BS EN 10025-5:2019



Hot rolled products of structural steels

Part 5: Technical delivery conditions for structural steels with improved atmospheric corrosion resistance



National foreword

This British Standard is the UK implementation of EN 10025-5:2019. It supersedes BS EN 10025-5:2004, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ISE/103, Structural Steels Other Than Reinforcements.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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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.

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

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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of an identical text or by endorsement, at the latest by February 2020 and conflicting national standards shall be withdrawn at the latest by February 2020.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;
- 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:

- 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;
- for applications under the CPR this document and part 1 are to be used together;
- c) requirements for elements not definded 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;

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- 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.

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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		
		Nominal thickness mm		Sections	Bars	Rods
Steel name	Steel number			Nominal thickness or diameter mm		
		≤ 12	≤ 150	≤ 63	≤ 150	≤ 60
S235J0W	1.8958	35	х	x	х	х
S235J2W	1.8961		x	x	x	x
S355J0WP	1.8945	х				
S355J2WP	1.8946	x				
S355J0W	1.8959	***	x	x	х	х
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	üs	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	0.00		
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).