THE ULTIMATE TANK COATING SYSTEMS
FOR LIQUID, WATER & WASTEWATER STORAGE

LIQ Fusion 7000 FBE™ (interior coating system)
EXT Fusion 5000 FBE™ (exterior coating system)
EXT Fusion SDP™ (exterior topcoat system)

LIQ Fusion 7000 FBE™ is the ultimate fusion coating system ever developed for bolted storage tanks storing liquids. This coating system was developed by Akzo Nobel, the largest powder coat supplier worldwide. It is offered exclusively through Tank Connection, a global leader in bolted storage systems. LIQ Fusion 7000 FBE™ performance exceeds all powder coatings, liquid coatings and glass/vitreous enamel coatings offered today in bolted tank construction.

Tank Connection’s fusion powder coating systems are formulated from thermosetting resins, binder, pigments and additives to meet today’s storage requirements of durability, chemical resistance, chip resistance, flexibility, heat resistance and UV protection. Tank Connection’s fusion powder coating formulations are created by blending the various components and processing them through an extruder into a continuous mass with a completely uniform composition. This homogenous mass is then cooled and broken down into small chips, which are then ground into a fine powder. Each particle of powder contains within it the necessary components for reforming into the finished coating after fusion application and oven baking.

LIQ Fusion 7000 FBE™, EXT Fusion 5000 FBE™ and EXT Fusion SDP™ powder coating systems are electrostatic applied from an automated state-of-the-art, fusion powder coating line. (Reference TC flowchart document detailing over 20 step fusion coating process.) Tank Connection maintains the only fusion powder coat line “certified” to apply these coating systems to bolted steel panels for liquid storage applications.

The pre-stages of LIQ Fusion 7000 FBE application are critical to provide the best substrate surface and anchor profile. All bolted steel panels are chemically washed and blasted to an SSPC-SP10 near white finish. LIQ fusion powder is fed pneumatically from a reservoir into automated spray guns where a low amperage, high voltage charge is imparted to the particles. The bolted panels to be coated are grounded, so that the charged particles will seek the opposite charged metal surfaces. By utilizing the latest in today’s technology, this coating process can produce a uniform, monolithic, fusion-bonded surface with superior edge and bolt-hole coverage. (In comparison, this coating system is a stronger system than vitreous enamel/glass in liquid storage applications. It addresses all deficiencies in glass coated bolted panels. Additionally, a bolted storage tank coated with LIQ Fusion 7000 FBE can be recoated in the future, increasing the expected service life by up to 1.5 to 2 times over glass coated tanks. LIQ Fusion 7000 FBE™ is today’s premier coating technology.)
The proprietary fusion powder coating systems offered by Tank Connection are thermoset powders that utilize low-molecular-weight solids that go through a fusion and chemical reaction to form higher-molecular-weight polymers. Once the powder is applied, the bolted steel panels enter an oven where the resins, pigments and other reactive agents crosslink to produce a high molecular weight binder system, resulting with a tough, durable coating system designed for high chemical resistance, corrosion resistance, flexibility, chip resistance, weatherability and UV protection.

The BEST Interior Coating System - For water and wastewater storage applications, LIQ Fusion 7000 FBE™ is the best internal coating system available worldwide. It is exclusively offered for bolted storage tanks through one company, Tank Connection LLC.

The BEST Exterior Coating System – EXT Fusion 5000 FBE™ + EXT Fusion SDP™ (super durable polyester hybrid powder that demonstrates an excellent mixture of flexibility with impact, chemical and UV resistance). The advanced chemistry of this system has proven to be the best bolted steel tank exterior coating system available worldwide.

Tank Connection’s thermoset processes are irreversible. Once curing and crosslink takes place, the powder coating cannot be returned to its original form by any means. Testing data by Akzo Nobel clearly shows that LIQ Fusion performance is unmatched in liquid storage applications.

Get the Facts & Get Connected with the Industry Leader in Liquid Storage, Tank Connection!

Related Definitions:

- **Electrostatic spray:** A deposition method of spraying and charging a coating so that it is deposited on a grounded substrate surface. A spray application process in which the coating and part to be coated are oppositely charged; process provides excellent “wrap” of coating around the part, even on sides opposite the spray guns.
- **Fusion:** The melting and flowing of heated polymer particles to form a continuous film.
- **Edge coverage:** A coating’s ability to flow over, build and adhere to sharp corners, angles and edges.
- **Gel Time:** The interval required at a given temperature for a powder to be transformed from a dry solid to a gel.
- **Crosslinking:** Quality of thermosetting plastic resins in which polymer chains combine during the curing process. In general, the greater the crosslinking, the tougher and more chemically resistant the coating.
- **Powder coatings:** Finely divided particles of organic polymers, pigments and additives alloyed to form a coating.
- **Thermoset resin:** A resin designed to undergo an irreversible chemical and physical change during a heat-cure schedule.

TC Document: 2282LIQ