European Committee for Standardization
Comité Européen de Normalisation
Europaïsches Komitee für Normung

EN 13445 "Unfired pressure vessels" Maintenance Help Desk (MHD)
Question form

Request reference number *(to be filled by MHD):* **(2014)-02-05**				**Date: 2017-03-24**

Please fulfil the following

Part: EN 13445-2	Issue: 2014	Page 16	Subclause 5	National Standard Reference --

Subject: Materials used for non-pressure parts

Type of request:	☒ Technical clarification	☐ Editorial correction
	☐ Technical comment	☐ Translation correction

From : Company: VSK Pardubice s.r.o. Name: Tereza Bílková Postal address: Stará Obec 312 533 54 Pardubice-Rybitví Czech Republic	e-mail:tereza.bilkova@vsk.cz phone: +420 732 418 194

☒ Manufacturer	☐ User	☐ Other (please specify):

Question/comment:

In subclause 5 it is said, that for non-pressure parts you have to use materials with specified chemical composition and tensile properties.

In shell-and-tube heat exchangers baffles are used to provide desired flow pattern and support tubes. Baffles are placed in shell which is working under pressure. But baffles themselves are not subject to any pressure load.

Is it possible to use materials mentioned in subclause 5 for baffles? Or is it necessary to use materials corresponding to subclause 4?

Proposed answer(s): *

As baffles do not transmit any pressure load, materials for non-pressure parts mentioned in subclause 5 can be used.

Answer from the MHD *(to be filled by MHD):*

Agree with the proposed answer.

To be sent to EN 13445 Maintenance Help Desk secretariat:	EN 13445 MHD secretariat c/o UNM Standardization Office on behalf of AFNOR F 92038 Paris La Défense Cedex – France e-mail: en13445@unm.fr

* *Please note that question with proposed answers will be dealt with as priority.*

European Committee for Standardization
Comité Européen de Normalisation
Europaïsches Komitee für Normung

EN 13445 "Unfired pressure vessels" Maintenance Help Desk (MHD)
Question form

Request reference number *(to be filled by MHD):* **(2014)-02-09**   **Date: 2019-04-14**

Please fulfil the following

Part: EN 13445-2	Issue: 2009	Page 51	Subclause Annex D	National Standard Reference --

Subject: Technical delivery conditions for Clad products for pressure purposes

Type of request: ☒ Technical clarification   ☐ Editorial correction

☐ Technical comment   ☐ Translation correction

From :

Company: Rolls-Royce ....

Name: Shaun Currie ....

Postal address: 303 Bridgewater Place, WA3 6XF. UK

e-mail: shaun.currie@rolls-royce.com ....

phone: +44 (0) 1925 781746 ....

☒ Manufacturer   ☐ User   ☐ Other (please specify):

Question/comment:

Dear Sir / Madam, we have a query regarding components that are to be explosive clad, to EN13445-2.
The components are both Tubesheets, one in P245 GH Carbon Steel at Ø2.3m x 80mm main section and the other in P265 GH at Ø2.1m x 130mm main section, finished sizes.
Both Tubesheets are to be clad in Titanium to B265, 10mm thick, with a finished thickness of 6mm.

The cladding operation is being completed by an external supplier.
They are working to EN13445-2, Annex D, and our customer, EDF, spec BTS 91.C.109.UKEPR, Appendix 19.
The EDF spec states the following 'When the cladding is carried out by explosion, the test specimens shall be taken in the zone furthest away from the ignition point'.
In this instance, the ignition point would therefore be at 180° to the test piece location.
This was originally mutually agreed by a procurement spec.

