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

**Title: ExTAG/674A/CD** – **Revised** **Draft ExTAG Decision Sheet –** **The number of impact test conducted on the equipment**

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

**INTRODUCTION**

This document, ExTAG/674A/CD – Revised Draft ExTAG Decision Sheet – The number of impact test conducted on the equipment has been prepared by CQM, CN, and is issued for consideration by the ExTAG during the 2022 ExTAG Remote Meeting.

This revised version of the document has been prepared to take into account comments received on ExTAG/674/CD, and contained in ExTAG/690/CC

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**COLLECTION OF IECEx / ExTAG DECISIONS**

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| Standard:  IEC 60079-0:2017 | **Clauses:**  26.4.2 | **Draft Decision Sheet:**  ExTAG/674A/CD |
| **Subject:**  The number of impact conducted on one sample  **Status of document:**  Draft | **Key words:**   * Glass Window * Fan hood * Cable Gland | Date: August 2022 **Originator of proposal:**  CQM  **TC/SC involved:**  IEC/SC 31M WG 1 |

**BACKGROUND:**

The requirements of impact test have been given in IEC 60079-0:2017 clause 26.4.2

“*The test shall be made on at least two samples of the equipment, see 26.4.1. The test shall*

*be made at two separate places on each sample. For equipment with light-transmitting parts*

*made of glass, only one of those two tests shall be on the glass*.”

IEC 60079-0:2017 clause 17.2.3.2 describes additional requirement of impact on the fans, fan hoods and ventilation screen.

“*The fans, fan hoods and ventilation screens shall be constructed to meet the requirements of the resistance to impact test according to 26.4.2 and the acceptance criteria given in 26.4.4.*”

IEC 60079-0:2017 clause A.3.3 describes impact on the cable gland.

“ *For the tests of 26.4.2, each type and size of cable gland shall be tested with the smallest mandrel or smallest cable size fitted*.”

**QUESTION:**

For an equipment with metallic housing, fan hoods, integrated cable gland and incorporating glass window without cemented joint at the meantime, how many impact is required to comply with clause 26.4.2 of IEC 60079-0:2017?

**ANSWER:**

A minimum of four impact locations per sample are required. The housing, the glass window, the fan hood, and the integrated cable gland shall be impacted to comply with Table 15 and Clauses 26.4.2 and 17.2.3.2 in IEC 60079-0:2017.

Attention is drawn to the seventh paragraph of Clause 26.4.2, which states “for equipment with multiple materials or areas of concern, more than two samples or impact sites may need to be considered to adequately evaluate the impact resistance of the equipment.”

If impacts on some sites are omitted, the record of justification for those omitted shall be made.