SLOVENSKI STANDARD
SIST EN 10163-3:1997

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Dobavni pogoji za videz površine vroče valjane pločevine, ploščatega jekla in profilov - 3. del: Profili

Delivery requirements for surface condition of hot rolled steel plates and sections - Part 3: Sections

Lieferbedingungen für die Oberflächenbeschaffenheit von warmgewalzten Blech, Breitflachstahl und Profile von Stahl - Teil 3: Profile

Conditions de livraison relatives à l'état de surface des tôles, larges plats et profilés en acier laminés a chaud - Partie 3: Profils

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ICS:

77.140.50	Ploščati jekleni izdelki in polizdelki	Flat steel products and semi-products
77.140.70	Jekleni profili	Steel profiles

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English version

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This European Standard was approved by CEN on 1991-08-21
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.

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 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

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Contents

Foreword

This draft European Standard has been drawn up by ECISS/TC 10 "Structural steel -- qualities" whose Secretariat is held by NNI.

Part 1 and 2 of this document was originally drawn up as Euronorm 163 under the European Coal and Steel Community. With the formation of ECISS and the establishment of the ECISS work programme TC 10 was asked to prepare this document for eventual publication as a European Standard.

ECISS/TC 10 met 26 and 27 February, 1991 in Brussels and agreed on the text for publication as a European Standard. The following countries were represented in that meeting: Austria, Belgium, Denmark, Finland, France, Germany, Italy, Luxembourg, Netherlands, Norway, Spain, Sweden and United Kingdom.

This European Standard EN 10163-3 was approved by CEN on 1991-03-27.

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

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

1 Scope

This part 3 in addition to part 1 specifies the general delivery requirements for surface condition of sections to which the EURONORMS mentioned in clause 2 apply and applies to all surfaces excluding edges.

2 Normative References

EURONORM 19 [1] IPE-beams: parallel-flanged beams
EURONORM 24 [1] Standard beams and channel sections; Tolerances
EURONORM 34 [1] [2] Hot-rolled wide-flanged beams with parallel faces; Tolerances
EURONORM 44 [1] [2] Hot-rolled IPE-beams; Tolerances
EURONORM 53 [1] Wide-flanged beams with parallel flanges
EURONORM 54 [1] Small hot-rolled steel channels
EURONORM 55 [1] Hot-rolled equal flange tees with radiused root and toes in steel
EURONORM 56 [1] [2] Hot-rolled equal-leg angles (with radiused root and toes)
EURONORM 57 [1] [2] Hot-rolled unequal angles (with radiused root and toes)

3 General

3.1 The surface requirements and repair conditions are subdivided into 2 classes and each class is futher subdivided into 3 subclasses.

Class C General applications.
The surface condition shall comply with the requirements of 4.2 and clause 5.

Class D Special applications.
The surface condition shall comply with the requirements of 4.3 and clause 5.

Subclass 1 Repair by chipping and/or grinding followed by welding is permitted in compliance with 5.2.1. and 5.2.2.

Subclass 2 Repair by welding is only permitted if agreed at the time of enquiry and order and under agreed conditions (see 5.2.3).

Subclass 3 Repair by welding is not allowed.

The required class and subclass is specified in the appropriate material or product standard. If this is not the case the class and subclass shall be class C and subclass 1 unless otherwise specified at the time of enquiry and order.

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1) Until these EURONORMS are transformed into European Standards, they can either be implemented or reference made to the corresponding national standards, the list of which is given in Annex C to part 1 of this European Standard.
2) These EURONORMS are being transformed into European Standards.

4 Requirements

4.1 General

Sections may have surface discontinuities, which may be divided into categories depending on their nature, depth and number as defined in 4.2 and 4.3.

4.2 Class C

4.2.1 Imperfections

Discontinuities not exceeding the limits of table 1 are regarded as being inherent of the manufacturing process and are permissible irrespective of their number.

A surface area with a remaining thickness under the discontinuities less than the minimum thickness as specified in the applicable EURONORMS (see clause 2) is permissible with a maximum of 15 % of the inspected surface.

4.2.2 Defects

Discontinuities with a depth exceeding the limits of table 1 shall be repaired irrespective of their number.

Table 1 -- Maximum permissible depth of discontinuities for class C

Dimensions in mm

Nominal thickness of the product e	Maximum permissible depth of discontinuities
3 ≤ e < 20	minimum value: 1,2 or 25 % of e *)
20 ≤ e < 40	1,7
40 ≤ e < 80	2,5
80 ≤ e < 160	3,0
*) The lesser value applies.	

4.3 Class D

4.3.1 Imperfections

Discontinuities not exceeding the limits of table 2 are regarded as being inherent of the manufacturing process and are permissible irrespective of their number.

A surface area with a remaining thickness under the discontinuities less than the minimum thickness as specified in the applicable EURONORMS (see clause 2) is permissible with a maximum of 2 % of the inspected surface.

Table 2 -- Maximum permissible depth of discontinuities for class D

Dimensions in mm

Nominal thickness of the product e	Maximum permissible depth of discontinuities
3 ≤ e < 20	0,5
20 ≤ e < 40	0,7
40 ≤ e < 80	1,0
80 ≤ e < 160	1,5

4.3.2 **Defects**

Discontinuities with a depth exceeding the limits of table 2 shall be repaired irrespective of their number.

5 Repair procedures

5.1 Grinding

The maximum permitted grinding allowance below the minimum thickness as specified in the European Standards or EURONORMS specifying tolerances is given in table 3.
Futhermore the following conditions apply:

For ground areas with a thickness under the minimum permissible thickness, as specified in the European Standards or EURONORMS specifying tolerances, the sum of all ground areas shall not exceed 15 % of the surface for class C and 2 % for class D.

Table 3 -- Maximum permissible values below the minimum thickness

Dimensions in mm

Nominal thickness of the product e	Maximum permitted grinding allowance below minimum specified thickness
3 ≤ e < 20	0,4
20 ≤ e < 40	0,6
40 ≤ e < 80	1,2
80 ≤ e < 160	2,0

5.2 Welding

The following conditions apply for the repair by welding of defects which cannot be repaired by grinding as stated under 5.1:

5.2.1 **Class C Subclass 1**

The sum of the welded areas shall not exceed 15 % of the surface area under inspection.