Since then, the supplier is now asking for a concession on this point.
The supplier is asking the following;
"In order to increase as much as possible the material for test specimens, the Tubeplate to be obtained has been moved on one side of starting forging (180°), leaving 50 mm in order to guarantee the adhesion of titanium plate after cladding on entire surface of Tubeplate.
At the same time the ignition point has been positioned at 270° (previously 180°) of starting forging, in order to increase the distance between ignition point and the Tubeplate, and respect as far as possible the BTS requirements about the placement of test specimens."
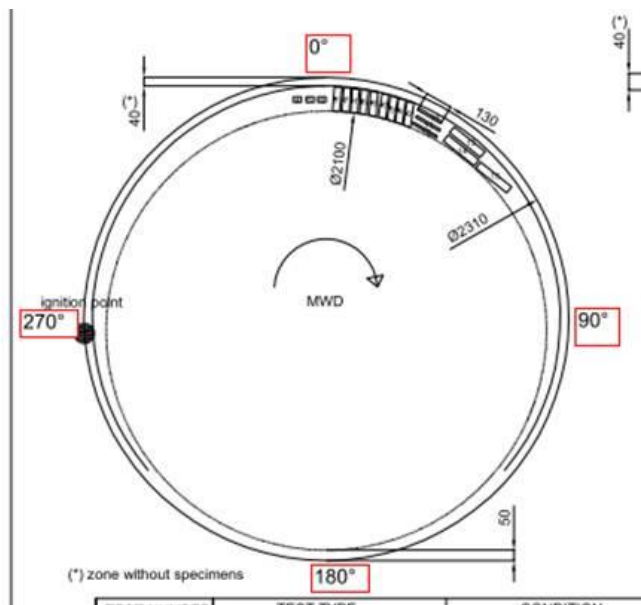
RR are looking to determine if this is an acceptable proposal.
We would also like to determine the following;
- The effect of having the test pieces positioned furthest away from the ignition point, does this give better or worse case mechanical results?
- What effect (if any) is likely by following our supplier's proposal. Are we likely to see better or worse mechanical results?
- The effect of the test pieces positioned at the edge of the component. Are there any detrimental effects due to the shape of the component, and the location of the test pieces?

Thanks in advance for your help.
Kind regards,
Shaun

Proposed answer(s): *

Answer from the MHD *(to be filled by MHD):*

Tis is a specific technical specification to EDF.
Informative Annex D of EN 13445-2 has no recommendation on this matter

To be sent to EN 13445 Maintenance Help Desk secretariat:	EN 13445 MHD secretariat c/o UNM Standardization Office on behalf of AFNOR F 92038 Paris La Défense Cedex – France e-mail: en13445@unm.fr

* *Please note that question with proposed answers will be dealt with as priority.*

European Committee for Standardization
Comité Européen de Normalisation
Europaïsches Komitee für Normung

EN 13445 "Unfired pressure vessels" Maintenance Help Desk (MHD)
Question form

Request reference number *(to be filled by MHD):* **(2021)-03-02**				**Date: 2022-05-05**

Please fulfil the following

Part: EN 13445-3	Issue: 2021	Page 363 & 374	Subclause 16.4.6.4 & 16.5.6.4	National Standard Reference --

Subject:

Type of request:	☐ Technical clarification	☐ Editorial correction
	☐ Technical comment	☐ Translation correction

From :
Company:P3 Engineering ....
Name:Walther Stikvoort.......................................
Postal address:Rotterdamseweg 183C - 2629 HD Delft
The Netherlands...

e-mail:W.Stikvoort@P3Engineering.nl..................
phone: +31592347088 ....

☐ Manufacturer	☐ User	☐ Other (please specify): Consultant

Question/comment:

Re:Clause 16.4.6.4 of EN 13445-3

Add the following expressions under equation   (16. 4-15)

$$\sqrt{[(|\Phi_P + \Phi_Z|)^2 + \Phi_B]^2 + \Phi_T{}^2} \leq 1.0 \qquad (16.\ 4\text{-}15a)$$

$$\sqrt{\Phi_Z{}^2 + \Phi_B{}^2 + \Phi_T{}^2} \leq 1.0 \qquad (16.\ 4\text{-}15b)$$

$$\sqrt{(|\Phi_P - 0.2\,\Phi_Z|)^2 + \Phi_B{}^2 + \Phi_S{}^2} \leq 1.0 \qquad (16.\ 4\text{-}15c)$$

