



U.S. Department  
of Transportation

**Pipeline and Hazardous  
Materials Safety  
Administration**

1200 New Jersey Avenue, SE  
Washington, DC 20590

SEP 26 2017

Chris Adams  
Manager, Regulatory Affairs  
FIBA Technologies, Inc.  
53 Ayer Road  
Littleton, MA 01406

Reference No. 17-0056

Dear Mr. Adams:

This letter is in response to your May 25, 2017, letter requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to the repair of seamless DOT 3-series specification cylinders. You describe a scenario in which a DOT 3AAX specification cylinder was not equipped with external neck threads at the time of manufacture. You ask if the cylinder may be threaded with external threads and be considered a "re-threaded" repair under the provisions of § 180.212(b)(2), and therefore not require prior approval.

The answer is no. The provisions of § 180.212(b)(2) apply only to cylinders already machined with threads. If a person wishes to machine external threads on a cylinder originally manufactured without external threads, the work must be done in accordance with § 180.212(a), which requires an approval under Part 107, Subpart H.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

Dirk Der Kinderen  
Chief, Standards Development Branch  
Standards and Rulemaking Division

Ciccarone  
§ 180.212(b)(2)  
Cylinders  
17-0056

**Dodd, Alice (PHMSA)**

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**From:** INFOCNTR (PHMSA)  
**Sent:** Friday, May 26, 2017 3:23 PM  
**To:** Hazmat Interps  
**Subject:** FW: FIBA Request for Letter of Interpretation Regarding 49 CFR 180.212(b)(2)  
**Attachments:** FIBA Request for Letter of Interpretation Regarding 49 CFR 180.212(b)(2) - Re-threading.pdf

Hi Shante/Alice,

Please submit this as a letter of interpretation. Mr. Adam's full contact information is in the attachment.

Please let me know if you have any questions.

Thanks,  
Jordan

**From:** Chris Adams [mailto:ChrisAdams@fibatech.com]  
**Sent:** Thursday, May 25, 2017 2:56 PM  
**To:** INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov>  
**Subject:** FIBA Request for Letter of Interpretation Regarding 49 CFR 180.212(b)(2)

To Whom It May Concern:

Please find attached correspondence from FIBA Technologies, Inc. regarding a question for which we are seeking a letter of interpretation from the U.S. DOT. Can you please confirm receipt of this letter? Please don't hesitate to contact me if you have any questions. Thank you.

Christopher R. Adams  
Manager, Regulatory Affairs  
FIBA Technologies, Inc.



**FIBA TECHNOLOGIES, INC.**  
53 Ayer Road  
Littleton, MA 01406 USA  
TEL (508) 887-7100  
<http://www.fibatech.com>

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May 25, 2017

E-Mail

ATTN: Hazardous Materials Information Center

[infocntr@dot.gov](mailto:infocntr@dot.gov)

SUBJECT: Letter of Interpretation

REF: 49 CFR § 180.212(b)(2)

To Whom It May Concern:

In accordance with 49 CFR § 105.20(2), I am writing to you seeking guidance regarding the above referenced citation from Title 49 of the Code of Federal Regulations. 49 CFR § 180.212 (see Exhibit A) relates to Repair of seamless DOT 3-series specification cylinders and seamless UN pressure receptacles. 49 CFR § 180.212(b) relates to Repairs not requiring prior approval. Finally, 49 CFR § 180.212(b)(2) relates to the External re-threading of DOT 3AX, 3AAX or 3T specification cylinders (a.k.a. tubes). It is this specific citation, 49 CFR § 180.212(b)(2), for which we seek an interpretation.

While it is a relatively unusual occurrence, there are older, 3AAX specification cylinders (see photo # 1 in Exhibit B) that by their design at time of manufacture were not equipped with external neck threads. The vast majority of these cylinders were manufactured in the 1960's. The method of securing these tubes to a semitrailer was by using a combination of a flange without threads, a pair of indentations in the wall of the tube neck (see photo # 2 in Exhibit B), and two (2) set screws that are threaded through the mounting flange in a radial direction and tightened against the tube neck to prevent rotation. This method has mostly been abandoned by tube trailer manufacturers, owners and operators in favor of a threaded tube neck, a threaded flange and anti-rotation pins, which will provide a more secure connection.

