NSAI Standards

Irish Standard Recommendation
S.R. CEN/TR 16829:2016+AC:2019&&LC:2019

Fire and explosion prevention and protection for bucket elevators

S.R. CEN/TR 16829:2016+AC:2019&&LC:2019

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

S.R. CEN/TR 16829:2016+AC:2019&&LC:2019 is the adopted Irish version of the European Document CEN/TR 16829:2016+AC:2019, Fire and explosion prevention and protection for bucket elevators

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Correction Notice

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please include the following minor editorial correction(s) in the document related to:

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- ☒ English
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- ☐ PQ/UQ
- ☐ Enquiry
- ☐ 2nd Enquiry
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- ☐ 2nd Parallel Formal Vote
- ☐ UAP
- ☐ TC Approval
- ☐ 2nd TC Approval
- ☒ Publication
- ☐ Parallel Publication

It has been brought to our attention that this document, issued on 24 April 2019, requires modification.

The superseding information was adapted on the title page and in the European foreword.

Please find enclosed the updated English version.

We apologise for any inconvenience this may cause.

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TECHNICAL REPORT

RAPPORT TECHNIQUE

TECHNISCHER BERICHT

CEN/TR 16829:2016+AC

April 2019

ICS 13.220.40; 13.230; 53.040.10

Supersedes CEN/TR 16829:2016

English Version

Fire and explosion prevention and protection for bucket elevators

Prévention et protection contre l'incendie et l'explosion des élévateurs à godets

Brand- und Explosionsschutz für Becherwerke

This Technical Report was corrected and reissued by the CEN-CENELEC Management Centre on 26 June 2019.

This document consolidates CEN/TR 16829:2016 and the Corrigendum CEN/TR 16829:2016/AC:2019.

This Technical Report was approved by CEN on 13 July 2015. It has been drawn up by the Technical Committee CEN/TC 305.

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Ref. No. CEN/TR 16829:2016+AC:2019 E

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European foreword

This document (CEN/TR 16829:2016+AC:2019) has been prepared by Technical Committee CEN/TC 305 “Potentially explosive atmospheres – Explosion prevention and protection”, the secretariat of which is held by DIN.

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.

[AC> This document supersedes CEN/TR 16829:2016. <AC]

This document includes Corrigendum 1 issued by CEN on 24 April 2019.

The start and finish of text introduced or altered by corrigendum is indicated in the text by tags [AC> <AC].

1 Scope

This European Technical Report applies to bucket elevators that may handle combustible products capable of producing potentially explosive atmospheres of dust or powder inside the bucket elevator during its operation. The precautions to control ignition sources will also be relevant where the product in the bucket elevator creates a fire risk but not an explosion risk.

For the purposes of this report, a bucket elevator is defined as an item of bulk material handling equipment that carries material in powder form or as coarse products such as whole grain, wood chips or flakes, in a vertical direction by means of a continuous movement of open containers.

This Technical Report specifies the principles of and guidance for fire and explosion prevention and explosion protection for bucket elevators.

Prevention is based on the avoidance of effective ignition sources, either by the elimination of ignition sources or the detection of ignition sources.

Explosion protection is based on the application of explosion venting, explosion suppression or explosion containment and explosion isolation rules specifically adapted for bucket elevators. These specific rules may be based on agreed test methods.

This European Technical Report does not apply to products that do not require atmospheric oxygen for combustion.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

〚AC〉 EN 1127-1 〈AC〛, *Explosive atmospheres — Explosion prevention and protection — Part 1: Basic concepts and methodology*

EN 13237, *Potentially explosive atmospheres — Terms and definitions for equipment and protective systems intended for use in potentially explosive atmospheres*

EN 13463-1, *Non-electrical equipment for use in potentially explosive atmospheres — Part 1: Basic method and requirements*

EN 13463-5, *Non-electrical equipment intended for use in potentially explosive atmospheres — Part 5: Protection by constructional safety 'c'*

EN 13463-6, *Non-electrical equipment for use in potentially explosive atmospheres — Part 6: Protection by control of ignition source 'b'*

EN 14373, *Explosion suppression systems*

EN 14460, *Explosion resistant equipment*

EN 14797, *Explosion venting devices*

EN 14491, *Dust explosion venting protective systems*

EN 15089, *Explosion isolation systems*

EN ISO 12100, *Safety of machinery — General principles for design — Risk assessment and risk reduction (ISO 12100)*