EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1993-1-3:2006/AC

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English version
Version Française
Deutsche Fassung

Eurocode 3 - Design of steel structures - Part 1-3: General rules - Supplementary rules for cold-formed members and sheeting

Eurocode 3 - Calcul des structures en acier - Partie 1-3: Règles générales - Règles supplémentaires pour les profilés et plaques formés à froid

Bemessung und Konstruktion von Stahlbauten - Teil 1-3: Allgemeine Regeln - Ergänzende Regeln für kaltgeformte dünnwandige Bauteile und Bleche

This corrigendum becomes effective on 11 November 2009 for incorporation in the three official language versions of the EN.

Ce corrigendum prendra effet le 11 novembre 2009 pour incorporation dans les trois versions linguistiques officielles de la EN.

Die Berichtigung tritt am 11.November 2009 zur Einarbeitung in die drei offiziellen Sprachfassungen der EN in Kraft.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

1) Modification to 1.1

Paragraph "(1)", delete three times "thin gauge"*.*

2) Modification to 3.2.1

Paragraph "(1)", replace "tensile strength" *with* "ultimate tensile strength"*.*

3) Modification to 3.2.4

Paragraph "(3)", in Equation "(3.3b)"*, delete the second* "=" *sign.*

4) Modification to Clause 4

Paragraph "(1)", "**NOTE**"*, replace* "EN 1090, 9.3.1" *with* "EN 1090-2, 9.3.1"*.*

5) Modification to 5.5.2

Paragraph "(3)", replace two times "from tables 4.1 and 4.2" *with* "from tables 4.1 and 4.2 of EN 1993-1-5"*.*

6) Modification to 5.5.3.2

Paragraph "(10)", replace "5.5.2(5)" *with* "5.5.2(1)"*.*

7) Modification to 5.5.3.3

Paragraph "(9)", replace "5.5.2(5)" *with* "5.5.2(1)"*.*

8) Modification to 5.5.3.4.4

Paragraph "(1)", 2nd line, replace "interaction between the distortional buckling (flexural buckling of the flange stiffeners and the web stiffeners)" *with* "interaction between the flexural buckling of the flange stiffeners and the web stiffeners"*.*

9) Modifications to 6.1.2

Paragraph "(1)", replace "see 3.2.3" *with* "see 3.2.2"*.*

Paragraph "(2)", replace "EN 1993-1-8, 3.6.3" *with* "EN 1993-1-8, 3.10.3"*.*

10) Modification to 6.1.3

Paragraph "(1)", delete:

"$\overline{\lambda}_{e\,max}$ is the relative slenderness of the element which corresponds to the largest value of $\overline{\lambda}_{e} / \overline{\lambda}_{e0}$;".

11) Modification to 6.1.4.1

Paragraph "(1)", delete the 12th line:

"   For stiffened elements $\overline{\lambda}_{e} = \overline{\lambda}_{d}$ and $\overline{\lambda}_{e0} = 0,65$, see 5.5.3. "

12) Modifications to 6.1.7.2

Paragraph "(4)", under Equation "(6.16d)", Equations for "k$_7$", "k$_8$" and "k$_{10}$", replace:

- "$k_7 = 1 + s_s / t / 750$" *with* "$k_7 = 1 + h_w /(t \times 750)$";

- "$k_8 = (1{,}10 - s_s / t / 665) / k$" *with* "$k_8 = (1{,}10 - h_w /(t \times 665)) / k$;

- *and* "$k_{10} = (0{,}98 - s_s / t / 865) / k$" *with* "$k_{10} = (0{,}98 - h_w /(t \times 865)) / k$".

13) Modification to 6.1.9

Paragraph "(3)", replace "$M_{cy,Rd,ten} \leq{}_{cy,Rd,com}$" *with* "$M_{cy,Rd,ten} \leq M_{cy,Rd,com}$".

14) Modifications to 6.2.3

Paragraph "(6)", replace:

"(6)   For doubly symmetric cross-sections (e.g. y_o = z_o = 0), the elastic critical force $N_{cr,TF}$ for torsional-flexural buckling should be determined from:

$$N_{cr,TF} = N_{cr,T} \qquad\qquad …(6.34)$$

provided $N_{cr,T} < N_{cr,y}$ and $N_{cr,T} < N_{cr,z}$. "

with:

"(6)   For doubly symmetric cross-sections (e.g. y_o = z_o = 0), the elastic critical force N_{cr} should be determined from:

$$N_{cr} = N_{cr,i} \qquad\qquad …(6.34)$$

where $N_{cr,i}$ should be determined as minimum from three values: $N_{cr,y}$, $N_{cr,z}$, $N_{cr,T}$."

