

# PolyGard™ FAQ's

#### How long has PPC been lining steel vessels?

We've got over 20 years of experience with PolyGard™ and have 10,000+ successes in global services.

### In what applications would you use PolyGard™?

We have lined chemical transport trailers, offshore transport vessels which have met DOT/US Coast Guard requirements, process tanks for the chemical industry and large diameter pipe.

### What chemicals are compatible with PolyGard™?

Because PolyGard™ is modified thermoplastic polyethylene, the broad chemical resistance is equivalent to HDXLPE or HDPE.

### What is the life expectancy of PolyGard™?

Our customers report a significantly longer life when compared to Tnemec, rubber or epoxy linings. We have yet to experience a field failure.

#### How thick is this liner material?

14"; 4x the thickness of traditional spray-in liners and coatings.

#### • Is PolyGard™ impact resistant?

All polyethylenes have very good impact resistance. A ¼" PolyGard™ sample exceeds 150 ft-lbs @ -40° F impact. Most competing liners are NOT impact resistant and are known to be brittle.

#### What are the temperature limitations?

-40° F to 170° F depending on the application. Themec Series 120 Vinyl-Ester liners are limited 100° F to 120° F.

## What are the PolyGard™ limitations as to pressure and vacuum?

Pressure limitations are in accordance with the pressure rating of the steel vessel. The resin suppliers have not developed any data pertaining to vacuum nor do any of our customers pull a vacuum during their operations. As a note, polyethylene tanks, without the steel shell, have a vacuum rating of .25 psi.

## Do you have special requirements for the steel tank before you apply PolyGard™?

Yes we do. In fact, we have a written specification that addresses Tank Identification, Steel Tank Preparation, Radii Requirements, Lining Tolerances, Testing Procedures and Inspection Procedures.

## How many nozzles can I have on my tank?

The number of nozzles is limited to their proximity to one another. In order to apply PolyGard™ to the flange face, PPC places a special "cap" around the flange. If the proximity of the flanges is too close, special considerations must be made. PPC's customer service and design personnel will be glad to assist your engineers in reviewing nozzle locations.

#### What is the smallest outlet size available?

Our recommendation for the smallest outlet size is 2". Remember, the PolyGard™ system has a ¼" nominal thickness thus <u>reducing</u> your outlet diameter by ½", so remember to adjust your nozzle size to provide adequate flow rates.

## Can my vessel have threaded nozzles?

No, all nozzles must be flanged.

## Are there any size or weight limitations?

Yes. The steel vessel cannot exceed 230" (19' 2") on the diagonal and cannot weigh more than 10,000 lbs.

### Can PolyGard™ be repaired?

This product is designed to "bond" to the steel vessel, so the size of the damaged area becomes restrictive. Diameters up to 1" are repaired easily; however, larger areas require special attention. PPC personnel will gladly assist in the unlikely event of an issue.

# What is the PolyGard™ warranty?

1 year