



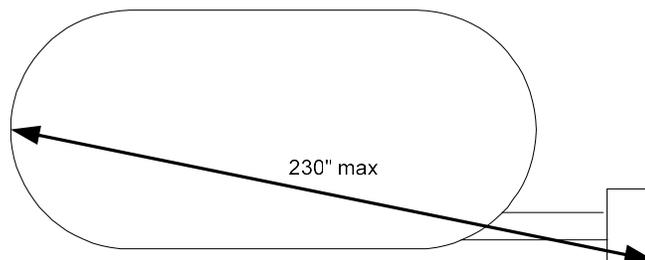
## Specification for Steel Tank Lining Using MRSP010

### Tank Design:

Maximum steel tank weight is 10,000 lbs.

Tank basic configuration must be cylindrical with domed heads. Optimum configuration is spherical.

Maximum steel tank dimension in any direction is 230-inches including any nozzle projection.



*Tank configuration and dimensions must be approved by Poly Processing before order is accepted.*

Tanks must have welded-on lifting lugs accommodating 1-inch shackles.

Radii within the tank and on flanges must be a minimum of  $\frac{1}{4}$ " , as shown below.



Flanged inlet/outlet nozzles must be

2-inch or larger.

Spaced adequately apart from one another to allow for molding tooling.

*Spacing and location of nozzles must be reviewed and approved by Poly Processing before order is accepted.*

### Tank Identification:

All steel tanks shall be permanently marked with a unique manufacturer's serial number. This number can be stamped or welded and must not be removed.

### Tank Preparation:

The inside of the tank to be lined must be rust and contaminant free and must be sand/grit blasted to a 2 to 4 Mil profile. Any outer surfaces that are to be lined such as flange faces must also be prepared to the same specification.

After the tank has been prepared, bagged desiccant (approximately one pound per 1000 gallons volume) must be placed in the tank and the tank sealed.

Each opening must be sealed by a gasket and cover plate. The cover plate must be  $\frac{1}{8}$ " thick metal or at least  $\frac{1}{2}$ " thick wood or plastic. Gaskets must be  $\frac{1}{4}$ " thick PE, EPDM, neoprene or cork. All plates, gaskets, and bolts used to seal openings must be re-useable and will be shipped back to the customer installed on the openings.

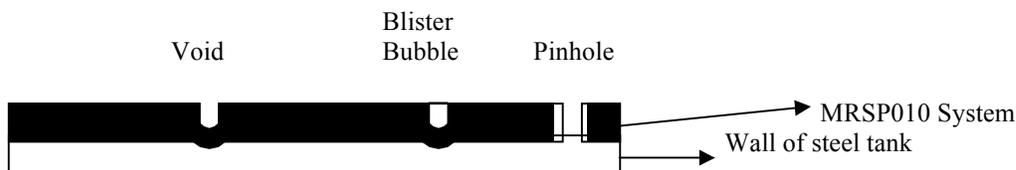
### Lining Material and Thickness:

Tanks will be lined using MRSP010 Polyethylene Medium Density Resin. Liner thickness will be a nominal .25". Flange and/or manway surfaces will have a minimum thickness of .13" after grinding for sealing purposes. (Minimum design thickness shall not be less than .20" to maintain minimum flange/manway surface thickness)

### New Lining Inspection:

Poly Processing Company will perform detailed visual inspection of the tank wall if the tank is accessible by PPC personnel (i.e. 24" manway minimum). Any blisters, bubbles, voids, or pinholes greater than  $\frac{1}{4}$ " in diameter and more than  $\frac{1}{8}$ " deep will be repaired using MRSP010 material (see figure #2).

Figure #1



The entire inner surface will be spark tested at 20,000 volts to verify that there are no breaches or pinholes in the liner. All repaired areas will be re-spark tested to ensure the repair is correct.

Any lumps, runs, or sags greater than  $\frac{3}{8}$ " will be smoothed down and the area re-tested (see figure #3).

Figure #2



An Impact Test will be performed on a sample cut from excess material molded on a flange or manway opening.

A copy or certification of the test records may be obtained at an additional cost.

### Annual Lining Inspection:

The owner must perform annual visual inspections for liner fatigue.

Spark tests must be performed annually as a part of the owner's general maintenance procedure. The spark test should follow the test equipment manufacturer's instruction at a voltage not to exceed 13,000 volts.

*End of specification*