NATIONAL ANNEX TO CYS EN 1993-1-4:2006 (Incuding A1:2015+A2:2020)

Eurocode 3: Design of steel structures

Part 1-4: General rules – Supplementary rules for stainless steels NA to CYS EN 1993-1-4:2006 (Including A1:2015+A2:2020)



NATIONAL ANNEX

ТО

CYS EN 1993-1-4:2006+A1:2015+A2:2020

Eurocode 3: Design of steel structures

Part 1-4: General rules – Supplementary rules for stainless

steels

This National Annex has been approved by the Board of Directors of the Cyprus Organisation for Standardisation (CYS) on 19.02.2021.

Copyright

Right to reproduce and distribute belongs to the Cyprus Organisation for Standardisation.

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Cyprus Organisation for Standardisation.

If you have any questions about standards copyright, please contact Centre of Information and Customer Service at the Cyprus Organisation for Standardisation phone: +357 22 411413/4 email: c.service@cys.org.cy

INTRODUCTION

This National Annex has been prepared by the CYS TC18 National Standardisation Committee of the Cyprus Organisation for Standardisation. (CYS).

NA 1 SCOPE

This National Annex is to be used in conjunction with CYS EN 1993-1-4:2006 (+A1:2015+A2:2020). Any reference in the rest of this document to CYS EN 1993-1-4:2006 means the above document.

This National Annex gives:

- (a) Nationally Determined Parameters described in the following clauses of CYS EN 1993-1-4:2006 (see Section NA 2):
 - 2.1.4 (2)
 - 2.1.5 (1)
 - 5.1 (2)
 - 5.5 (1)
 - 5.6 (2)
 - 6.1 (2)
 - 6.2 (3)
 - 7 (1)
 - A.2 (8)
 - A.3, Table A.4
- (b) Decisions on the use of CYS EN 1993-1-4:2006 informative annexes (see Section NA 3)
- (c) References to non-contradictory complementary information to assist the user to apply CYS EN 1993-1-4:2006 (see Section NA 4)

NA 2 NATIONALLY DETERMINED PARAMETERS

NA 2.1 Clause 2.1.4 (2) Fracture toughness

No further information is provided in this National Annex.

NA 2.2 Clause 2.1.5 (1) Through-thickness properties

No further information is provided in this National Annex.

NA 2.3 Clause 5.1 (2) General

```
The values for the partial factors \gamma_M are:
```

 $\gamma_{M0} = 1,1$

 $\gamma_{M1} = 1,1$

 $\gamma_{M2} = 1,25$

NA 2.4 Clause 5.5 (1) Uniform members in bending and axial compression

The values for the interaction factors k_y , k_z , k_{LT} are:

$$k_{y} = 1,0 + 2\left(\overline{\lambda}_{y} - 0,5\right)\frac{N_{Ed}}{N_{b,Rd,y}} \qquad \qquad \text{but } 1,2 \le k_{y} \le 1,2 + 2\frac{N_{Ed}}{N_{b,Rd,y}}$$

National Annex to CYS EN 1993-1-4:2006+A1:2015+A2:2020 Eurocode 3: Design of steel structures Part 1-4: General rules – Supplementary rules for stainless steels

$$k_{z} = 1,0 + 2(\overline{\lambda}_{z} - 0,5) \frac{N_{Ed}}{(N_{b,Rd})_{\min 1}} \qquad \text{but } 1,2 \le k_{z} \le 1,2 + 2 \frac{N_{Ed}}{(N_{b,Rd})_{\min 1}}$$

k_{LT}=1,0

No other interaction formulae as alternatives to equations 5.13 to 5.17 of CYS EN 1993-1-4:2006 are provided in this National Annex.

NA 2.5 Clause 5.6 (2) Shear resistance

The value of η is 1,20.

NA 2.6 Clause 6.1 (2) General

No further information is provided in this National Annex.

NA 2.7 Clause 6.2 (3) Bolted connections

The following recommended values of α shall be used:

- if the shear plane passes through unthreaded portion of the bolt, $\alpha=0.6$

- if the shear plane passes through the threaded portion of the bolt, $\alpha=0.5$

NA 2.8 Clause 7 (1) Design assisted by testing

No further information is provided in this National Annex.

NA 2.9 Clause A.2 (8) Selection of materials

A less severe CRF may be chosen when validated local operating experience or test data support such a choice.

NA 2.10 Clause A.3, Table A.4 Swimming pool environments

No further information is provided in this National Annex.

NA 3 DECISION ON THE USE OF INFORMATIVE ANNEXES

NA 3.1 Annex B

Annex B may be used.

NA 3.2 Annex C

Annex C may be used.

NA 4 REFERENCES TO NON-CONTRADICTORY COMPLEMENTARY INFORMATION

None

NA to CYS EN 1993-1-4:2006 (Including A1:2015+A2:2020)

CYPRUS ORGANISATION FOR STANDARDISATION

Limassol Avenue and Kosta Anaxagora 30, 2nd & 3rd Floor, 2014 Strovolos, Cyprus P.O.BOX.16197, 2086 Nicosia, Cyprus Tel: +357 22 411411 Fax: +357 22 411511 E-Mail: <u>cystandards@cys.org.cy</u> Website: <u>www.cys.org.cy</u>