**INTERNATIONAL ELECTROTECHNICAL COMMISSION (IEC) SYSTEM FOR CERTIFICATION TO STANDARDS RELATING TO EQUIPMENT FOR USE IN EXPLOSIVE ATMOSPHERES (IECEx SYSTEM)**

**Title: ExTAG/630A/CD – Revised Draft ExTAG Decision Sheet - Routine overpressure test for enclosures with cemented joints and with volumes less than or equal to 10 cm3**

**Circulated to: ExTAG – IECEx Testing and Assessment Group**

**INTRODUCTION**

This document, *ExTAG/630A/CD* *Draft ExTAG Decision Sheet - Routine overpressure test for enclosures with cemented joints and with volumes less than or equal to 10 cm3* has been prepared for consideration by ExTAG.

This revised version of the document has been prepared to take into account editorial changes which are highlighted in yellow.

In accordance with OD 035 this document is issued for a six week comment period.

Please submit comments on this new Draft DS using the comments table, a separate document, by –

**202012 02**

to

**Christine Kane**

ExTAG Secretariat

|  |
| --- |
| **Address:****IECEx Secretariat****Level 33 Australia Square****264 George Street****Sydney NSW 2000****Australia****Web:** [**www.iecex.com**](file://C:\Users\christine.kane\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\christine.kane\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\christine.kane\AppData\Local\Microsoft\Windows\christine.kane\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\AppData\Local\Users\horn02\AppData\Local\christine.kane\AppData\Local\Microsoft\christine.kane\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Christine.Kane\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\AppData\Local\jugauthier\AppData\Local\Temp\notesC9812B\www.iecex.com) |

COLLECTION OF IECEx / ExTAG DECISIONS

|  |  |  |
| --- | --- | --- |
| Standard: IEC 60079-1:2014IEC 60079-1:2007 | **Clauses:** 6.1.2 16.2 |  |
| **Subject:** Routine overpressure test for enclosures with cemented joints and with volumes less than or equal to 10 cm3**Status of document:** Draft | **Key words:** **-** Cemented joints- Overpressure test | Date: **October 2020****Originator of proposal:**PCEC |

**Background:**

It is stated in Clause 6.1.2 of IEC 60079-1:2014 that,

Routine overpressure testing of cemented joints (per Clause 16) shall be performed whenever 1,5 times or 3 times the reference pressure is necessary to comply with 6.1.2.

The above content is an extension ~~compare~~ to IEC 60079-1:2007.

Also it is stated in Clause 16.2 of IEC 60079-1:2014 that,

For enclosures that do not incorporate welded constructions, routine overpressure tests are not required under either of the following conditions:

– for volumes less than or equal to 10 cm3; or

– for volumes greater than 10 cm3, and when the prescribed type test has been made at a static pressure equal to four times the reference pressure.

It seems that these two Clauses are inconsistent. Different person has different opinions. So it’s necessary to be clarified.

**QUESTION:**

For enclosures with cemented joints and with volumes less than or equal to 10 cm3, should routine overpressure tests be carried out?

**ANSWER:**

No.

Although routine overpressure tests of cemented joints (per Clause 16) shall be performed whenever 1,5 times or 3 times the reference pressure, as stated in Clause 6.1.2 of IEC 60079-1:2014, Clause 16.2 of IEC 60079-1:2014 is an exception to an enclosure requiring routine test, if the volume of the enclosure is less than or equal to 10 cm3.