Re:Clause 16.5.6.4 of EN 13445-3

Add the following expressions under equation (16. 5-15)

$$\sqrt{[(|\frac{\Phi_P}{c_4} + \Phi_Z|)^2 + \Phi_B]^2 + \Phi_T{}^2} \leq 1.0 \qquad (16.\ 5\text{-}15a)$$

$$\sqrt{\Phi_Z{}^2 + \Phi_B{}^2 + \Phi_T{}^2} \leq 1.0 \qquad (16.\ 5\text{-}15b)$$

$$\sqrt{(|\frac{\Phi_P}{c_4} - 0.2\,\Phi_Z|)^2 + \Phi_B{}^2 + \Phi_S{}^2} \leq 1.0 \qquad (16.\ 5\text{-}15c)$$

Proposed answer(s): *

Desired addition to clarify the correct interpretation of the equations (16.4-15) and (16.5-15)

Answer from the MHD *(to be filled by MHD):*

We think that the formulae contained in the standard are clear enough. The proposed answer is not acceptable.

To be sent to EN 13445 Maintenance Help Desk secretariat:	EN 13445 MHD secretariat c/o UNM Standardization Office on behalf of AFNOR F 92038 Paris La Défense Cedex – France e-mail: en13445@unm.fr

* *Please note that question with proposed answers will be dealt with as priority.*

European Committee for Standardization
Comité Européen de Normalisation
Europaïsches Komitee für Normung

EN 13445 "Unfired pressure vessels" Maintenance Help Desk (MHD)
Question form

Request reference number *(to be filled by MHD):* **(2014)-03-61**   **Date: 2021-07-26**

Please fulfil the following

Part: EN 13445-3	Issue: 2014	Page 28	Subclause 6.6.2	National Standard Reference --

Subject:

Type of request: ☒ Technical clarification   ☐ Editorial correction

☐ Technical comment   ☐ Translation correction

From :

Company: Milton Roy Europe.......................................

Name: Bringuier Jean-Baptiste...................................

Postal address:10 Grande Rue, 27360 Pont-Saint-Pierre

....

e-mail: Jean-Baptiste.Bringuier@miltonroy.com ....

phone: +33 7 61 30 99 83 ....

☒ Manufacturer   ☐ User   ☐ Other (please specify):

Question/comment:

For the static and fatigue sizing of a machined part, the EN13445-3 considers austenitic and ferritic steels only, what about austenitic-ferritic steels like duplex and superduplex? What calculation method should we use?

<u>Part cut in 4</u>

Proposed answer(s): *

In fatigue, use the calculation method for ferritic steels and in static, use the first line of table 6-1 because it is the most restrictive equations for steels other than austenitic.

Answer from the MHD *(to be filled by MHD):*

The proposed answer is accepted.

To be sent to EN 13445 Maintenance Help Desk secretariat:	EN 13445 MHD secretariat c/o UNM Standardization Office on behalf of AFNOR F 92038 Paris La Défense Cedex – France e-mail: en13445@unm.fr

* *Please note that question with proposed answers will be dealt with as priority.*

European Committee for Standardization
Comité Européen de Normalisation
Europaïsches Komitee für Normung

EN 13445 "Unfired pressure vessels" Maintenance Help Desk (MHD)
Question form

Request reference number *(to be filled by MHD):* **(2014)-03-62**				**Date:**

Please fulfil the following				
Part: EN 13445-3/A8	Issue: 2019	Page 12 & 22	Subclause 16.4.5.7 &16.5.5.7	National Standard Reference --

Subject:

Type of request: ☐ Technical clarification   ☐ Editorial correction
☐ Technical comment   ☐ Translation correction

From :
Company:N.A...
Name:Walther Stikvoort..
Postal address:Wagnerlaan 37; 9402SH Assen (NL) ..

e-mail:stikvoort@ziggo.nl ....
phone: +31592347088 ....

