

# SVENSK STANDARD

## SS-EN 1993-1-10:2005/AC:2009

Fastställt/Approved: 2009-03-30

Publicerad/Published: 2009-06-09

Utgåva/Edition: 1

Språk/Language: engelska/English

ICS: 91.010.30; 91.070.03; 91.070.60; 91.070.80; 91.080.10

---

### **Eurokod 3: Dimensionering av stålkonstruktioner – Del 1-10: Seghet och egenskaper i tjockleksriktningen**

### **Eurocode 3: Design of steel structures – Part 1-10: Material toughness and through-thickness properties**

This preview is downloaded from [www.sis.se](http://www.sis.se). Buy the entire standard via <https://www.sis.se/std-69302>

# Hitta rätt produkt och ett leveranssätt som passar dig

## Standarder

Genom att följa gällande standard både effektiviserar och säkrar du ditt arbete. Många standarder ingår dessutom ofta i paket.

## Tjänster

Abonnemang är tjänsten där vi uppdaterar dig med aktuella standarder när förändringar sker på dem du valt att abonnera på.

På så sätt är du säker på att du alltid arbetar efter rätt utgåva.

e-nav är vår online-tjänst som ger dig och dina kollegor tillgång till standarder ni valt att abonnera på dygnet runt. Med e-nav kan samma standard användas av flera personer samtidigt.

## Leveranssätt

Du väljer hur du vill ha dina standarder levererade. Vi kan erbjuda dig dem på papper och som pdf.

## Andra produkter

Vi har böcker som underlättar arbetet att följa en standard. Med våra böcker får du ökad förståelse för hur standarder ska följas och vilka fördelar den ger dig i ditt arbete. Vi tar fram många egna publikationer och fungerar även som återförsäljare. Det gör att du hos oss kan hitta över 500 unika titlar. Vi har även tekniska rapporter, specifikationer och "workshop agreement".

Matriser är en översikt på standarder och handböcker som bör läsas tillsammans. De finns på [sis.se](http://sis.se) och ger dig en bra bild över hur olika produkter hör ihop.

## Standardiseringsprojekt

Du kan påverka innehållet i framtida standarder genom att delta i någon av SIS ca 400 Tekniska Kommittéer.

# Find the right product and the type of delivery that suits you

## Standards

By complying with current standards, you can make your work more efficient and ensure reliability. Also, several of the standards are often supplied in packages.

## Services

Subscription is the service that keeps you up to date with current standards when changes occur in the ones you have chosen to subscribe to. This ensures that you are always working with the right edition.

e-nav is our online service that gives you and your colleagues access to the standards you subscribe to 24 hours a day. With e-nav, the same standards can be used by several people at once.

## Type of delivery

You choose how you want your standards delivered. We can supply them both on paper and as PDF files.

## Other products

We have books that facilitate standards compliance. They make it easier to understand how compliance works and how this benefits you in your operation. We produce many publications of our own, and also act as retailers. This means that we have more than 500 unique titles for you to choose from. We also have technical reports, specifications and workshop agreements.

Matrices, listed at [sis.se](http://sis.se), provide an overview of which publications belong together.

## Standardisation project

You can influence the content of future standards by taking part in one or other of SIS's 400 or so Technical Committees.

Europastandarden EN 1993-1-10:2005/AC:2009 gäller som svensk standard. Detta dokument innehåller den engelska versionen av EN 1993-1-10:2005/AC:2009.

The European Standard EN 1993-1-10:2005/AC:2009 has the status of a Swedish Standard. This document contains the official English version of EN 1993-1-10:2005/AC:2009.

! © 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.

Upplysningar 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 upplysningar om svensk och utländsk standard.

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

SIS Förlag AB, SE 118 80 Stockholm, Sweden. Tel: +46 8 555 523 10. Fax: +46 8 555 523 11.  
E-mail: [sis.sales@sis.se](mailto:sis.sales@sis.se) Internet: [www.sis.se](http://www.sis.se)



EUROPEAN STANDARD

**EN 1993-1-10:2005/AC**

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2009

---

ICS 91.010.30

English version

Eurocode 3: Design of steel structures - Part 1-10: Material toughness and through-thickness properties

Eurocode 3 - Calcul des structures en acier  
- Partie 1-10 : Choix des qualités d'acier

Eurocode 3: Bemessung und Konstruktion  
von Stahlbauten - Teil 1-10:  
Stahlsortenauswahl im Hinblick auf  
Bruchzähigkeit und Eigenschaften in  
Dickenrichtung

This corrigendum becomes effective on 25 March 2009 for incorporation in the three official language versions of the EN.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

## SS-EN 1993-1-10:2005/AC:2009 (E)

### Modifications due to EN 1993-1-10:2005/AC:2005

#### 1) Modifications to Subclause 2.1

The corrections are to add a "P" after the clause number and replace "should" with "shall" where appropriate. The corrections are underlined as shown.

