

Mechanické spájanie. Deštruktívne skúšanie spojov. Rozmery skúšobných telies a skúšobné postupy na skúšanie pevnosti v šmyku jednotlivých spojov (ISO 12996: 2013).

**STN EN ISO 12996** 

05 1115

Mechanical joining - Destructive testing of joints - Specimen dimensions and test procedure for tensile shear testing of single joints (ISO 12996:2013)

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/13

Obsahuje: EN ISO 12996:2013, ISO 12996:2013

## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

### **EN ISO 12996**

July 2013

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 12996:2013)

Assemblage mécanique - Essais destructifs des jonctions - Dimensions des éprouvettes et procédures d'essai pour essais de traction-cisaillement des jonctions uniques (ISO 12996:2013)

Mechanisches Fügen - Zerstörende Prüfung von Verbindungen - Probenmaße und Prüfverfahren für die Scherzugprüfung von Einpunktproben (ISO 12996:2013)

This European Standard was approved by CEN on 15 June 2013.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

### EN ISO 12996:2013 (E)

Contents	Page
Foreword	3

### **Foreword**

This document (EN ISO 12996:2013) has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" in collaboration with Technical Committee CEN/TC 121 "Welding and allied processes" the secretariat of which is held by DIN.

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 January 2014, and conflicting national standards shall be withdrawn at the latest by January 2014.

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

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### **Endorsement notice**

The text of ISO 12996:2013 has been approved by CEN as EN ISO 12996:2013 without any modification.

INTERNATIONAL STANDARD

ISO 12996

First edition 2013-07-15

# 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 procédures d'essai pour essais de traction-cisaillement des jonctions uniques



ISO 12996:2013(E)



### COPYRIGHT PROTECTED DOCUMENT

© ISO 2013

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents		Page	
Fore	Foreword		
1	Scope	1	
2	Normative references	1	
3	Terms and definitions	1	
4	Test specimens and types of tests	3	
5	Test equipment and test procedure	4	
6	Failure modes and force-displacement curves	5	
7	Test report	5	
Ann	ex A (normative) Types of joint failure	7	
Bibl	liography	16	

### **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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2, www.iso.org/directives.

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received, www.iso.org/patents.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

The committee responsible for this document is ISO/TC 44, *Welding and allied processes*, Subcommittee SC 6, *Resistance welding and allied mechanical joining*.

Requests for official interpretations of any aspect of this International Standard should be directed to the Secretariat of ISO/TC 44/SC 6 via your national standards body. A complete listing of these bodies can be found at www.iso.org.

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

### 1 Scope

This International Standard specifies the geometry of the test specimens and the procedure for the tensile shear testing of single mechanical joints on single and multilayer specimens up to a single sheet thickness of 4,5 mm.

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

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

This International Standard does not apply to civil engineering applications such as metal building and steel construction which are covered by other applicable standards.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 — Part 1: 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

### koniec náhľadu – text ďalej pokračuje v platenej verzii STN