☐ Manufacturer   ☐ User   ☐ Other (please specify): Consultant Static Pressure Equipment Integrity

Question/comment:

The formulas for determining the shear stresses should be based on the **outside** nozzle diameter rather than the **mean** nozzle diameter in order to be consistent with WRC 107 and PD 5500 clauses G.2.3.6.3 and G.2.4.5.

📄 PDF

CALCULATION_OF_L
OCAL_STRESS_STATE

The pdf shows shear stress formulas based on outside diameter (radius) of the nozzle!

Please include this in the 2021 edition of EN 13445-3 by means of an addendum.

Proposed answer(s): *
Proposed adaptation of shear stress formulae
Re: EN 13445-3:2014 / A8 : 2019 and the 2021 version of EN 13445-3

The mean nozzle diameter "d" will be replaced by the outside nozzle diameter "d_e" in the equations for the shear stresses as stated in clauses: 16.4.5.7,16.4.7.3,16.5.5.7 and 16.5.7.3 to be consistent with WRC Bulletin 107.

The relevant clauses in combination with the relevant equations are summarized in the table below:

Clauses	16.4.5.7	16.4.7.3	16.5.5.7	16.5.7.3
Equations	(16.4-8a) ; (16.4-8b)	(16.4-22a) ; (16.4-22b)	(16.5-8a) ; (16.5-8b) ; (16.5-8c)	(16.5-24a) ; (16.5-24b) ; (16.5-24c)

Answer from the MHD *(to be filled by MHD):*

The method of EN 13445.3 is an original method, there is no need to modify it considering methods provided by other standards. The proposed modification is not accepted.

To be sent to EN 13445 Maintenance Help Desk secretariat:	EN 13445 MHD secretariat c/o UNM Standardization Office on behalf of AFNOR F 92038 Paris La Défense Cedex – France e-mail: en13445@unm.fr

* *Please note that question with proposed answers will be dealt with as priority.*

European Committee for Standardization
Comité Européen de Normalisation
Europaïsches Komitee für Normung

EN 13445 "Unfired pressure vessels" Maintenance Help Desk (MHD)
Question form

Request reference number *(to be filled by MHD):* **(2014)-03-63**				**Date: 201X-xx-xx**

Please fulfil the following				
Part: EN 13445-3 V4	Issue: 2014	Page 162	Subclause 11	National Standard Reference French

Subject:

Type of request:	☒ Technical clarification	☐ Editorial correction
	☐ Technical comment	☐ Translation correction

From :
Company: Cetim ....
Name: Philippe ROHART ....
Postal address: Avenue Felix Louat, Senlis, FRANCE

e-mail: philippe.rohart@cetim.fr ....
phone: +33 3 44 67 47 94 ....

☐ Manufacturer	☒ User	☐ Other (please specify):

Question/comment:

Clause 11.5.1 provides a set of information about flange calculations.

Clause 11.5.1.b provides a methodology, whose applicability depends on some parameters. One of them requires that P should be lower or equal to 2 MPa.

Question : In this equation, what is P ?

Proposed answer(s): *

Proposed answer 1 : P is unique for a flange, and is the highest pressure value applied on the flange. It should be the test pressure.

Proposed answer 2 : P is the pressure for the situation evaluated. Therefore, if a flange is calculated for a service situation and a test situation, the service situation may be evaluated with clause 11.5.1.b if the pressure is lower or equal to 2 MPa, while the test situation would require other rules if the test pressure is greater than 2 MPa.

Answer from the MHD *(to be filled by MHD):*

The proposed answer 2 is accepted.

