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Gas welding equipment — Decomposition blockers for high-pressure acetylene

Matériel de soudage aux gaz — Bloqueurs de décomposition pour l'acétylène haute pression

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Foreword

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This document was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 8, *Equipment for gas welding, cutting and allied processes*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html. Official interpretations of ISO/TC 44 documents, where they exist, are available from this page: https://committee.iso.org/sites/tc44/home/interpretation.html.

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Gas welding equipment — Decomposition blockers for high-pressure acetylene

1 Scope

This document establishes the general specifications, requirements and tests for decomposition blockers located on the high-pressure side in battery vehicles and gas containers as defined in EN 13807 or in acetylene bundles as defined in ISO 10961.

NOTE 1 The terms “upstream” and “downstream” refer to the normal direction of gas flow in the decomposition blocker. 1 bar = 0,1 MPa = 10^5 Pa; 1 Pa = 1 N/m^2. All pressures are expressed in gauge pressures.

NOTE 2 This document can be used as a guideline for decomposition blocker for filling centre application.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 9090, *Gas tightness of equipment for gas welding and allied processes*

ISO 9539, *Gas welding equipment — Materials for equipment used in gas welding, cutting and allied processes*

ISO 10225, *Gas welding equipment — Marking for equipment used for gas welding, cutting and allied processes*

ISO 15615, *Gas welding equipment — Acetylene manifold systems for welding, cutting and allied processes — Safety requirements in high-pressure devices*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

3.1
asymmetric decomposition blocker for high-pressure acetylene
safety device that stops acetylene decomposition at a pressure of ≤ 2,5 MPa (25 bar) from one side

Note 1 to entry: The decomposition blocker for high-pressure acetylene may optionally comprise other safety elements such as non-return valve or automatic quick-acting shut-off device (see ISO 15615).

3.2
symmetric decomposition blocker for high-pressure acetylene
safety device that stops acetylene decomposition at a pressure of ≤ 2,5 MPa (25 bar) from two sides

Note 1 to entry: The decomposition blocker for high-pressure acetylene may optionally comprise other safety elements such as non-return valve or automatic quick-acting shut-off device (see ISO 15615).

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