



SLOVENSKI STANDARD

SIST EN 4526:2014

01-februar-2014

Aeronavtika - Kovinski materiali - Preskusne metode - Preskušanje natezne trdnosti z ostro robno zarezo pri pločevini in trakovih

Aerospace series - Metallic materials - Test methods - Sharp edge-notch tensile testing for sheet and strip

Luft- und Raumfahrt - Metallische Werkstoffe - Prüfverfahren - Zugversuch an Spitzkerbproben von Blechen und Bändern

Série aérospatiale - Matériaux métalliques - Méthodes d'essais - Essai de traction sur éprouvette à bord entaillé pour tôles et bandes

<https://standards.iteh.ai/catalog/standards/sist/0b6f7e80-0328-4819-ac27-baa6e6fd15d5/sist-en-4526-2014>

Ta slovenski standard je istoveten z: EN 4526:2013

ICS:

49.025.05	Železove zlitine na splošno	Ferrous alloys in general
49.025.15	Neželezove zlitine na splošno	Non-ferrous alloys in general

SIST EN 4526:2014

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 4526:2014

<https://standards.iteh.ai/catalog/standards/sist/0b6f7e80-0328-4819-ac27-baa6e6fd15d5/sist-en-4526-2014>

EUROPEAN STANDARD

EN 4526

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2013

ICS 49.025.05; 49.025.15

English Version

Aerospace series - Metallic materials - Test methods - Sharp edge-notch tensile testing for sheet and strip

Série aérospatiale - Matériaux métalliques - Méthodes d'essais - Essai de traction sur éprouvette à bord entaillé pour tôles et bandes

Luft- und Raumfahrt - Metallische Werkstoffe - Prüfverfahren - Zugversuch an Spitzkerbproben von Blechen und Bändern

This European Standard was approved by CEN on 10 November 2012.

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.

<https://standards.iteh.ai/catalog/standards/sist/0b6f7e80-0328-4819-ac27-baa6e6fd15d5/sist-en-4526-2014>



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents		Page
Foreword.....		3
Introduction		4
1	Scope.....	5
2	Normative references.....	5
3	Terms, definitions and symbols	5
4	Health and safety	5
5	Principle.....	5
6	Testing requirements.....	6
7	Test report	7

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 4526:2014](https://standards.iteh.ai/catalog/standards/sist/0b6f7e80-0328-4819-ac27-baa6e6fd15d5/sist-en-4526-2014)

<https://standards.iteh.ai/catalog/standards/sist/0b6f7e80-0328-4819-ac27-baa6e6fd15d5/sist-en-4526-2014>

Foreword

This document (EN 4526:2013) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

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 July 2013, and conflicting national standards shall be withdrawn at the latest by July 2013.

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 organisations 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.

ITEH STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 4526:2014](https://standards.iteh.ai/catalog/standards/sist/0b6f7e80-0328-4819-ac27-baa6e6fd15d5/sist-en-4526-2014)

<https://standards.iteh.ai/catalog/standards/sist/0b6f7e80-0328-4819-ac27-baa6e6fd15d5/sist-en-4526-2014>

EN 4526:2013 (E)

Introduction

This standard is part of the series of EN metallic material standards for aerospace applications. The general organisation of this series is described in EN 4258.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 4526:2014](https://standards.iteh.ai/catalog/standards/sist/0b6f7e80-0328-4819-ac27-baa6e6fd15d5/sist-en-4526-2014)

<https://standards.iteh.ai/catalog/standards/sist/0b6f7e80-0328-4819-ac27-baa6e6fd15d5/sist-en-4526-2014>

1 Scope

This European Standard specifies the requirements for sharp edge-notch tensile testing for sheet and strip for aerospace applications.

It shall be applied when referred to in the EN Technical Specification or material standard unless otherwise specified on the drawing, order or inspection schedule.

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.

EN 2002-001, *Aerospace series — Metallic materials — Test methods — Part 001: Tensile testing at ambient temperature*

EN 4258, *Aerospace series — Metallic materials — General organization of standardization — Links between types of EN standards and their use*

EN 4259, *Aerospace series — Metallic materials — Definition of general terms* ¹⁾

ASTM E338-91, *Sharp notch tension testing of high strength sheet materials* ²⁾

3 Terms, definitions and symbols

For the purposes of this document, the terms, definitions and symbols given in EN 4259 apply.

4 Health and safety

Resources, test pieces, test samples, test materials, test equipment and test procedures shall comply with the current health and safety regulations/laws of the countries where the test is to be carried out.

Where materials and/or reagents which may be hazardous to health are specified, appropriate precautions in conformity with local regulations and/or laws shall be taken.

5 Principle

A test piece with a sharp machined notch is tested in tension to determine the maximum force (or load, P) that can be withstood. The ratio of sharp notch strength to 0,2 % proof stress is used as a comparative index of fracture toughness.

The test method is restricted to those materials (e.g. aluminium and magnesium alloys) in which the required sharp notch may be machined.

1) Published as ASD-STAN Prestandard at the date of publication of this standard (www.asd-stan.org).

2) Published by ASTM National (US) American Society for Testing and Materials <http://www.astm.org/>

EN 4526:2013 (E)**6 Testing requirements****6.1 Resources****6.1.1 Equipment/plant**

See EN 2002-001 for ambient temperature tests.

6.1.2 Materials/Reagents

The following materials/reagents may be suitable:

- degreasing fluids;
- recording paper;
- means of electronic recording, if appropriate.

6.1.3 Qualification of personnel

Testing to the requirements of this test method shall only be undertaken and/or supervised by personnel who have demonstrated their competence by a suitable education and appropriate training and experience.

6.2 Test samples/Test pieces

A machined sharp edge-notch specimen in accordance with ASTM E338-91 shall be used.

6.3 Testing procedure**6.3.1 General**

See ASTM E338-91 and EN 2002-001.

6.3.2 Temperature of test

The test shall be carried out at $10\text{ °C} \leq \theta \leq 35\text{ °C}$, unless otherwise specified. In cases of dispute, the test shall be performed at $\theta = 23\text{ °C} \pm 5\text{ °C}$.

6.4 Expression of results

See ASTM E338-91.

ITeH STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 4526:2014
<https://standards.iteh.ai/catalog/standards/sist/0b6f7e80-0328-4819-ac27-baa6e6fd15d5/sist-en-4526-2014>