To be sent to EN 13445 Maintenance Help Desk secretariat:	EN 13445 MHD secretariat c/o UNM Standardization Office on behalf of AFNOR F 92038 Paris La Défense Cedex – France e-mail: en13445@unm.fr

* *Please note that question with proposed answers will be dealt with as priority.*

EN 13445 "Unfired pressure vessels" Maintenance Help Desk (MHD)
Question form

European Committee for Standardization
Comité Européen de Normalisation
Europaïsches Komitee für Normung

Request reference number *(to be filled by MHD):* **(2014)-03-64**	**Date: 201X-xx-xx**

Please fulfil the following

Part: EN 13445-3 V4	Issue: 2014	Page 28	Subclause -	National Standard Reference English

Subject:

Type of request: ☒ Technical clarification ☐ Editorial correction
☐ Technical comment ☐ Translation correction

From :
Company: Cetim ....   e-mail: philippe.rohart@cetim.fr ....
Name: Philippe ROHART ....   phone: +33 3 44 67 47 94 ....
Postal address: Avenue Felix Louat, Senlis, FRANCE

☐ Manufacturer ☒ User ☐ Other (please specify):

Question/comment:

Table 6-1 provides the maximum allowed values of the nominal design stress for pressure parts other than bolts. There are several categories, mainly depending on the question ''Is my steel austenitic ?''

My question deals with austenitic-ferritic steels. I am hesitating between two interpretations :

- My austenitic-ferritic is both austenitic and ferritic. So it is austenitic, and should be classified in categories 6.4 or 6.5
- My austenitic-ferritic is neither austenitic nor ferritic. So it is not austenitic, and should be classified in categories 6.2 or 6.3

Proposed answer(s): *

Answer 1 : Austenitic-ferritic steels are no austenitic steels. They should therefore be classified in categories 6.2 or 6.3. A note may be added to this table, so as to impose this interpretation.

Answer from the MHD *(to be filled by MHD):*

The proposed answer is accepted.

To be sent to EN 13445 Maintenance Help Desk secretariat:	EN 13445 MHD secretariat c/o UNM Standardization Office on behalf of AFNOR F 92038 Paris La Défense Cedex – France e-mail: en13445@unm.fr

* *Please note that question with proposed answers will be dealt with as priority.*

EN 13445 "Unfired pressure vessels" Maintenance Help Desk (MHD)
Question form

Request reference number *(to be filled by MHD):* **(2014)-05-29 et (2014)-03-65**				**Date:** 2022-05-05

Please fulfil the following

Part: EN 13445-5 EN 13445-3	Issue: 2014 2014	Page 10 477	Subclause 5.2.2 18.2.17	National Standard Reference DIN EN 13445-5:2018-12 DIN EN 13445-3:2016-12

Subject: critical areas / Information to be contained in the technical documentation

Type of request: ☒ Technical clarification ☐ Editorial correction

☐ Technical comment ☐ Translation correction

From :

Company: .... Sulzer Pompes France   e-mail:...................... yannick.lecoq@sulzer.com

Name:.. Yannick Le Coq   phone: +.................................. +33 1 34 77 70 58

Postal address: 1 Rue de l'Innovation 78200 Buchelay   phone: +.................................. +33 6 88 97 68 14

☐ Manufacturer   ☒ User   ☐ Other (please specify):

Question/comment:

According to **EN 13445-5:2014** § 5.2 "Information to be contained in the technical documentation" :

"if the vessel is designed for cyclic operation the allowed numbers of cycles, the range of action (as defined in EN 13445-3:2014, 5.3.1) during the cycle and the locations where the cumulative fatigue damage index D (as defined in EN 13445-3:2014, Clauses 17 and 18) is greater than 0,8."
technical documentation shall indicate areas where D > 0.8

EN 13445-3:2014

18.2.17

critical area : an area where the total fatigue damage index exceeds the maximum value D_{max} defined as follows:

- $D_{max} = 0,8$ for $500 < n_{eq} < 1\ 000$
- $D_{max} = 0,5$ for $1000 < n_{eq} < 10\ 000$
- $D_{max} = 0,3$ for $neq > 10\ 000$

Specific NDT requirements shall apply for critical areas (see 18.4.4). Several thresholds are considered for critical areas according to EN 13445-3. EN 13445-5:2014 and EN 13445-3:2014 do not look fully consistent.

