

**SLOVENSKI STANDARD**  
**SIST EN 13445-6:2014/A2:2019**

**01-januar-2019**

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**Neogrevane (nekurjene) tlačne posode - 6. del: Zahteve za konstruiranje in proizvodnjo tlačnih posod in tlačnih delov posode iz nodularne litine - Dopolnilo A2**

Unfired pressure vessels - Part 6: Requirements for the design and fabrication of pressure vessels and pressure parts constructed from spheroidal graphite cast iron

Unbefeuerte Druckbehälter - Teil 6: Anforderungen an die Konstruktion und Herstellung von Druckbehältern und Druckbehälterteilen aus Gusseisen mit Kugelgraphit  
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Récepteurs sous pression non soumis à la flamme - Partie 6 : Exigences pour la conception et la fabrication des récepteurs sous pression et des parties sous pression moulés en fonte à graphite sphéroïdal  
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**Ta slovenski standard je istoveten z:** **EN 13445-6:2014/A2:2018**

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**ICS:**

23.020.32	Tlačne posode	Pressure vessels
77.140.01	Železni in jekleni izdelki na splošno	Iron and steel products in general

**SIST EN 13445-6:2014/A2:2019**

**en,fr,de**

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 13445-6:2014/A2**

November 2018

ICS 23.020.30

English Version

**Unfired pressure vessels - Part 6: Requirements for the design and fabrication of pressure vessels and pressure parts constructed from spheroidal graphite cast iron**

Récepteurs sous pression non soumis à la flamme -  
Partie 6 : Exigences pour la conception et la fabrication  
des récepteurs sous pression et des parties sous  
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Unbefeuerte Druckbehälter - Teil 6: Anforderungen an  
die Konstruktion und Herstellung von Druckbehältern  
und Druckbehälterteilen aus Gusseisen mit  
Kugelgraphit

This amendment A2 modifies the European Standard EN 13445-6:2014; it was approved by CEN on 27 May 2018.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

**The STANDARD PREVIEW**

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This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

	Page
<b>European foreword.....</b>	<b>3</b>
<b>1 Modification to D.5, General.....</b>	<b>4</b>
<b>2 Modification to D.6.3, Fatigue design curves.....</b>	<b>4</b>
<b>3 Modification to D.7.4, Allowable number of cycles.....</b>	<b>4</b>
<b>4 Modifications to G.2.2, Cover thickness, pressure to convex side .....</b>	<b>4</b>
<b>5 Modification to G.2.3, Pressure to concave side.....</b>	<b>4</b>
<b>6 Modification to Annex ZA (informative), Relationship between this European Standard and the essential requirements of Directive 2014/68/EU aimed to be covered.....</b>	<b>5</b>

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## European foreword

This document (EN 13445-6:2014/A2:2018) has been prepared by Technical Committee CEN/TC 54 “Unfired pressure vessels”, the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2019, and conflicting national standards shall be withdrawn at the latest by May 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom. **(standards.iteh.ai)**

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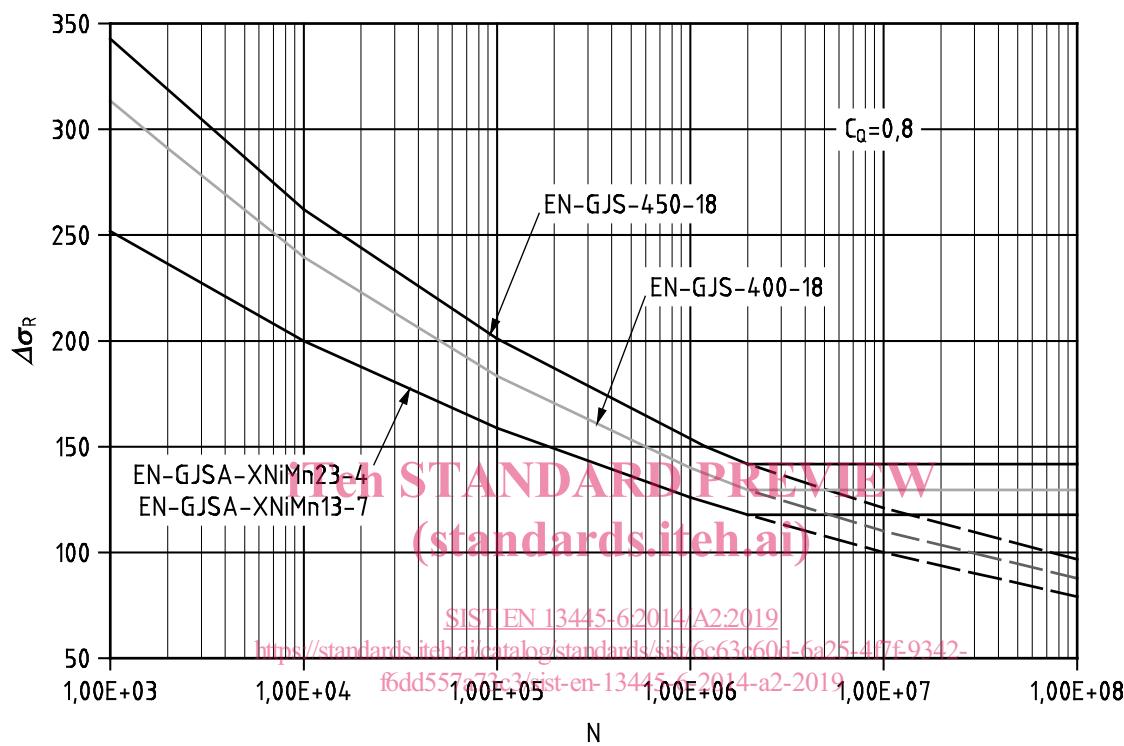
## 1 Modification to D.5, General