For this reason, customers of FIBA Technologies, Inc. (FIBA) are asking FIBA to machine threads to the OD surface of the tube necks that have not had threads applied since the day they were manufactured. We feel that it is appropriate to do this under the regulations found in 49 CFR § 180.212(b)(2) despite it being a threading process, rather than a re-threading process. We are confident that the machining of threads to these cylinders will not increase risk to safety or property. In fact, it will reduce risk.



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53 Ayer Road  
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FIBA Technologies, Inc.  
Interpretation Request Pertaining to 49 CFR § 180.212(b)(2)

FIBA is not asking for any deviation from the requirements of 49 CFR § 180.212(b)(2). We consider the addition of the threads to be a repair of a seamless DOT 3-series specification cylinder. We expect that, like FIBA, only a cylinder manufacturer of these types of cylinders can perform the threading. The repair work shall be performed under the supervision of an independent inspection agency and, upon completion of the threading, the threads will be gauged in accordance with Federal Standard H-28 or an equivalent standard containing the same specification limits. Finally, the threaded cylinder will be stamped clearly and legibly with the words "RETHREAD" on the shoulder, top head, or neck. Given these conditions, FIBA is not seeking a special permit, as it is not appropriate to do so.

Given the above information, FIBA seeks from the DOT a letter of interpretation that confirms that this threading of old tubes (as described above) originally manufactured without threads is equivalent to re-threading old tubes that were originally manufactured with threads. Phrased as a question, we ask the DOT to respond to the following:

Q. Does the U.S. DOT agree that machining external threads on DOT 3-series specification cylinders (tubes) that were not threaded at time of manufacture is a repair process provided the threading is performed in accordance with the regulations found in 49 CFR § 180.212(b)(2)?

Thank you in advance for your attention to this matter. Please do not hesitate to contact me if you have any questions or need any additional information.

Sincerely yours,

Christopher R. Adams  
Manager, Regulatory Affairs  
FIBA Technologies, Inc.

## EXHIBIT A

### 49 CFR § 180.212(b)(2)

**§180.212** Repair of seamless DOT 3-series specification cylinders and seamless UN pressure receptacles. (a) **General requirements for repair of DOT 3-series cylinders and UN pressure receptacles.** (1) No person may repair a DOT 3-series cylinder or a seamless UN pressure receptacle unless—

- (i) The repair facility holds an approval issued under the provisions in §107.805 of this chapter; and
- (ii) Except as provided in paragraph (b) of this section, the repair and the inspection is performed under the provisions of an approval issued under subpart H of Part 107 of this chapter and conform to the applicable cylinder specification or ISO standard contained in part 178 of this chapter.

(2) The person performing the repair must prepare a report containing, at a minimum, the results prescribed in §180.215.

(b) **Repairs not requiring prior approval.** Approval is not required for the following specific repairs:

(1) The removal and replacement of a neck ring or foot ring on a DOT 3A, 3AA or 3B cylinder or a UN pressure receptacle that does not affect a pressure part of the cylinder when the repair is performed by a repair facility or a cylinder manufacturer of these types of cylinders. The repair may be made by welding or brazing in conformance with the original specification. After removal and before replacement, the cylinder must be visually inspected and any defective cylinder must be rejected. The heat treatment, testing and inspection of the repair must be performed under the supervision of an inspector and must be performed in accordance with the original specification.

(2) External re-threading of DOT 3AX, 3AAX or 3T specification cylinders or a UN pressure receptacle mounted in a MEGC; or the internal re-threading of a DOT-3 series cylinder or a seamless UN pressure receptacle when performed by a cylinder manufacturer of these types of cylinders. The repair work must be performed under the supervision of an independent inspection agency. Upon completion of the re-threading, the threads must be gauged in accordance with Federal Standard H-28 or an equivalent standard containing the same specification limits. The re-threaded cylinder must be stamped clearly and legibly with the words "RETHREAD" on the shoulder, top head, or neck. No DOT specification cylinder or UN cylinder may be re-threaded more than one time without approval of the Associate Administrator.

## EXHIBIT B

### PHOTOS OF 3AAX CYLINDERS WITHOUT EXTERNAL NECK THREADS



1] ICC/DOT Specification 3AAX



2] Tube Secured by Set Screws