



Providing Solutions Through Innovation

PolyGard™

PolyGard™ is a MDPE or medium density polyethylene manufactured by Equistar having excellent chemical resistance properties. With the combination of this resins proprietary additive package along with proper surface preparation, per the attached specification, we are able to deliver a product that will bond to carbon and stainless steel vessels.

The PolyGard™ manufacturing process is similar to our normal rotational molding process used for our standard product offering. The primary difference is the steel vessel must first be preheated. Once the targeted internal temperature has been achieved, we introduce the PolyGard™ product into the vessel. The processing cycle is continued until the product has properly coated the steel vessel and the unit is allowed to cool.

After production, Poly Processing Company performs detailed visual inspections of the tank wall. Any blisters, bubbles, voids, or pinholes greater than 1/4" in diameter and more than 1/8" deep will be repaired using PolyGard™ material. The entire inner surface will be spark tested at 20,000 volts to verify that there are no breeches or pinholes in the bonded material. All repaired areas will be spark tested to ensure the repair is correct. Any lumps, runs, or sags greater than 3/8" will be smoothed down and the area re-tested. An Impact test will also be performed on a sample cut from excess material molded on a flange or manway opening.