##### '2.1 General'

"(3)P The rules shall be applied to the properties of materials specified for the toughness quality in the relevant steel product standard. Material of a less onerous grade shall not be used even though test results show compliance with the specified grade."

### Modifications due to EN 1993-1-10:2005/AC:2009

#### 2) Modification to Subclause 1.2

Paragraph '(1)', delete:

"

EN 10155 Structural steels with improved atmospheric corrosion resistance - Technical delivery conditions;

".

#### 3) Modifications to Subclause 1.3.1

Change "K<sub>V</sub>-value" into: "KV-value".

Change "The K<sub>V</sub> (Charpy V-Notch)-value..." into: "The KV (Charpy V-Notch)-value..."

Delete: "A<sub>V</sub>(T)".

#### 4) Modification to Subclause 1.3.2

Change "A<sub>V</sub>(T)" into: "KV(T)".

#### 5) Modification to Subclause 1.3.3

'Figure 1.1', change "A<sub>V</sub>(T)" into: "KV(T)".

#### 6) Modification to Subclause 1.3.4

Change "A<sub>V</sub>" into: "KV".

#### 7) Modifications to Subclause 1.4

Change "A<sub>V</sub>(T)" into: "KV(T)".

Add:

"

K stress intensity factor

"

Change the definition for 'K<sub>Ic</sub>' into:

"

K<sub>Ic</sub> plane strain fracture toughness for linear elastic behaviour measured in N/mm<sup>3/2</sup>

"

(to be consistent with 1.3.6).

## 8) Modification to Subclause 2.2

Paragraph '(5)', 'NOTE 2', change "stress intensity function" into: "stress intensity factor function" at the two occurrences of this expression in the note.

## 9) Modification to Subclause 2.3.1

Paragraph '(1)', change "K<sub>V</sub>-value" into: "KV-value".

Paragraph '(2)', delete: "EN 10155,".

## 10) Modifications to Subclause 2.3.2

'Table 2.1', 1<sup>st</sup> row, 3<sup>rd</sup> column, change "Charpy energy CVN" into: "KV".

'Table 2.1', 'NOTE 2', change "T<sub>AV</sub>" into: "T<sub>KV</sub>".

'Table 2.1', 'NOTE 3', change "Charpy energy values CVN" into: "KV-values".

## 11) Modifications to Subclause 2.4

Paragraph '(1)', change "K<sub>V</sub>-values" into: "KV-values".

Paragraph '(2)', change Equation '(2.7)' into: " $T_{Ed} \geq T_{Rd}$ ".

Paragraph '(3)', change "The assumed flaw should be located at the position of adverse stress concentration" into: "The assumed flaw should be located at the position of the most adverse stress concentration".

## 12) Modification to Subclause 3.1

Paragraph '(3)', change "if the strain in the joint acts" into: "if the strain in the connection acts".

## 13) Modification to Subclause 3.2

'Table 3.2', 3<sup>rd</sup> column, 1<sup>st</sup> row at the top, heading, delete: "=" and divide this cell into two cells with a vertical line continuing the one subdividing the rows below, so that the new cell on the left bears the title "Effective weld depth a<sub>eff</sub> (see Figure 3.2)" and the new cell on the right bears the title "Throat thickness a of fillet welds", thus:

"

**SS-EN 1993-1-10:2005/AC:2009 (E)**

**Table 13.1: Criteria affecting the target value of  $Z_{Ed}$**

a)	Weld depth relevant for straining from metal shrinkage	Effective weld depth $a_{eff}$ (see Figure 3.2)	Throat thickness $a$ of fillet welds	$Z_i$
		$a_{eff} \leq 7\text{mm}$	$a = 5\text{ mm}$	$Z_a = 0$
		$7 < a_{eff} \leq 10\text{mm}$	$a = 7\text{ mm}$	$Z_a = 3$
		$10 < a_{eff} \leq 20\text{mm}$	$a = 14\text{ mm}$	$Z_a = 6$
		$20 < a_{eff} \leq 30\text{mm}$	$a = 21\text{ mm}$	$Z_a = 9$
		$30 < a_{eff} \leq 40\text{mm}$	$a = 28\text{ mm}$	$Z_a = 12$
		$40 < a_{eff} \leq 50\text{mm}$	$a = 35\text{ mm}$	$Z_a = 15$
		$50 < a_{eff}$	$a > 35\text{ mm}$	$Z_a = 15$

(...)

“