

SVENSK STANDARD

SS-EN ISO 18286:2010

Fastställt/Approved: 2010-06-14
Publicerad/Published: 2010-08-18
Utgåva/Edition: 1
Språk/Language: engelska/English
ICS: 77.140.20; 77.140.50

Varmvalsad plåt av rostfria stål – Toleranser för dimensioner och form (ISO 18286:2008)

Hot-rolled stainless steel plates – Tolerances on dimensions and shape (ISO 18286:2008)

This preview is downloaded from www.sis.se. Buy the entire standard via <https://www.sis.se/std-74370>

Standarder får världen att fungera

SIS (Swedish Standards Institute) är en fristående ideell förening med medlemmar från både privat och offentlig sektor. Vi är en del av det europeiska och globala nätverk som utarbetar internationella standarder. Standarder är dokumenterad kunskap utvecklad av framstående aktörer inom industri, näringsliv och samhälle och befrämjar handel över gränser, bidrar till att processer och produkter blir säkrare samt effektiviserar din verksamhet.

Delta och påverka

Som medlem i SIS har du möjlighet att påverka framtida standarder inom ditt område på nationell, europeisk och global nivå. Du får samtidigt tillgång till tidig information om utvecklingen inom din bransch.

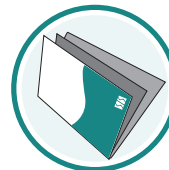
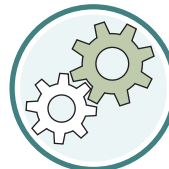
Ta del av det färdiga arbetet

Vi erbjuder våra kunder allt som rör standarder och deras tillämpning. Hos oss kan du köpa alla publikationer du behöver – allt från enskilda standarder, tekniska rapporter och standardpaket till handböcker och onlinetjänster. Genom vår webbtjänst e-nav får du tillgång till ett lättnavigerat bibliotek där alla standarder som är aktuella för ditt företag finns tillgängliga. Standarder och handböcker är källor till kunskap. Vi säljer dem.

Utveckla din kompetens och lyckas bättre i ditt arbete

Hos SIS kan du gå öppna eller företagsinterna utbildningar kring innehåll och tillämpning av standarder. Genom vår närhet till den internationella utvecklingen och ISO får du rätt kunskap i rätt tid, direkt från källan. Med vår kunskap om standarders möjligheter hjälper vi våra kunder att skapa verklig nytta och lönsamhet i sina verksamheter.

Vill du veta mer om SIS eller hur standarder kan effektivisera din verksamhet är du välkommen in på www.sis.se eller ta kontakt med oss på tel 08-555 523 00.



Standards make the world go round

SIS (Swedish Standards Institute) is an independent non-profit organisation with members from both the private and public sectors. We are part of the European and global network that draws up international standards. Standards consist of documented knowledge developed by prominent actors within the industry, business world and society. They promote cross-border trade, they help to make processes and products safer and they streamline your organisation.

Take part and have influence

As a member of SIS you will have the possibility to participate in standardization activities on national, European and global level. The membership in SIS will give you the opportunity to influence future standards and gain access to early stage information about developments within your field.

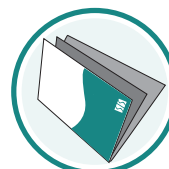
Get to know the finished work

We offer our customers everything in connection with standards and their application. You can purchase all the publications you need from us - everything from individual standards, technical reports and standard packages through to manuals and online services. Our web service e-nav gives you access to an easy-to-navigate library where all standards that are relevant to your company are available. Standards and manuals are sources of knowledge. We sell them.

Increase understanding and improve perception

With SIS you can undergo either shared or in-house training in the content and application of standards. Thanks to our proximity to international development and ISO you receive the right knowledge at the right time, direct from the source. With our knowledge about the potential of standards, we assist our customers in creating tangible benefit and profitability in their organisations.

If you want to know more about SIS, or how standards can streamline your organisation, please visit www.sis.se or contact us on phone +46 (0)8-555 523 00



Europastandarden EN ISO 18286:2010 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN ISO 18286:2010.

The European Standard EN ISO 18286:2010 has the status of a Swedish Standard. This document contains the official English version of EN ISO 18286:2010.

