1+15)

SIS FASTSTÄLLER OCH UTGER SVENSK STANDARD SAMT SÄLJER NATIONELLA, EUROPEISKA OCH INTERNATIONELLA STANDARDPUBLIKATIONER ©

Hot rolled sheet piling of non alloy steels – Part 1: Technical delivery conditions

The European Standard EN 10 248-1:1995 has the status of a Swedish Standard. This document contains the official English version of EN 10 248-1:1995.

Swedish Standards corresponding to documents referred to in this Standard are listed in "Catalogue of Swedish Standards", annually issued by SIS. The Catalogue lists, with reference number and year of Swedish approval, International and European Standards approved as Swedish Standards as well as other Swedish Standards.

Varmvalsade spontplankor av olegerade stål – Del 1: Tekniska leveransbestämmelser

Europastandarden EN 10 248-1:1995 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 10 248-1:1995.

Motsvarigheten och aktualiteten i svensk standard till de publikationer som omnämns i denna standard framgår av "Katalog över svensk standard", som årligen ges ut av SIS. I katalogen redovisas internationella och europeiska standarder som fastställts som svenska standarder och övriga gällande svenska standarder.

ICS 77.140.70

Standarder kan beställas hos SIS som även lämnar allmänna upplysningar om svensk och utländsk standard.
Postadress: SIS, Box 3295, 103 66 STOCKHOLM
Telefon: 08 - 613 52 00. *Telefax*: 08 - 411 70 35

Upplysningar om **sakinnehållet** i standarden lämnas av MMS.
Telefon: 08 - 665 24 00. *Telefax*: 08 - 667 85 42

Prisgrupp N

Tryckt i november 1995

This preview is downloaded from www.sis.se. Buy the entire standard via https://www.sis.se/std-17203

This preview is downloaded from www.sis.se. Buy the entire standard via https://www.sis.se/std-17203

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 10248-1

June 1995

ICS 77.140.70
Descriptors: iron -and steel products, hot rolled products, sheet pilings, steels, unalloyed steels, chemical compostion, grades: quality, classifications, designation, mechanical properties, weldability, surface condition, tests, inspection, marking

English version

Hot rolled sheet piling of non alloy steels – Part 1: Technical delivery conditions

Palplanches laminées à chaud en aciers non alliés – Partie 1: Conditions techniques de livraison

Warmegewalzte Spundbohlen aus unlegierten Stählen – Teil 1: Technische Lieferbedingungen

This European Standard was approved by CEN on 1995-05-19. 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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, 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

© 1995 All rights of reproduction and communication in any form and by any means reserved in all countries to CEN and its members.

Ref. No. EN 10248-1:1995 E

This preview is downloaded from www.sis.se. Buy the entire standard via https://www.sis.se/std-17203

Contents

This preview is downloaded from www.sis.se. Buy the entire standard via https://www.sis.se/std-17203

Foreword

This European Standard was prepared by SC4 "Sheet piling" of Technical Committee ECISS/TC10 "Structural steels - Qualities" the secretariat of which is held by NNI.

EN 10248 is composed of two parts :

Part 1 : Technical delivery conditions,
Part 2 : Tolerances on shape and dimensions.

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 December 1995, and conflicting national standards shall be withdrawn at the latest by December 1995.

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.

This preview is downloaded from www.sis.se. Buy the entire standard via https://www.sis.se/std-17203

1 Scope

This part of this European Standard specifies the requirements for hot rolled non alloy steel sheet piling in respect of its chemical composition, mechanical properties and conditions of delivery.

The products specified are for general, structural and civil engineering works.

Requirements in respect of tolerances on shape and dimensions are specified in Part 2 of this European Standard.

2 Normative references

This European Standard incorporates by dated or 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 dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 10002-1 Metallic materials - Tensile testing - Part 1 : Method of test (at ambient temperature).

EN 10020 Definition and classification of grades of steel.

EN 10021 General technical delivery requirements for steel and steel products.

EN 10027-1 Designation system for steel - Part 1 : Steel names, principal symbols.

EN 10027-2 Designation system for steel - Part 2 : Steel numbers.

EN 10079 Definition of steel products.

EN 10248-2 Hot rolled sheet piling of non alloy steels - Part 2 : Tolerances on shape and dimensions

EN 10204 Metallic products - Types of inspection documents.

