

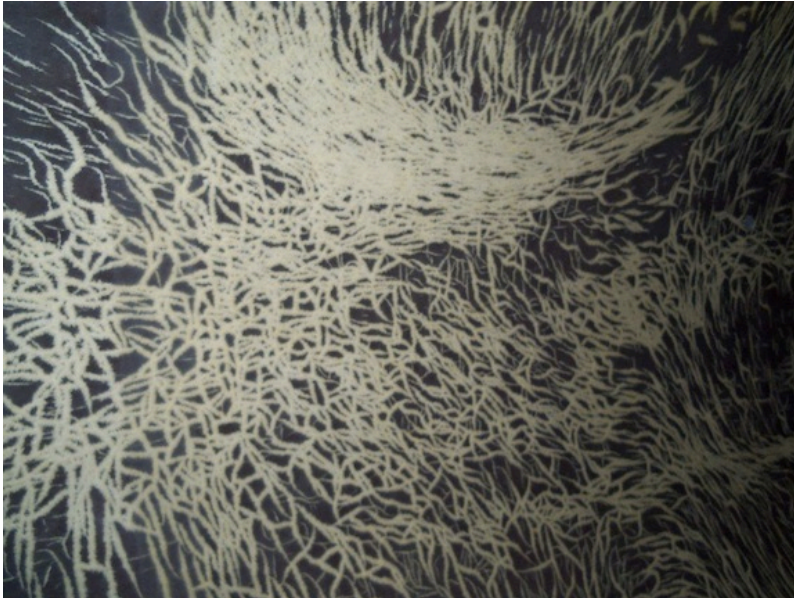
The Corrosion Report

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Provided by: Corrosion Shield Inc. CT 12872

Cargo Tanker Motor Vehicle Newsletter

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Liner/Corrosion Barrier Inspections

GFRP/FRP and fiberglass lined steel cargo tanker motor vehicles have various liners and or corrosion Barriers to protect the structure from degradation. Each of these are and can be different. Consult the data plate and Special Permit for the cargo tanker you are working on and consult the manufacturer or CSI (Corrosion Shield) for questions on these permits.

Cargo Tankers 102-Liners

This issue of the Corrosion Report, I am discussing the inspection of the Liner or Corrosion Barrier. The picture above shows liner fractures from cyclic pressure. All of the Special Permit cargo tankers have liners/corrosion barriers, which require annual inspection of the internal to confirm the rate of degradation and depth of corrosion into this liner, per DOT 180.407 (f).

It is important for you to do a thorough inspection of all openings and manways, which require removal of **ALL** vents, outlet piping, pressure or vacuum vents and the like. 100% of all external items need to be removed in order to do a correct inspection of the lining. Review the list to the right for the steps involved in this inspection.

This information is my interpretation of the requirements and code for DOT 180.407. Consult this code for accuracy and interpretations email office@csicomposites.com for additional questions or comments

Minimum Recommended Items

Recommended action list for liner degradation determinations

1. Review the special permit of the manufacturer.
2. Inspect the fractures, blisters, delaminations for depth of corrosion with a pit gauge or micrometer.
3. Log the depth of fracture, and estimate the time of use to the existing fracture depth and record.
4. Photograph the areas of concern as well as areas that are in good condition.
5. Estimate the remaining life left of the liner/corrosion barrier.
6. Make sure to reline when there is still 10-20% of the liner left so good bond substrate will exist.

Additionally Recommended

DOT/ NTTC training seminar on Cargo tank testing and inspection courses as required. Please visit www.phmsa.dot.gov and www.tanktruck.org