Proposed answer(s): *

We believe critical areas should be indicated in the technical documentation instead of areas where D > 0.8 and that EN 13445-5:2014 § 5.2 should be modified accordingly.

Answer from the MHD *(to be filled by MHD):*

The proposed answer is acceptable

To be sent to EN 13445 Maintenance Help Desk secretariat:	EN 13445 MHD secretariat c/o UNM Standardization Office on behalf of AFNOR F 92038 Paris La Défense Cedex – France e-mail: en13445@unm.fr

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Europaïsches Komitee für Normung

EN 13445 "Unfired pressure vessels" Maintenance Help Desk (MHD)
Question form

Request reference number *(to be filled by MHD):* **(2021)-03-02**				**Date: 2022-05-05**

Please fulfil the following

Part: EN 13445-3	Issue: 2021	Page 363 & 374	Subclause 16.4.6.4 & 16.5.6.4	National Standard Reference --

Subject:

Type of request: ☐ Technical clarification   ☐ Editorial correction

☐ Technical comment   ☐ Translation correction

From :

Company:P3 Engineering...
Name:Walther Stikvoort...
Postal address:Rotterdamseweg 183C - 2629 HD Delft
The Netherlands ....

e-mail:W.Stikvoort@P3Engineering.nl ....
phone: +31592347088 ....

☐ Manufacturer   ☐ User   ☐ Other (please specify): Consultant

Question/comment:

Re:Clause 16.4.6.4 of EN 13445-3

Add the following expressions under equation   (16. 4-15)

$$\sqrt{[(|\Phi_P + \Phi_Z|)^2 + \Phi_B]^2 + \Phi_T^2} \le 1.0 \qquad (16.\ 4\text{-}15a)$$

$$\sqrt{\Phi_Z^2 + \Phi_B^2 + \Phi_T^2} \le 1.0 \qquad (16.\ 4\text{-}15b)$$

$$\sqrt{(|\Phi_P - 0.2\,\Phi_Z|)^2 + \Phi_B^2 + \Phi_S^2} \le 1.0 \qquad (16.\ 4\text{-}15c)$$

Re:Clause 16.5.6.4 of EN 13445-3

Add the following expressions under equation (16. 5-15)

$$\sqrt{[(|\frac{\Phi_P}{c_4} + \Phi_Z|)^2 + \Phi_B]^2 + \Phi_T^2} \le 1.0 \qquad (16.\ 5\text{-}15a)$$

$$\sqrt{\Phi_Z^2 + \Phi_B^2 + \Phi_T^2} \le 1.0 \qquad (16.\ 5\text{-}15b)$$

$$\sqrt{(|\frac{\Phi_P}{c_4} - 0.2\,\Phi_Z|)^2 + \Phi_B^2 + \Phi_S^2} \le 1.0 \qquad (16.\ 5\text{-}15c)$$

Proposed answer(s): *

Desired addition to clarify the correct interpretation of the equations (16.4-15) and (16.5-15)

Answer from the MHD *(to be filled by MHD):*
We think that the formulae contained in the standard are clear enough. The proposed answer is not acceptable.

To be sent to EN 13445 Maintenance Help Desk secretariat:	EN 13445 MHD secretariat c/o UNM Standardization Office on behalf of AFNOR F 92038 Paris La Défense Cedex – France e-mail: en13445@unm.fr

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EN 13445 "Unfired pressure vessels" Maintenance Help Desk (MHD) Question form

Request reference number *(to be filled by MHD):* **(2021)-03-03**		**Date: 2022-05-05**

Please fulfil the following				
Part: EN 13445-3	Issue: 2021	Page	Clause 11 "Flanges"	National Standard Reference --

Subject:

Type of request: ☐ Technical clarification   ☐ Editorial correction
☐ Technical comment   ☐ Translation correction

From :
Company:P3 Engineering..   e-mail:W.Stikvoort@P3Engineering.nl.................
Name:Walther Stikvoort..   phone: +31592347088 ....
Postal address:Rotterdamseweg 183C - 2629 HD Delft
The Netherlands ....

