

SVENSK STANDARD

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Varmvalsade konstruktionsstål – Del 5: Tekniska leveransbestämmelser för konstruktionsstål med förbättrat motstånd mot atmosfärisk korrosion

Hot rolled products of structural steels – Part 5: Technical delivery conditions for structural steels with improved atmospheric corrosion resistance

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Europastandarden EN 10025-5:2019 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 10025-5:2019.

Denna standard ersätter SS-EN 10025-5:2004, utgåva 1.

The European Standard EN 10025-5:2019 has the status of a Swedish Standard. This document contains the official version of EN 10025-5:2019.

This standard supersedes the SS-EN 10025-5:2004, edition 1.

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Denna standard är framtagen av kommittén för Konstruktionsstål, SIS/TK 142.

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EUROPEAN STANDARD

EN 10025-5

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2019

ICS 77.140.10; 77.140.50

Supersedes EN 10025-5:2004

English Version

Hot rolled products of structural steels - Part 5: Technical delivery conditions for structural steels with improved atmospheric corrosion resistance

Produits laminés à chaud en aciers de construction -
Partie 5 : Conditions techniques de livraison pour les
aciers de construction à résistance améliorée à la
corrosion atmosphérique

Warmgewalzte Erzeugnisse aus Baustählen - Teil 5:
Technische Lieferbedingungen für wetterfeste
Baustähle

This European Standard was approved by CEN on 16 June 2019.

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.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

SS-EN 10025-5:2019 (E)

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SS-EN 10025-5:2019 (E)

European foreword

This document (EN 10025-5:2019) has been prepared by Technical Committee CEN/TC 459/SC 3 “Structural steels other than reinforcements”, 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 February 2020 and conflicting national standards shall be withdrawn at the latest by February 2020.

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

This document supersedes EN 10025-5:2004.

This document consists of the following parts, under the general title *Hot rolled products of structural steels*:

- *Part 1: General technical delivery conditions*
- *Part 2: Technical delivery conditions for non-alloy structural steels*
- *Part 3: Technical delivery conditions for normalized/normalized rolled weldable fine grain structural steels*
- *Part 4: Technical delivery conditions for thermomechanical rolled weldable fine grain structural steels*
- *Part 5: Technical delivery conditions for structural steels with improved atmospheric corrosion resistance*
- *Part 6: Technical delivery conditions for flat products of high yield strength structural steels in the quenched and tempered condition*

For a short transition period there will be a coexistence of EN 10025-1:2004 with EN 10025-2:2019 to - EN 10025-6:2019, since the new EN 10025-1 has to fulfil the requirements of the CPR and will therefore be published later. For this short transition period up-to-the publication of the next edition of part 1 the following is to be taken into account for EN 10025-1:2004:

- a) all dated and undated references to EN 10025-1:2004 to EN 10025-6:2004 are unchanged to this version with following exception: In 9.2.2.1 the references are 8.3.1 and 8.3.2 instead of 8.4.1 and 8.4.2;
- b) Clauses 5, 12 and 13 of EN 10025-1:2004 are no longer relevant.

The main changes with respect to the previous edition are listed below:

- a) part 5 is now a stand-alone standard for technical delivery conditions including the preparation of samples and test pieces, the test methods, the marking, labelling and packaging and the drawings;
- b) for applications under the CPR this document and part 1 are to be used together;
- c) requirements for elements not defined were added to 7.2.1 and 7.2.2;
- d) Option 33 were added, Options 9 and 21 were deleted;
- e) key to Figure A.1 was updated;

- f) steel grades S355J4, S420J0W, S420J2W, S420J4W, S460J0W, S460J2W and S460J4W were added to Tables 1 to 5;
- g) Annex B concerning the corresponding EURONORMS deleted;
- h) references were updated and document editorial revised.

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

SS-EN 10025-5:2019 (E)

1 Scope

This document specifies technical delivery conditions for flat and long products of hot rolled steels with improved atmospheric corrosion resistance in the grades and qualities given in Tables 2 and 3 (chemical composition) and Tables 4 and 5 (mechanical properties) in the usual delivery conditions as given in 6.3.

The thicknesses in which products of the steel grades and qualities specified in this document can be supplied are given in Table 1.

Table 1 — Product forms for the different steel grades with improved atmospheric corrosion resistance depending on their thickness

Designation		Flat products		Long products		
Steel name	Steel number	Nominal thickness		Sections	Bars	Rods
		mm		Nominal thickness or diameter		
		≤ 12	≤ 150	≤ 63	≤ 150	≤ 60
S235J0W	1.8958		x	x	x	x
S235J2W	1.8961		x	x	x	x
S355J0WP	1.8945	x				
S355J2WP	1.8946	x				
S355J0W	1.8959		x	x	x	x
S355J2W	1.8965		x	x	x	x
S355K2W	1.8967		x	x	x	x
S355J4W	1.8787		x	x	x	x
S355J5W	1.8991		x			
S420J0W	1.8943		x	x		
S420J2W	1.8949		x	x		
S420K2W	1.8997		x	x		
S420J4W	1.8954		x			
S420J5W	1.8992		x			
S460J0W	1.8966		x	x		
S460J2W	1.8980		x	x		
S460K2W	1.8990		x	x		
S460J4W	1.8981		x			
S460J5W	1.8993		x			

The steels specified in this document are not intended to be heat treated except products delivered in the delivery condition +N. Stress relieving is accepted. Products delivered in +N condition can be hot formed and/or normalized after delivery (see Clause 3).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EN 10017, *Steel rod for drawing and/or cold rolling — Dimensions and tolerances*

EN 10020:2000, *Definition and classification of grades of steel*

EN 10021, *General technical delivery conditions for steel products*

EN 10024, *Hot rolled taper flange I sections — Tolerances on shape and dimensions*

EN 10025-1, *Hot rolled products of structural steels — Part 1: General technical delivery conditions*

EN 10027-1, *Designation systems for steels — Part 1: Steel names*

EN 10027-2, *Designation systems for steels — Part 2: Numerical system*

EN 10029, *Hot-rolled steel plates 3 mm thick or above — Tolerances on dimensions and shape*

EN 10034, *Structural steel I and H sections — Tolerances on shape and dimensions*

EN 10048, *Hot rolled narrow steel strip — Tolerances on dimensions and shape*

EN 10051, *Continuously hot-rolled strip and plate/sheet cut from wide strip of non-alloy and alloy steels — Tolerances on dimensions and shape*

EN 10055, *Hot rolled steel equal flange tees with radiused root and toes — Dimensions and tolerances on shape and dimensions*

EN 10056-1, *Structural steel equal and unequal leg angles — Part 1: Dimensions*

EN 10056-2, *Structural steel equal and unequal leg angles — Part 2: Tolerances on shape and dimensions*

EN 10058, *Hot rolled flat steel bars and steel wide flats for general purposes — Dimensions and tolerances on shape and dimensions*

EN 10059, *Hot rolled square steel bars for general purposes — Dimensions and tolerances on shape and dimensions*

EN 10060, *Hot rolled round steel bars for general purposes — Dimensions and tolerances on shape and dimensions*

EN 10061, *Hot rolled hexagon steel bars for general purposes — Dimensions and tolerances on shape and dimensions*

EN 10067, *Hot rolled bulb flats — Dimensions and tolerances on shape, dimensions and mass*

EN 10079, *Definition of steel products*

EN 10160, *Ultrasonic testing of steel flat product of thickness equal or greater than 6 mm (reflection method)*