

Continued Use and Retesting of Bundles of Cylinders not Constructed to EN or EN ISO Standards

Background

Until 2003 there was no European Standard for bundles of cylinders, the only standard was a German Standard, TRG 370. In 2003 EN 13769 *Transportable gas cylinders – Cylinder bundles – Design, manufacture, identification and testing* was published, and this was the first European design standard for bundles of cylinders, and this eventually has developed into EN ISO 10961 *Gas cylinders. Cylinder bundles. Design, manufacture, testing and inspection*.

In 2005 EN 13769 was introduced into the RID/ADR as a requirement for the construction of new bundles of cylinders. Prior to the introduction of EN 13769, the requirements for bundles of cylinders were detailed in the RID/ADR. It should be noted that bundles of cylinders are considered as pressure receptacles in RID/ADR.

Due to the long life of bundles of cylinders, (and other pressure receptacles) there are bundles of cylinders in use that were not constructed to either an EN or an EN ISO standard.

Bundles of cylinders not constructed to EN or EN ISO standards were designed and manufactured to a company standard and drawings that were in accordance to the requirements of ADR prevailing at the time. These bundles of cylinders have proven to be safe in service and like all bundles of cylinders are subject to pre-fill and filling inspections in accordance with a number of standards that are referenced in ADR, including:

- EN 13365 *Transportable gas cylinders – Cylinder bundles for permanent and liquefied gases (excluding acetylene) – Inspection at the time of filling;*
- ISO 11755 *Gas cylinders – Cylinder bundles for compressed and liquefied gases (excluding acetylene) – Inspection at time of filling;* and
- EN ISO 13088 *Gas cylinders – Acetylene cylinder bundles – Filling conditions and filling inspection.*

For the periodic inspection and test of bundles of cylinders, EN 15888 *Transportable gas cylinders - Cylinder bundles - Periodic inspection and testing*¹ is applicable.

The marking of bundles of cylinders have been raised a number of times at the RID/ADR Joint Meeting and particularly what design standard should be stamped on the name plate.

EIGA has sought on a number of occasions to clarify the marking of bundles of cylinders. This has now been clarified by the text in see 6.2.2.7, together with transitional measures in 1.6.2 of RID/ADR.

¹ EN 15888 *Transportable gas cylinders - Cylinder bundles - Periodic inspection and testing* will be superseded by EN ISO 20475: *Gas cylinders. Cylinder bundles. Periodic inspection and testing*.

1.6.2.13 *Bundles of cylinders manufactured before 1 July 2013 which are not marked in accordance with 6.2.3.9.7.2 and 6.2.3.9.7.3 applicable from 1 January 2013 or 6.2.3.9.7.2 applicable from 1 January 2015 may be used until the next periodic inspection after 1 July 2015.*

1.6.2.15 *Bundles of cylinders periodically inspected before 1 July 2015 which are not marked in accordance with 6.2.3.9.7.3 applicable from 1 January 2015 may be used until the next periodic inspection after 1 July 2015.*

Further clarification was sought at the Joint Meeting on what design standard should be marked on bundles of cylinders built before EN 13769 was published or became mandatory in RID/ADR.

The specific interpretation EIGA requested in ECE/TRANS/WP.15/AC.1/2017/15 (EIGA) was:

“The Joint Meeting is asked to confirm that the technical standard that should be marked on the bundle frame at the time of the periodic inspection and test is the original technical standard used for design, manufacture and testing. EN ISO 10961 or EN 13769 should only be marked when one of these standards was used for the type approval of the bundle of cylinders.”

The report of the Joint Meeting, (ECE/TRANS/WP.15/AC.1/146) stated:

“The Joint Meeting confirmed the interpretation of EIGA according to which the technical standard to be marked on the bundle of cylinders at the time of checks and periodic testing is the original technical standard used for design, manufacture and testing.”

Based on the text of RID/ADR and the reports of the Joint Meeting the summary for the use and marking of bundles of cylinders, not constructed to EN or EN ISO Standards is:

- 1) These bundles of cylinders may continue in use without the need to be modified and reassessed to meet the requirements of EN 13769 provided they met the requirements of the regulations applicable at the time of their original manufacture.**
- 2) Retested bundles of cylinders, including both those that were manufactured to EN, EN ISO and other design standards or company specifications are required to be marked in accordance with the requirements of RID/ADR at their next periodic inspection and test.**

In addition, 1.6.2.1 should be noted:

Receptacles built before 1 January 1997 and which do not conform to the requirements of ADR applicable as from 1 January 1997, but the carriage of which was permitted under the requirements of ADR applicable up to 31 December 1996, may continue to be transported after that date if the periodic test requirements in packing instructions P200 and P203 are complied with.

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