☐ Manufacturer   ☐ User   ☐ Other (please specify): Consultant

Question/comment:

It has been noted that clause 11 of EN 13445-3 does not include hub slope restrictions as in ASME VIII-1;Appendix 2 - Figure 2-4 and in ASME VIII-2-Figure 4.16.2.

What is the justification for the absence of such manufacturing recommendations ?

Proposed answer(s): *
The appropriate figures showing hub slope restrictions will be incorporated in the next revision of clause 11.

Answer from the MHD *(to be filled by MHD):*

Slope resctrictions are already contained in Annex A.

To be sent to EN 13445 Maintenance Help Desk secretariat:	EN 13445 MHD secretariat c/o UNM Standardization Office on behalf of AFNOR F 92038 Paris La Défense Cedex – France e-mail: en13445@unm.fr

* *Please note that question with proposed answers will be dealt with as priority.*

EN 13445 "Unfired pressure vessels" Maintenance Help Desk (MHD)
Question form

Request reference number *(to be filled by MHD):* **(2021)-03-04**				**Date: 2022-05-05**

Please fulfil the following

Part: EN 13445-3	Issue: 2021	Page 344-345	Subclause 15.5.3	National Standard Reference --

Subject:

Type of request: ☐ Technical clarification   ☐ Editorial correction

         X Technical comment   ☐ Translation correction

From :

Company: Titan Projects bv ....   e-mail: rsp@titanprojects.nl ....

Name: René Schildkamp..   phone: +31515548200 ....

Postal address: De Marne 53, 8701 PV Bolsward......

X Manufacturer   ☐ User   ☐ Other (please specify):

Question/comment:

The bending stresses formulas 15.5.3-4, 15.5.3-5, 15.5.3-6, 15.5.3-7, 15.5.3-8 and 15.5.3-9 gives as result the unit N/mm^3 instead of N/mm^2

Example formular15.5.3-4: (₅b)c=((P*e1*h^2)/(8*N*H*I1))*((K2-k1*k2)+a^2*k2*(K2-k2)) result x*N/mm^3

Proposed answer(s): *

I think this formular should be: (₅b)c=((P*e1*h^2)/(8*N*I1))*((K2-k1*k2)+a^2*k2*(K2-k2)) result x*N/mm^2

For the other formulas the same change. Leaf the length H out of the formulas

Answer from the MHD *(to be filled by MHD):*

CEN/TC 54/WG 53 agrees that the formulae are wrong. For a solution, see the answer to the question (2021)-03-05.

To be sent to EN 13445 Maintenance Help Desk secretariat:	EN 13445 MHD secretariat c/o UNM Standardization Office on behalf of AFNOR F 92038 Paris La Défense Cedex – France e-mail: en13445@unm.fr

* *Please note that question with proposed answers will be dealt with as priority.*

European Committee for Standardization
Comité Européen de Normalisation
Europaïsches Komitee für Normung

EN 13445 "Unfired pressure vessels" Maintenance Help Desk (MHD)
Question form

Request reference number *(to be filled by MHD):* **(2014)-04-05**	**Date: 2019-12-23**

Please fulfil the following

Part: EN 13445-4	Issue: 3	Page 20	Subclause 7.3 a)	National Standard Reference SS-EN 13445-4:2014

Subject:

Type of request: ☒ Technical clarification ☐ Editorial correction
☐ Technical comment ☐ Translation correction

From :
Company: Kiwa Inspecta AB ....
Name: Karin Velander ....
Postal address: P.O.Box 7178, 170 07 Solna ....

e-mail:karin.velander@kiwa.com ....
phone: +46104793509 ....

