SLOVENSKI STANDARD
SIST EN 13100-1:2000

01-december-2000

Neporušitveno preskušanje zvarjenih spojev plastomernih polizdelkov - 1. del: Vizualni pregled

Non destructive testing of welded joints of thermoplastics semi-finished products - Part 1: Visual examination

Zerstörungsfreie Prüfung von Schweißverbindungen aus thermoplastischen Kunststoffen - Teil 1: Sichtprüfung

Contrôle non destructif des assemblages soudés sur produits semi-finis en thermoplastiques - Partie 1: Contrôle visuel

Ta slovenski standard je istoveten z: **EN 13100-1:1999**

ICS:

25.160.40	Varjeni spoji in vari	Welded joints
83.140.01	Izdelki iz gume in polimernih materialov na splošno	Rubber and plastics products in general

SIST EN 13100-1:2000 **en**

EUROPEAN STANDARD

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EUROPÄISCHE NORM

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November 1999

ICS 25.160.40

English version

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This European Standard was approved by CEN on 30 September 1999.

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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.

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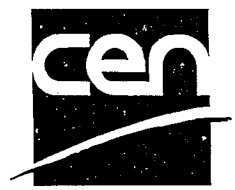

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

Contents

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 249 "Plastics", the secretariat of which is held by IBN.

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of an identical text or by endorsement, at the latest by May 2000, and conflicting national standards shall be withdrawn at the latest by May 2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European standard covers the visual examination of welds in thermoplastic materials.

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 473	1993	Qualification and certification of NDT personnel - General principles
EN 970	1997	Non-destructive examination of fusion welds - Visual examination
EN 12345		Welding - Multilingual terms for welded joints with illustrations.
prEN 13067	-[1)]	Plastics welding personnel - Approval testing of welders - Thermoplastics welded assemblies

[1)] To be published.

3 Examination conditions and equipment

The illuminance at the surface, shall be a minimum of 350 lx, 500 lx is recommended.

For direct inspection, access shall be sufficient to allow the eye to be placed within a distance of 600 mm from the weld, around the whole weld.

Remote inspection using boroscopes, fibre optics or cameras shall be considered as additional requirements and shall be specified by an application standard or by agreement between the contracting parties.

If a good contrast and relief effect between imperfections and background is required, an additional light source can be used.

Examples of examination equipment are given in annex A of EN 970:1997.

4 Personnel

Personnel who carry out examination in accordance with this European Standard should :

a) be familiar with the relevant standards, rules, specifications and the welding procedure used ;

b) have good vision, in accordance with the requirements of 6.3 of EN 473: 1993.

5 Visual examination

5.1 General

The examination is normally performed on welds in the as-welded condition but exceptionally, for example when required by an application standard or by agreement between the contracting parties, the examination may be carried out at other stages during the welding process.

The extent of examination shall be defined in advance by an application standard or by agreement between the contracting parties.

The examiner shall have access to the necessary inspection and production documentation required.

5.2 Visual examination of joint preparation

When visual examination is required prior to welding, the joint preparation shall be examined to check that the shape and dimensions of the weld preparation meet the specified requirements given in the relevant standards (e.g. prEN 13067: -[1]).

5.3 Visual examination during welding

When required, the weld shall be examined during the welding process to check that the specified requirements given in the relevant standards (e.g. prEN 13067:[1]) are met.

5.4 Visual examination of the finished weld

Welds shall be examined in the as-welded condition and shall also be examined after any surface treatment.

The finished weld shall be examined to determine whether it meets the requirements specified in the agreed acceptance standard (e.g. *the quality levels*).

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[1] To be published.

6 Test report

The test report shall refer to this standard and shall include at least the following information :

- identification of the components (manufacturers, etc.) ;
- location of the welds in component ;
- type of material(s) ;
- type of joint and weld according to EN 12345 ;
- welding process ;
- extent of examination with reference to the visual records (sketches, photographs, etc.) as appropriate ;
- examination devices used ;
- result of examination with reference to acceptance criteria ;
- name of the examining body ;
- name and signature of examiner and date of examination.