

SLOVENSKI STANDARD
oSIST prEN 10359:2014
01-september-2014

Lasersko varjeni specialni spoji - Tehnični dobavni pogoji

Laser welded tailored blanks - Technical delivery conditions

Laserstrahlgeschweißte Tailored Blanks aus Stahlfeinblech - Technische Lieferbedingungen

Flans raboutés laser - Conditions techniques de livraison

Ta slovenski standard je istoveten z: prEN 10359

ICS:

25.160.40	Varjeni spoji in vari	Welded joints
77.140.50	Ploščati jekleni izdelki in polizdelki	Flat steel products and semi-products

oSIST prEN 10359:2014

en,fr,de

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

WHITE DRAFT
prEN 10359

June 2014

ICS 77.140.50

English Version

Laser welded tailored blanks - Technical delivery conditions

Flans raboutés laser - Conditions techniques de livraison

Laserstrahlgeschweißte Tailored Blanks aus Stahlfeinblech
- Technische Lieferbedingungen

This draft European Standard is submitted to ECISS/COCOR before submission to CEN members for formal vote. It has been drawn up by the Technical Committee ECISS/TC 109.

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.

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.

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.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.

<https://standards.iteh.ai/catalog/standards/sist/807f4f84-c11c-4413-967d-aad68c76c488/sist-en-10359-2015>



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Requirements	4
5 Tolerances on dimensions and shape	4
6 Destructive testing of weld joints	5
6.1 Cup test	5
6.2 Cross section	5

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[SIST EN 10359:2015](https://standards.iteh.ai/catalog/standards/sist/807f4f84-c11c-4413-967d-aad68c76c488/sist-en-10359-2015)

<https://standards.iteh.ai/catalog/standards/sist/807f4f84-c11c-4413-967d-aad68c76c488/sist-en-10359-2015>

Foreword

This document (prEN 10359:2014) has been prepared by Technical Committee ECISS/TC 109 “Coated and uncoated flat products to be used for cold forming”, the secretariat of which is held by AFNOR.

This document is currently submitted to the COCOR Vote.

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[SIST EN 10359:2015](https://standards.iteh.ai/catalog/standards/sist/807f4f84-c11c-4413-967d-aad68c76c488/sist-en-10359-2015)

<https://standards.iteh.ai/catalog/standards/sist/807f4f84-c11c-4413-967d-aad68c76c488/sist-en-10359-2015>

1 Scope

This technical delivery condition describes the requirements for laser welded tailored blanks made of alloyed and unalloyed steels, of uniform or different steel grades and with or without metallic and/or organic coatings, having uniform or different sheet thickness. It applies only to the (Tailored Blanks) as-supplied condition of tailored blanks.

After the welding process, tailored blanks are further processed to pressed parts by forming operations under the responsibility of the processor. In the design of the component due consideration must be given to the fact that the weld seam is less formable in comparison to the base material.

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; Tolerances for linear and angular dimensions without individual tolerance indications*.

EN 10131, *Cold rolled uncoated low carbon and high yield strength steel flat products for cold forming; tolerances on dimensions and shape*.

EN 10143, *Continuously hot-dip metal coated steel sheets and strip; tolerances on dimensions and shape*.

3 Terms and definitions

For the purposes of this document, the following term and definition applies:

3.1

tailored blanks

laser welded metal sheets of uniform and/or different thickness and/or uniform or different steel grades, both with and without surface coating.

<https://standards.iteh.ai/catalog/standards/sist/807f4f84-e11c-4413-967d-aad68c76c488/sist-en-10359-2015>

4 Requirements

As far as the properties of the components are concerned, the general rules of engineering apply. The suitability of tailored blanks for the processes of the customer is guaranteed in case of appropriate execution of the welding seam, suitable positioning of weld seam in the part to be formed and appropriate lay out of sheet thicknesses and steel grades under taking into consideration the requirements of known further processing steps. The criteria laid down in table 1 have proved to be a practical basis for ordering. Additional specific deviations are admissible and have to be agreed upon at the time of ordering.

5 Tolerances on dimensions and shape

Regarding tolerances on dimensions and shape the agreements of EN 10131 and EN 10143 shall apply for cold rolled and surface coated wide coils, cut to length sheets and slit coils, which are used for the manufacturing tailored blanks.

The relevant tolerance classes for width, flatness and thickness have to be agreed upon between producer of tailored blank and steel producer.

For the general tolerances regarding lengths, angles, coaxiality and symmetry, the precision class c according to ISO 2768-1 shall apply.

If not all edges of the blank were cut, the definition of the dimension has to be according to EN 10143 and EN 10131 also.