Amendment to ECE/TRANS/WP.15/AC.1/2022/8 on the Note related to EN ISO 18119:2018 in 6.2.3.5.1 and 6.2.4.2 of the ADR

Transmitted by the European Industrial Gases Association (EIGA)

Introduction

1. Based on the feedback from some delegations, few clarifications are proposed on the intend of the Notes. In particular the accuracy of the ultrasonic device has been taken into account.

2. EIGA is seeking comments from the delegates.

Proposal

3. New text is shown underlined.

   6.2.3.5.1  NOTE 3: Amend the final sentence as follows.

   "Notwithstanding clause B.1 of this standard, all cylinders and tubes whose measured wall thickness is less more than 0.1 mm below the minimum design wall thickness, shall be rejected."

   6.2.4.2  Entry in the table for EN ISO 18119:2018: Amend the NOTE in Column 2 as follows.

   NOTE: "Notwithstanding clause B.1 of this standard, all cylinders and tubes whose measured wall thickness is less more than 0.1 mm below the minimum design wall thickness, shall be rejected."

Justification

4. All measurement equipment has a tolerance of the measured value. For ultrasonic probes this tolerance is given with absolute 0.1mm.

5. Additional testing data is provided in ISO/TR 22694, see section 5. This Technical Report demonstrates that a wall thickness reduction of 5% is acceptable and does not affect the mechanical integrity of the cylinder.

6. All standards on ultrasonic equipment and methodologies refer to EN 1968, ISO 6406 and EN ISO 18119 and these refer to the accuracy of the system of +/- 5% when measuring wall thickness of steel and aluminium alloy cylinders. For a given typical wall thickness of 5mm the 0.1mm represent only 2% of the wall thickness. The proposed deviation of 0.1mm is a conservative approach, which are within the accuracy of the system.
Safety Impact

7. EIGA maintain since nearly 100 years a data base of incidents in our industry from which our members can learn and act and are the basis for our industry standards.

8. Safety is the most important objective for all EIGA members.

9. EIGA contributed to the ISO/TR 22694 with destructive tests (burst and pressure cycle tests) to verify that the acceptable defects do not result in unsafe packages.