

## Economic Commission for Europe

### Inland Transport Committee

#### Working Party on the Transport of Dangerous Goods

Joint Meeting of the RID Committee of Experts and the  
Working Party on the Transport of Dangerous Goods

9 August 2021

Geneva, 21 September – 1 October 2021

Item 5 (a) of the provisional agenda

Proposals for amendments to RID/ADR/ADN:  
pending issues

### Amendment to the note limiting the application of EN ISO 18119 :2018

Transmitted by the European Industrial Gases Association (EIGA)

#### Introduction

1. At the Joint Meeting held in September 2020 EIGA introduced its document ECE/TRANS/WP.15/AC.1/2020/63 requesting that the note which appear in the reference to EN ISO 18119:2018 should be deleted. The European Cylinder Manufacturers Association submitted document INF.50 arguing that the note should be retained. EIGA supplemented its case by a further explanation in INF.51.

2. The note appears in 6.2.4.2 in the reference to EN ISO 18119 and is as follows:

*NOTE: Notwithstanding clause B.1 of this standard, all cylinders and tubes whose wall thickness is less than the minimum design wall thickness shall be rejected.*

This sentence is also written in 6.2.3.1.5 **NOTE 3**. Annex B1 allows the wall thickness which is discovered at periodic inspection to be less than the design minimum to be evaluated and passed as safe for further service if it meets the criteria specified in the Annex. The Working Group on Standards took the view that the practice which had been observed in Contracting Members/Parties hitherto of rejecting pressure receptacles with wall thicknesses below the minimum was a sound and practical rule which should continue to be observed. It therefore recommended to the Joint Meeting that the above note should be added to the reference.

3. The discussion of EIGA's proposal at the Joint Meeting also considered the document INF.50 from the European Cylinder Makers Association (ECMA) which supported retaining the Note. The report of the discussion was as follows:

“Several delegates did not support the proposal to remove in 6.2.3.5.1 the last sentence of Note 3. Others raised the concern that it was too premature to adopt the proposal and felt that additional information was necessary (e.g. training of inspectors) before taking a decision. The representative of EIGA announced to further exchange views with the delegations and to prepare an updated document for the next session.”

#### Progress and future work

4. EIGA members have adopted ultrasonic inspection which gives a complete inspection of seamless cylinders and tubes and automatically rejects wall thicknesses less than the minimum. The result is that more cylinders and tubes are rejected than would occur if visual inspection was employed because ultrasonic inspection finds minor thickness variations such as isolated pits that would be either unnoticed or recognised as too small to be unsafe.

5. Industry sponsored research work backed up by extensive testing which resulted in the publication of ISO TR 22694:2008 *Gas cylinders. Methods for establishing acceptance/rejection criteria for flaws in seamless steel and aluminium alloy cylinders at time of periodic inspection and testing*. This work was used in the development of Annex B of ISO 18119:2018.

6. There is clearly a strong economic and environmental need to avoid scrapping safe cylinders and the work described above shows that savings would be significant. EIGA is working with experts from members, manufacturers and other interested parties to see if some compromise solution can be agreed to enable some relaxation of a strict rule on wall thickness and which would be practical and not involve extensive retraining of inspectors.

7. These discussions are ongoing and we hope to present the outcome at the next meeting.

---