Paragraph "(7)", end of the paragraph, add the following text:

"Equation (6.35) is valid only if the torsional and flexural buckling lengths are equal $l_y = l_T$."

15) Modification to 6.2.5

Paragraph "(2)", 1st line, replace "(6.38)" *with* "(6.36)".

16) Modification to 8.2

Paragraph "(2)", replace "6.2.2.1(2)" *with* "6.2.2(1)".

17) Modifications to 8.3

Paragraph "(13)", "Table 8.2", "NOTE:[2]*", replace two times* "skrews" *with* "screws".

Paragraph "(13)", "Table 8.4", 8th row from the top, replace "3 mm > $t \geq$ 0,75 mm"   *with* "$0{,}75$ mm $\leq t < 3$ mm".

18) Modification to 8.5.3

Paragraph "(5)", *list entry* "(i)", *replace two times* "F$_{w,Sd}$" *with* "F$_{w,Rd}$".

19) Modifications to 10.1.1

Paragraph "(5)", *correct* "trapetzoidal" *into* "trapezoidal".

Paragraph "(6)", *correct* "trapetzoidal" *into* "trapezoidal".

20) Modifications to 10.1.4.2

Paragraph "(7)", 2nd *and* 3rd *lines, replace* "The formula (10.10a)" *with* "The formula (10.9)".

Paragraph "(7)", 4th *line, replace* "10.1.4.2(5)" *with* "(5)".

21) Modifications to 10.1.6

Paragraph "(2)", "Table 10.5", 4th *row* "C-beam, gravity loading", *second column* "Reaction force on bottom flange R_1", *replace* "$-(1-\varsigma)k_h q_{Ed} L/2$" *with* "(1-ς)k$_hq_{Ed}$L/2".

Paragraph "(2)", "Table 10.5", 4th *row* "C-beam, gravity loading", *third column* "Reaction force on top flange R_2", *replace* "$(1-\varsigma)k_h q_{Ed} L/2$" *with* "-(1-ς)k$_hq_{Ed}$L/2".

Paragraph "(2)", "Table 10.5", 5th *row* "C-beam, uplift loading", *second column* "Reaction force on bottom flange R_1", *replace* "$(1-\varsigma)k_h q_{Ed} L/2$" *with* "-(1-ς)k$_hq_{Ed}$L/2".

Paragraph "(2)", "Table 10.5", 5th *row* "C-beam, uplift loading", *third column* "Reaction force on top flange R_2", *replace* "$-(1-\varsigma)k_h q_{Ed} L/2$" *with* "(1-ς)k$_hq_{Ed}$L/2".

Paragraph "(3)", *replace this paragraph with the following one:*

"(3) The factor ς may be taken as $\varsigma = 1 - \sqrt[3]{\kappa_R^2}$ where κ_R is the correction factor given in Table 10.1, and the factor ξ may be taken as ξ=1,5ς."

22) Modification to 10.2.1

Paragraph "(1)", *replace in the second sentence* "by attached profiled steel sheeting" *with* "by attached profiled steel sheeting or by steel purlin or by similar component".

23) Modifications to 10.4

Paragraph "(2)", *replace in the first sentence* "using 5.1" *with* "using 5".

Paragraph "(2)", *Equation* "(10.25)", *replace* "$t_{a,\text{eff}} = 1,18\,t\left(1 - \dfrac{d}{0,9a}\right)$" *with:* "$t_{a,eff} = 1,18t(1-0,9\dfrac{d}{a})$".

Paragraph "(4)", *replace in the first sentence* "using 6.1.9" *with* "using 6.1.7".

24) Modification to A.4.1

Paragraph "(2)", *6th line, delete* "(rare)".

25) Modifications to A.6.2

Paragraph "(5)", *replace* "in which μ_R is the resistance adjustment coefficient" *with* "in which μ_R is the adjustment coefficient".

Paragraph "(7)", *add after the note as normal clause text:*

"For the adjustment of second moment of area, where linear behaviour is observed under the serviceability limit state loading, the exponents in the formula (A.9) should be taken as follows: $\alpha = 0{,}0$ and $\beta = 1{,}0$."

26) Modifications to Annex E

Paragraph "(1)", *replace* "the purlins are restraint... of table E.1 are met" *with* "the purlins are restrained ... of table 10.3 are met".

Paragraph "(3)", "**NOTE**", *replace reference to* "1.6.4" *with* "1.5.4".