SLOVENSKI STANDARD
oSIST prEN ISO 12996:2012

01-januar-2012

Mehansko spajanje - Porušitveno preskušanje spojev - Mere primerkov in preskusni postopki za natezno strižno preskušanje enojnih spojev (ISO/DIS 12996:2011)

Mechanical joining - Destructive testing of joints - Specimen dimensions and test procedure for tensile shear testing of single joints (ISO/DIS 12996:2011)

Mechanisches Fügen - Zerstörende Prüfung von Verbindungen - Probenmaße und Prüfverfahren für die Scherzugprüfung von Einpunktproben (ISO/DIS 12996:2011)

Assemblage mécanique - Essais destructifs des assemblages - Dimensions des éprouvettes et mode opératoire d'essai pour les essais de traction-cisaillement des assemblages simples (ISO/DIS 12996:2011)

Ta slovenski standard je istoveten z: prEN ISO 12996

ICS:

25.160.40 Varjeni spoji in vari Welded joints

oSIST prEN ISO 12996:2012 en,fr,de

EUROPEAN STANDARD

NORME EUROPÉENNE

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ICS 25.160.40; 25.160.10

English Version

Mechanical joining - Destructive testing of joints - Specimen dimensions and test procedure for tensile shear testing of single joints (ISO/DIS 12996:2011)

Assemblage mécanique - Essais destructifs des assemblages - Dimensions des éprouvettes et mode opératoire d'essai pour les essais de traction-cisaillement des assemblages simples (ISO/DIS 12996:2011)

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This draft European Standard is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee CEN/TC 121.

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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Foreword

This document (prEN ISO 12996:2011) has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" in collaboration with Technical Committee CEN/TC 121 “Welding” the secretariat of which is held by DIN.

This document is currently submitted to the parallel Enquiry.

Endorsement notice

The text of ISO/DIS 12996:2011 has been approved by CEN as a prEN ISO 12996:2011 without any modification.

DRAFT INTERNATIONAL STANDARD ISO/DIS 12996

ISO/TC **44**/SC **6** Secretariat: **DIN**

Voting begins on **2011-11-03** Voting terminates on **2012-04-03**

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Mechanical joining — Destructive testing of joints — Specimen dimensions and test procedure for tensile shear testing of single joints

Assemblage mécanique — Essais destructifs des assemblages — Dimensions des éprouvettes et mode opératoire d'essai pour les essais de traction-cisaillement des assemblages simples

ICS 25.160.10; 25.160.40

ISO/CEN PARALLEL PROCESSING

This draft has been developed within the International Organization for Standardization (ISO), and processed under the **ISO-lead** mode of collaboration as defined in the Vienna Agreement.

This draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel five-month enquiry.

Should this draft be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month approval vote in ISO and formal vote in CEN.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.

Pour accélérer la distribution, le présent document est distribué tel qu'il est parvenu du secrétariat du comité. Le travail de rédaction et de composition de texte sera effectué au Secrétariat central de l'ISO au stade de publication.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 12996 was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 6, *Resistance welding and allied mechanical joining*.

Mechanical joining — Destructive testing of joints — Specimen dimensions and test procedure for tensile shear testing of single joints

1 Scope

This international standard (ISO 12996) specifies the geometry of the test specimens and the procedure for the tensile shear testing of single mechanical joints on single and multi-layer specimens up to a single sheet thickness of 4,5 mm.

The term sheet, as used in this standard, includes extrusions and cast materials.

The purpose of the tensile shear test is to determine the mechanical characteristics and failure types of the joints made with the different methods.

2 Normative references

The following referenced documents are indispensable for the application 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.

ISO 2768-1, *General tolerances — Tolerances for linear and angular dimensions without individual tolerance indications*

ISO 7500-1 *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system*

3 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

3.1
tensile shear load
$F_{max.}$
maximum load, recorded in the test

Note If required, further characteristic data, e.g. $F_{p0,2}$ (see 3.2), stiffness of the specimen c (see 3.7) or slope of the force curve, energy dissipation W (see 3.8), can be determined according to the shear diagram given in Figure 4.

3.2
elastic load limit
$F_{p0,2}$
maximum load before plastic or permanent deformation of 0,2 % occurs

3.3
slippage load
F_s