ECISS/IC 10 Designation system for steel - Additional symbols for steel names.

EU 18 [1)] Selection and preparation of samples and test pieces for steel and iron and steel products.

EU 168 [1)] Iron and steel products - Inspection documents, content

3 Definitions

For the purpose of this European Standard, the definitions in EN 10020, EN 10021 and EN 10079 shall apply.

NOTE : EN 10020 applies with respect to non alloy steel definition with the exception of copper content (see 7.3.2).

---

1) Until these EURONORMS are transformed into European Standards, they may be either implemented as referenced in this European Standard or the corresponding national standards given in annex B may be implemented in their place.

This preview is downloaded from www.sis.se. Buy the entire standard via https://www.sis.se/std-17203

4 Information to be supplied by the purchaser

4.1 General

The following information shall be supplied by the purchaser, at the time of the enquiry and order :

a) details of the product form, length, quantity and any further processing work that is required, e.g. surface treatment,

b) the designation of the product (in accordance with 6.2),

c) whether products have to be submitted to inspection and testing and if inspection and testing is required, which type of inspection and which inspection document is required (see 8.1.2).

Where non specific choice is made by the purchaser concerning a) and b) the supplier shall refer back to the purchaser.

NOTE : It is recommended that the manufacturer be informed by the purchaser at the time of the order, if the purchaser intends to carry out any surface treatment on the product after delivery.

4.2 Options

A number of options are specified in clause 10. In the event that the purchaser does not indicate a requirement to implement any of these options, the product shall be supplied in accordance with the basic specification.

5 Mass of steel

The calculated mass shall be determined using a conventional volumetric mass of 7,85 kg/dm^3.

6 Classification and designation

6.1 Classification

This European Standard specifies six steel grades which are classified as non-alloyed steels according to EN 10020.

6.2 Designation

6.2.1 Steel names [2)] are assigned to steel grades in tables 1 and 2 in accordance with EN 10027-1 and IC 10. Steel numbers are allocated to steel grades in accordance with EN 10027-2.

6.2.2 The products covered by this European Standard shall be designated in the following sequence :

a) the name of the product, i.e. "Sheet piling",

b) the number of this European Standard, i.e. EN 10248,

c) the steel name or number.

[2)] Former national designations (steel names) are listed in annex C

This preview is downloaded from www.sis.se. Buy the entire standard via https://www.sis.se/std-17203

EXAMPLE : Sheet piling EN10248-S320GP or Sheet piling EN 10248-1.0046
Indicating a sheet piling product in accordance with EN 10248 made of steel S320GP (steel number 1.0046).

7 Technical requirements

7.1 Steel manufacturing process

7.1.1 The steel manufacturing process shall be at the manufacturer's option. Where specified at the time of the enquiry and order, the steel manufacturing process shall be reported to the purchaser.

Option 1, see 10.2.

7.1.2 The method of deoxidation shall be at the option of the manufacturer, except that rimming steel shall not be permitted.

7.2 Delivery condition

Unless otherwise agreed, sheet piles shall be delivered in the as rolled condition.

Option 2, see 10.3.

7.3 Chemical composition

7.3.1 The upper limits applicable for both the ladle and the product analysis shall comply with the values given in table 1.

7.3.2 Where specified at the time of the enquiry and order, the copper content can be between 0,20 % and 0,35 % or 0,35 % and 0,50 %.

Option 3, see 10.4.

7.3.3 A maximum carbon equivalent value (CEV) based on the ladle analysis may be agreed at the time of the enquiry and order. The carbon equivalent value shall be determined according to the following formula :

$$CEV = C + \frac{Mn}{6} + \frac{Cr+Mo+V}{5} + \frac{Ni+Cu}{15}$$

Where a carbon equivalent value is agreed the content of the elements in the carbon equivalent formula shall be reported in the inspection document (see 8.8).

Option 4, see 10.5.

7.4 Mechanical properties

7.4.1 Under the inspection and testing conditions as specified in clause 8 and in the delivery condition as specified in 7.2, the mechanical properties shall comply with the relevant requirements of table 2.

7.4.2 If agreed at the time of the enquiry and order, all steel grades shall be supplied with specified impact properties.

Option 5, See 10.6.