

DS/EN 1993-1-12 DK NA:2015

National Annex to

Eurocode 3: Design of steel structures –

Part 1-12: Additional rules for the extension of EN 1993 up to steel grade S 700

Preface

The implementation of Eurocodes has involved the preparation of

- National Annexes to the bridge-specific Eurocodes
- Addenda to National Annexes for bridge-specific sections in Eurocodes for loads.

Together with the basic Eurocodes, including the related national annexes, these constitute the codes of practices to be applied in the design of bridges in Denmark.

Scope

This National Annex sets out the conditions for implementation of EN 1993-1-12.

Contents

This National Annex contains the national choices that apply in Denmark.

The national choices may be in the form of current national values, a choice between several methods or addition of supplementary guidance.

In connection with the national choices, the national annexes may refer to Banedanmark's Railway Standards (e.g. BN1-59) or Danish Road Directorate's Road Standards.

Reference may also be made to the infrastructure manager (IF). IF is the authority which has ownership and/or holds maintenance responsibility for a road bridge or for a railway bridge. Examples of IF's include the Danish Road Directorate, local authorities, Banedanmark and regional railway providers.

In addition, the National Annex includes an overview of all the items where it has been possible to make a national choice.



Items for which a national choice has been made

Page	Item	Subject	National choice
6	2.1-6.2.3 (2)	Specify the value γ_{M12} for net cross section.	<p>A value of $\gamma_{M12} = 1.35 \times \gamma_3 \times \gamma_0$ is applied.</p> <p>For γ_3 and γ_0, see DS/EN 1993-1-1 DK NA.</p> <p>Note: Use of strict control requires independent 3rd party tests of materials and execution, see DS/EN 1990 DK NA.</p>



Overview of possible national choices

The following overview shows the places where a national choice is possible and which informative annexes that apply/do not apply. Moreover, it is specified where a national choice has been made.

Page	Items	Subject	Comment
5	2.1- 3.1(2)	Specify steel types higher than S460 up to S700.	No national choice.
5	2.1- 3.2.2 (1)	Limited values of: Relationship between ultimate tensile stress and yield stress, elongation at failure.	No national choice.
6	2.1- 5.4.3 (1)	Additional rules for plastic analysis.	No national choice.
6	2.1- 6.2.3 (2)	Specify the value γ_{M12} for net cross section.	National choice specified.
7	2.8- 4.2 (2)	Restrictions for the use of electrodes with a lower strength than the base material.	No national choice.
9	3(1)	Possibility for limiting the steel grades S460 - S700 which are covered by EN 1993-2 to DS/EN 1993-6.	No national choice.

Note: No national choice implies that a recommendation in the code of practice is observed.

DISCLAIMER

The translation into English of Road Standards (Vejregler), Tender Specifications and National Annexes is to be regarded entirely as a service. In the event of any discrepancy or shortcomings in the translation, the Danish version will prevail. At any time the Danish versions of Road Standards (Vejregler), Tender Specifications and National Annexes are those in force.