© Copyright/Upphovsrätten till denna produkt tillhör SIS, Swedish Standards Institute, Stockholm, Sverige. Användningen av denna produkt regleras av slutanvändarlicensen som återfinns i denna produkt, se standardens sista sidor.

© Copyright SIS, Swedish Standards Institute, Stockholm, Sweden. All rights reserved. The use of this product is governed by the end-user licence for this product. You will find the licence in the end of this document.

Uppllysningar om sakinnehållet i standarden lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00. Standarder kan beställas hos SIS Förlag AB som även lämnar allmänna uppllysningar om svensk och utländsk standard.

Information about the content of the standard is available from the Swedish Standards Institute (SIS), telephone +46 8 555 520 00. Standards may be ordered from SIS Förlag AB, who can also provide general information about Swedish and foreign standards.

Standarden är framtagen av kommittén för Rostfria stål, SIS/TK 135.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

EUROPEAN STANDARD

EN ISO 18286

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2010

ICS 77.140.50

English Version

Hot-rolled stainless steel plates - Tolerances on dimensions and shape (ISO 18286:2008)

Tôles en acier inoxydable laminées à chaud - Tolérances sur les dimensions et la forme (ISO 18286:2008)

Warmgewalztes Blech aus nichtrostendem Stahl - Grenzabmaße und Formtoleranzen (ISO 18286:2008)

This European Standard was approved by CEN on 20 May 2010.

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 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 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....	iv
1 Scope	1
2 Normative references	1
3 Information to be supplied by the purchaser	1
3.1 General.....	1
3.2 Purchase order options.....	2
4 Designation	2
5 Form of supply	2
6 Tolerances on dimensions	3
6.1 Thickness	3
6.2 Width and length.....	3
7 Tolerances on shape	5
7.1 Edge camber and out-of-squareness	5
7.2 Flatness	5
8 Excess mass	6
9 Measurements	6
9.1 General.....	6
9.2 Thickness	6
9.3 Width	6
9.4 Length	6
9.5 Edge camber	7
9.6 Out-of-squareness	7
9.7 Flatness	7
10 Purchase order options.....	7
Bibliography	8

Foreword

The text of ISO 18286:2008 has been prepared by Technical Committee ISO/TC 17 “Steel” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 18286:2010 by Technical Committee ECISS/TC 105 “Steels for heat treatment, alloy steels, free-cutting steels and stainless steels” 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 December 2010, and conflicting national standards shall be withdrawn at the latest by December 2010.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 18286:2008 has been approved by CEN as a EN ISO 18286:2010 without any modification.

Hot-rolled stainless steel plates — Tolerances on dimensions and shape

1 Scope

This International Standard specifies requirements for tolerances for hot-rolled stainless steel plates (quarto plates) made on a reversing mill with the following characteristics:

- a) nominal thickness, t , such that $4 \text{ mm} \leq t \leq 250 \text{ mm}$;
- b) nominal width, w , such that $w \geq 600 \text{ mm}$.

Tolerances for plate of width $w < 600 \text{ mm}$ cut or slit from wider plate should be agreed upon between manufacturer and purchaser at the time of enquiry and order.

This International Standard is not applicable to round plates, custom-made plates, checker plate or bulb plate for flooring or wide flats, nor to continuous-process plates (plate made with coiling).

This International Standard does not include round plates, custom-made plates, checker plate or bulb plate for flooring or wide flats. It does not include continuous process plates (plate made with coiling) because tolerances for these plates are defined in another International Standard (see ISO 9444).

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/TS 15510:2003, *Stainless steels — Chemical composition*

ISO 16143-1:2004, *Stainless steels for general purposes — Part 1: Flat products*

3 Information to be supplied by the purchaser

3.1 General

The following information shall be supplied by the purchaser at the time of enquiry and order:

- a) description of the product (plate);
- b) reference to this International Standard, ISO 18286;
- c) nominal thickness, in millimetres;
- d) nominal width, in millimetres;
- e) the letters NK, if plate with mill edges is required [see 6.2.2 and Clause 10 a)];

- f) nominal length, in millimetres;
- g) width and length tolerances, Class A (in accordance with Tables 2 and 3), Class B (in accordance with Table 4) or Class C (in accordance with Table 5), see 6.2;
- h) flatness tolerance class, Class N (in accordance with Table 6) or Class S (in accordance with Table 7), see 7.2.1;
- i) requirements concerning limits for excess mass (see Clause 8).