Delete the 1st sentence in Entry D.5.3.

## 2 Modification to D.6.3, Fatigue design curves

Replace the existing Figure D.1 with the following one:

“



## 3 Modification to D.7.4, Allowable number of cycles

Replace Formula (D.7-10) itself with " $N = \left( \frac{C_Q}{0,9} \cdot \frac{C_C}{\Delta\sigma^\bullet} \right)^{m_c}$ " (in which "m" is replaced with " $m_c$ ").

## 4 Modifications to G.2.2, Cover thickness, pressure to convex side

Replace the existing title itself with "Cover crown thickness, pressure to convex side".

Insert the following paragraph before Formula (G.2-1):

"If the pressure on the concave side is larger than on the convex side the thickness of the crown shall not be less than:".

## 5 Modification to G.2.3, Pressure to concave side

Replace the existing title itself with "Cover crown thickness, pressure to concave side".

## 6 Modification to Annex ZA (informative), Relationship between this European Standard and the essential requirements of Directive 2014/68/EU aimed to be covered

*Replace the whole Annex ZA with the following one:*

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## Annex ZA

(informative)

### **Relationship between this European Standard and the essential requirements of Directive 2014/68/EU (Pressure equipment Directive) aimed to be covered**

This European Standard has been prepared under a Commission's standardization request M/071 to provide one voluntary means of conforming to essential requirements of Directive 2014/68/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 15 May 2014 on the harmonization of the laws of the Member States relating to the making available on the market pressure equipment.

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

**Table ZA.1 — Correspondence between this European Standard and Annex I of Directive 2014/68/EU (Pressure equipment Directive)**

Essential Requirements of Directive 2014/68/EU	Clause(s)/subclause(s) of this EN	Remarks/Notes
2.2	5.2.2.1, 5.2.2.2	Design for adequate strength
2.2	4.1, 4.2, 5.2 <a href="https://standards.iteh.ai/catalog/standards/sist-en-13445-6-2014-a2-2019/f6dd557a73c3/sist-en-13445-6-2014-a2-2019">https://standards.iteh.ai/catalog/standards/sist-en-13445-6-2014-a2-2019/f6dd557a73c3/sist-en-13445-6-2014-a2-2019</a>	Calculation method
2.2.3	5.2.2.1.1, Annex D, Annex E, Annex G	Design by formula
2.2.3	5.2.2.1.2.2 indent 1), 2)	Design by analysis
2.2.2 - 2.2.4	5.2.2.1.2.3, Clause H.3	Design by experiment
2.2.2 - 2.2.4	Annex H	Experimental design method
3.1	5.2.2.6	Design review in relation to fabrication
3.1	H.3	Destructive testing
3.1.1	5.3.1, 5.3.2	Manufacturing procedures, appropriate techniques
3.1.3	7.1.6, 7.1.7, 7.1.8, 7.1.9	Non-destructive testing
3.1.5	9.1	Traceability
3.2.1	7.2.1	Final assessment
3.2.1	7.1.1, 7.1.2, 7.1.3	Testing
3.2.2	7.2.2	Final assessment, proof test
3.3	9.1, 9.2	Marking and labelling
3.4	9	Operating instructions
4.1	5.1, Annex A, 6.3, 6.4	Materials for pressurized parts