ANNEX 20

NATIONAL ANNEX

TO STANDARD

SFS-EN 1993-1-4 EUROCODE 3: DESIGN OF STEEL STRUCTURES.

Part 1-4: General Rules. Supplementary rules for stainless steel

Preface

This national annex is used together with Standard SFS - EN 1993-1-4:2006.

This national annex sets out:

a) The national parameters for the following clauses in Standard SFS-EN 1993-1-4 where national selection is permitted:

- 2.1.4(2) Note 2
- 2.1.5(1)
- 5.1(2)
- 5.5(1) Note 1
- 5.5(1) Note 2
- 5.6(2)
- 6.1 (2)
- 6.2 (3).

b) Guidance for the use of Annexes A, B and C.

2.1.4 Fracture toughness

2.1.4(2), Note 2:
Further information is not given.

2.1.5 Through-thickness characteristics

2.1.5(1):
Further information is not given.

5.1 General

5.1(2):
The recommended values should be used.

5.5 Deflection and axial compression of members with uniform cross-section

5.5(1), Note 1:
The recommended equations should be used.

5.5(1), Note 2:
The recommended equations should be used.

5.6 Shear resistance

5.6(2):
The value $\eta = 1{,}20$ should be used, when 0,2 % proof strength of steel is not higher than 460 MPa and when the temperature of steel is not not more than 400°C. When the temperature of steel is greater than 400 °C, the value $\eta = 1{,}00$ should be used.

6.1 General

6.1(2), Note 2:
Formulaes for pull-out strength based on testing and design guidance may be given in the product approval.

6.2 Bolted connections

6.2(3):
The recommended values should be used.

Annex A
Durability

Annex A may be used.

Annex B
Stainless steel in work hardened state

Annex B may be used.

Additional information:
The text part of standard SFS-EN 1993-1-4 should be applied to steel, which are not work hardened (see 2.1.1(2) and 2.1.1(4) of SFS-EN 1993-1-4). If steel is work hardened, Annex B of SFS-EN 1993-1-4 should be applied.

The butt welds of work hardened steels may be designed according to FCSA`s Code of Practice No 15/2002: Austenitic stainless steel structural hollow sections – utilisation of work hardening at the butt weld joints.

Annex C
Modelling of material behaviour

Annex C may be used.

Mechanical properties at elevated temparatures for steel grades 1.4318, 1.4318 C850 and 1.4571 C850, see the National Annex for standard SFS-EN 1993-1-2 (Annex C of standard SFS-EN 1993-1-2).