☐ Manufacturer ☐ User ☒ Other (please specify): Notified Body

Question/comment:

EN 13445-4 clause 7.3 a) state that:

For test plates on butt joints equal to or over 20 mm thickness a longitudinal weld tensile test having a minimum diameter equal to or over 6 mm shall be performed in accordance with EN ISO 5178:2011 and $R_{e/T}$, R_m and A_5 shall satisfy the specified minimum requirements of the base material or for weld consumables requirements in EN 13445-2:2014, 4.3.5 or other relevant values specifically taken into account in the design (e.g. austenitic filler metal in combination with 9 % Nickel steel).

Where the design temperature is higher than 300 °C then the test shall be done at the design temperature.

Question:

Shall the long weld tensile test be performed at design temperature only when the design temperature is higher than 300 °C?

Proposed answer(s): *

No, it shall satisfy the specified minimum requirements of $R_{e/T}$ and this value is the yield strength at the calculation temperature T, though the test shall be performed at the calculation temperature.

Answer from the MHD *(to be filled by MHD):*

This draft amendment EN 13445-4:2021/FprA1 under completion answers this MHD question.

To be sent to EN 13445 Maintenance Help Desk secretariat:	EN 13445 MHD secretariat c/o UNM Standardization Office on behalf of AFNOR F 92038 Paris La Défense Cedex – France e-mail: en13445@unm.fr

∗ *Please note that question with proposed answers will be dealt with as priority.*

EN 13445 "Unfired pressure vessels" Maintenance Help Desk (MHD)
Question form

Request reference number *(to be filled by MHD):* **(2014)-04-07**				**Date: 2021-02-03**

Please fulfil the following				
Part: EN 13445-4	Issue: 2014-V4-2017-07	Page 65	Subclause Annex C § C.5.5.1	National Standard Reference *NF EN 13445-4 V4*

Subject:

Type of request:	☒ Technical clarification	☐ Editorial correction
	☒ Technical comment	☐ Translation correction

From :
Company: APAVE ....
Name: Charles JARBOUI ....
Postal address: Immeuble Canopy – 6 Rue du Général Audran - CS 60123
92 412 COURBEVOIE Cedex
FRANCE

e-mail: charles.jarboui@apave.com ....
phone: +33 6 66 95 61 38 ....

☐ Manufacturer	☐ User	☒ Other (please specify): Notified Body

Question/comment:
The majority of the qualification standards for permanent joining personnel specify that the date of starting of validity period of the qualification must be based on the date of production of the qualification coupon.
Against this common general provision, EN 13445-4 Annex C § C.5.5.1 specifies that the validity of the approval of an expanding operator starts from the moment when all the required tests have been carried out and approved.
Can you please take the necessary steps to bring this specific feature up and correct it in Annex C of EN 13445-4 to make it consistent with the rule of all other qualification standards for personnel in charge of permanent joining? Or produce an interpretation for this item accordingly.
Indeed, this peculiarity creates difficulties in the processing and management of the qualifications of expanders according to this Annex C.
EN 13445-4 Annex C § C.5.5.1:
" **C.5.5 Period of validity**
C.5.5.1 Initial approval
The validity of an expansion operator approval begins at the date when all the required tests have been completed and have been approved……»

Proposed answer(s): *
We propose to use the same wording as provided by the harmonised standard EN ISO 9606-1 for the qualification of welders (see below).
Example of EN ISO 9606-1:
" **9 Period of validity**
9.1 Initial qualification
The welder's qualification begins from the date of welding of the test piece(s), provided that the required testing has been carried out and the test results obtained were acceptable…... »

Answer from the MHD *(to be filled by MHD):*

This technical issue to be considered. Clarification of the text is necessary. The proposed changes of this MHD question should be included into the Draft Amendment under development EN 13445-4:2021/prA2.

To be sent to EN 13445 Maintenance Help Desk secretariat:	EN 13445 MHD secretariat c/o UNM Standardization Office on behalf of AFNOR F 92038 Paris La Défense Cedex – France e-mail: en13445@unm.fr

* *Please note that question with proposed answers will be dealt with as priority.*