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Periodic inspection of individual gas cylinders in MEGCs

Transmitted by the European Industrial Gases Association (EIGA)

Introduction

The expert from Sweden has request an interpretation regarding the periodic inspection of MEGCs, and to assist in the discussion EIGA has prepared the following: Swedish Paper ECE/TRANS/WP.15/AC.1/2014/22

Please note the reference in the Swedish paper should be to 6.2.1.6. and not to 6.2.6.1.

In the opinion of EIGA the requirements in RID/ADR concerning the testing of MEGCs and Battery Vehicles are quite clear.

- 6.7.5.12.4 The elements and the piping shall be tested at the periodicity specified in packing instruction P200 and in accordance with the provisions described in 6.2.1.6....
- 6.8.3.4.13 The elements and the piping shall be tested at the periodicity defined in packing instruction P200 of 4.1.4.1 and in accordance with the requirements of 6.2.1.6 and 6.2.3.5 respectively. ...

The term "**The elements**" being in the plural, infers its application to all of the elements in a MEGC or Battery Vehicle i.e. all the cylinders.

- **6.2.1.6 Periodic inspection and test** and the notes to **6.2.1.6.1** allow other methods than those involving a hydraulic test which if used negate the use of water and the subsequent requirement to dry the cylinders out.
- **NOTE 1:** With the agreement of the competent authority, the hydraulic pressure test may be replaced by a test using a gas, where such an operation does not entail any danger.
- **NOTE 2:** With the agreement of the competent authority, the hydraulic pressure test of cylinders or tubes may be replaced by an equivalent method based on acoustic emission testing or a combination of acoustic emission testing and ultrasonic examination.

ISO 16148:2006 may be used as a guide for acoustic emission testing procedures.

NOTE 3: The hydraulic pressure test may be replaced by ultrasonic examination carried out in accordance with ISO 10461:2005+A1:2006 for seamless aluminium alloy gas cylinders and in accordance with ISO 6406:2005 for seamless steel gas cylinders.

Therefore in the opinion of EIGA there is a requirement to test each individual element of a MEGC but there are alternative test methods to that of the hydraulic test that may be used.