3.2 Purchase order options

A number of options are listed in Clause 10. In the absence of any specification of these options by the purchaser at the time of enquiry and purchase order, the manufacturer is permitted to deliver in accordance with the basic requirements of this specification (see 5.2).

4 Designation

The designation of products in accordance with 3.1 shall also include the exact designation of the ordered steel grade, in accordance with the following examples:

- a) plate in accordance with this International Standard with nominal thickness of 20 mm, nominal width 2 000 mm, with trimmed edges, nominal length 4 500 mm, with width and length tolerances Class B (in accordance with Table 4), with special flatness tolerances in accordance with Table 7 (Class S), grade X2CrNi18-9 as specified in ISO 16143-1:2004

**plate ISO 18286 – 20 × 2000 × 4500 B S,
steel ISO 16143-1 – X2CrNi18-9**

- b) plate in accordance with this International Standard with nominal thickness of 4,5 mm, nominal width 1 500 mm, with mill edge (NK), with width tolerance $^{+100}_0$ mm, nominal length 2 800 mm and length tolerance class A (in accordance with Table 3), with normal flatness tolerances in accordance with Table 6 (Class N), grade X2CrNiMo17-12-2 as specified in ISO 16143-1:2004

**plate ISO 18286 – 4,5 × 1500 NK –0/+100 × 2800 A N,
steel ISO 16143-1 – X2CrNiMo17-12-2**

5 Form of supply

5.1 Plate shall be supplied

- a) with thickness tolerances as specified in Table 1 (see 6.1.1),
- b) with trimmed edges or with mill edges (NK) (see 6.2.2),
- c) with normal (N in Table 6) or with special (S in Table 7) flatness tolerances (see 7.2).

5.2 In the absence of information or code letters, as defined in 3.1 g) and h), in the purchase order, plate shall be supplied as follows:

- a) tolerances on length and width in accordance with Class A (see Tables 2 and 3);
- b) normal tolerances for flatness, Class N (see Table 6).

6 Tolerances on dimensions

6.1 Thickness

6.1.1 Tolerances on thickness are given in Table 1.

6.1.2 Unless otherwise agreed upon in the order by the manufacturer and purchaser, the thickness of the plate in all areas, including ground areas, shall meet the minimum thickness requirements for the nominal thickness.

Table 1 — Tolerances on thickness

Dimensions in millimetres

Nominal thickness t^a	Width w			
	$w < 2\ 100$	$2\ 100 \leq w < 3\ 000$	$3\ 000 \leq w < 3\ 600$	$w \geq 3\ 600$
$t < 10$	+1,15	+1,30	+2,15	—
$10 \leq t < 20$	+1,40	+1,55	+2,15	+2,30
$20 \leq t < 25$	+1,55	+1,65	+2,15	+2,55
$25 \leq t < 50$	+1,80	+1,90	+2,40	+2,95
$50 \leq t < 75$	+2,55	+2,75	+2,95	+3,15
$75 \leq t < 100$	+2,75	+2,95	+3,15	+3,35
$100 \leq t < 150$	+2,95	+3,15	+3,35	+3,55
$150 \leq t < 200$	+3,35	+3,55	+3,75	+3,95
$200 \leq t \leq 250$	+3,75	+3,95	+4,15	+4,35

^a For plate of thickness ≤ 250 mm, the tolerance under the nominal thickness shall be 0,30 mm.

6.2 Width and length

6.2.1 Tolerances on width and length for plate with trimmed edges are given in Tables 2, 3, 4 and 5. At the time of enquiry and purchase order, the purchaser shall specify which width and length tolerance class is applicable to the purchased material, tolerance Class A (tolerances on width in accordance with Table 2 and tolerances on length in accordance with Table 3), tolerance Class B (tolerances on width and length according to Table 4) or tolerance Class C (tolerances on width and length in accordance with Table 5).

The choice of the trimming procedure is left to the manufacturer's discretion, unless otherwise stated in the purchase order.

Table 2 — Tolerances on width for Class A

Dimensions in millimetres

Nominal width w	Tolerances	
	Lower	Upper
$600 \leq w < 2\ 000$	0	+15
$2\ 000 \leq w < 3\ 000$	0	+20
$w \geq 3\ 000$	0	+25