



SLOVENSKI STANDARD

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Preskušanje zvarjenih spojev plastomernih polizdelkov - 2. del: Trgalni preskus

Testing of welded joints of thermoplastics semi-finished products - Part 2: Tensile test

Prüfen von Schweißverbindungen aus thermoplastischen Kunststoffen - Teil 2:
Zugversuch

Essais des assemblages soudés sur produits semi-finis en thermoplastiques - Partie 2 :
Essai de traction

Ta slovenski standard je istoveten z: prEN 12814-2

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English Version

**Testing of welded joints of thermoplastics semi-finished
products - Part 2: Tensile test**

Essais des assemblages soudés sur produits semi-finis
en thermoplastiques - Partie 2 : Essai de traction

Prüfen von Schweißverbindungen aus
thermoplastischen Kunststoffen - Teil 2: Zugversuch

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 249.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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 CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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European foreword

This document (prEN 12814-2:2019) has been prepared by Technical Committee CEN/TC 249 “Plastics”, the secretariat of which is held by NBN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 12814-2:2000.

In comparison with the previous edition, the following technical modifications have been made:

- the references standards ISO 5893 and ISO 13953 have been changed to undated;
- a new annex (Annex A), describing the tensile test specimen geometry for overlap joints, has been added.

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1 Scope

This document specifies the dimensions, the method of sampling, the preparation of the test specimens and the conditions for performing the tensile test in order to determine the short-term tensile welding factor.

A tensile test may be used in conjunction with other tests (e.g. bend, tensile creep, macro) to assess the performance of welded assemblies, made from thermoplastics materials.

The test is applicable to welded assemblies made from thermoplastics materials filled or unfilled, but not reinforced, irrespective of the welding process used.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 527-1, *Plastics — Determination of tensile properties — Part 1: General principles (ISO 527-1)*

ISO 5893, *Rubber and plastics test equipment — Tensile, flexural and compression types (constant rate of traverse) — Description*

EN 13100-1, *Non destructive testing of welded joints of thermoplastics semi-finished products — Part 1: Visual examination*

3 Symbols and designations

For the purposes of this document, the symbols and designations given in Table 1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

Table 1 — Symbols and designations

Symbols and abbreviations	Designations	Units
a	Minimum measured thickness of the test specimen within calibrated and parallel length	millimetre
a_n	Nominal thickness of the test piece	millimetre
b	Width of calibrated and parallel length of the test specimen	millimetre
b_1	Width of shoulder of the test specimen	millimetre
D_n	Nominal outside diameter of the tube	millimetre
F_r	The value of force of the unwelded test specimens taken from the same test piece, used in the calculation of f_s	Newton
f_s	The short-term tensile welding factor	