We engineer excellence
Tank Connection is the leading international bolted tank manufacturer for factory coated bolted storage tanks and aluminum geodesic dome and flat covers for liquid and dry bulk storage applications.

We exceed expectations
Tank Connection is committed to helping clients find success with their projects. Utmost devotion to the customer drives an unyielding pursuit of excellence that is the embodiment of Tank Connection.

We own a reputation of success
Tank Connection is an employee owned company, manufacturing American made products in ISO 9001:2015 Certified QMS facilities in the U.S. Tank Connection has built a reputation of success with a passion for safety, innovation and continuous improvement.

We facilitate comprehensive solutions
Tank Connection focuses on listening to clients and providing them with factual information on different types of storage containment options. This approach to service clients is based on the development of a broad product line of superior storage tank products, designs and field services.
BOLTED RTP DESIGN
PRECISION ENGINEERING PERFECTED.
Tank Connection's bolted RTP (Rolled, Tapered Panel) tank design is a culmination of experience, innovation, and vision to create the highest quality tank in the storage industry. Distinguished for outstanding quality, longevity and reliability, Tank Connection's bolted RTP tanks feature advanced engineering, precision fabrication and premier coating technology.

**THE BOLTED RTP ADVANTAGE**

- #1 BOLTED TANK DESIGN WORLDWIDE
- LIQ FUSION 8000 FBE™
- LIQ FUSION 8000 FBE™ + EXT FUSION SDP™
- MODULAR CONSTRUCTION
- GRADE LEVEL, SYNCHRONIZED JACKING PROCESS

- ROBUST DESIGN
- UNMATCHED IN ALL CATEGORY RANKINGS
- PRECISION ENGINEERING
- NO LEAK DESIGN
- SAFE FIELD INSTALLATION

- LONG LIFE + LOW MAINTENANCE
- DIVERSE + VERSATILE DESIGN
- PROPRIETARY COATING TECHNOLOGY
- ECONOMICS OF VALUE
- HEAVY TANK DESIGN

- EXACT MANUFACTURING TOLERANCES
- CAPACITIES UP TO 8 MILLION GALLONS
- SMOOTH WALL CONSTRUCTION
- QUICK INSTALLATION
- FACTORY DIRECT INSTALLATION CREWS AVAILABLE
THE COATING PROCESS
Tank Connection’s fusion powder coating systems are formulated from thermosetting resins, binder, pigments and additives. The 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 homogeneous 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 8000 FBE™ and EXT Fusion SDP™ powder coating systems are electrostatically applied from an automated fusion powder coating line.

The pre-stages of the LIQ Fusion 8000 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-SP-10 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. This coating process produces a uniform, monolithic, fusion-bonded surface with complete edge and bolt hole coverage.

UNBREAKABLE BOND
The thermoset powders, utilized by Tank Connection, incorporate 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. Tank Connection’s thermoset processes are irreversible. Once the curing and crosslink takes place, the powder coating can not be returned to its original form by any means.
Tank Connection's powder on powder coating process creates a top coat layer that can not be removed independently from the base coat. This top coat, fused to the primer substrate, offers superior protection and unparalleled longevity and performance. The electrostatically applied fusion bond process provides 100% coating coverage on all edges and bolt holes.
**CHARACTERISTICS**
- Fusion bonded to substrate surface
- Abrasion, chip and scrape resistant
- Can be repaired in the field if damaged
- Superior test performance compared to all other coatings
- Does not crack or spall
- Excellent chemical and corrosion resistance

**CERTIFICATIONS**
- NSF/ANSI Standard 61: Drinking Water Systems
- FDA - 21 CFR 175.300: Resinous and Polymeric Coatings

**PHYSICAL PROPERTIES**

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>TEST METHOD</th>
<th>PERFORMANCE</th>
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</thead>
<tbody>
<tr>
<td>Adhesion</td>
<td>ASTM D3359</td>
<td>100%</td>
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<tr>
<td>Abrasion Resistance</td>
<td>ASTM D4060-D7 (CS-10, 1000g, 3000 cycles)</td>
<td>&lt; 70mg Loss</td>
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<td>Abrasion Resistance</td>
<td>ASTM D968 (690 liters)</td>
<td>No wear through</td>
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<tr>
<td>Chip Resistance</td>
<td>ASTM D3170-03</td>
<td>7B</td>
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<tr>
<td>Heat Resistance: Dry</td>
<td>Temperature (°F)</td>
<td>300°F (149°C)</td>
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<tr>
<td>Heat Resistance: Water</td>
<td>Temperature (°F)</td>
<td>212°F (100°C)</td>
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<tr>
<td>Impact Resistance</td>
<td>ASTM D2794</td>
<td>160/160 direct/reverse</td>
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<tr>
<td>Hardness</td>
<td>ASTM D3363</td>
<td>6H</td>
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<tr>
<td>Flexibility</td>
<td>ASTM D522</td>
<td>1/8” (270° bend)</td>
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<tr>
<td>Pull Testing</td>
<td>ASTM D4541</td>
<td>3,000+ psi</td>
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<tr>
<td>Corrosion Resistance</td>
<td>ASTM B117 Salt spray test</td>
<td>11,000 hrs no change</td>
</tr>
<tr>
<td>Cathodic Disbondment</td>
<td>G95</td>
<td>13 mm (90 days, ambient)</td>
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</tbody>
</table>

**SPECIFICATION & PERFORMANCE**
- Mils: 5-9 mils DFT
- pH Range: 3-14 pH (contingent upon liquid stored and temperature)
- Testing: Factory holiday free - per ASTM D5162

**DURABILITY**
- Impact Resistance: Per ASTM D2794
  - LIQ Fusion 8000 FBE™: 100%
  - Competitor Bolted Tank Coatings: 80%
  - Typical Field Applied Coatings: 60%

**LOW pH (ACID) RESISTANCE**
- Test terminated without failure: Per ASTM B117 salt spray test
  - LIQ Fusion 8000 FBE™: 11,000 hrs no change
  - Typical Field Applied Coatings: 5,500 hrs no change
  - Competitor Bolted Tank Coatings: 2,550 hrs no change

**FLEXIBILITY**
- 100% Intact - After bending over 1/8” mandrel: Per ASTM D522
  - LIQ Fusion 8000 FBE™: 100%
  - Typical Field Applied Coatings: 70%
  - Competitor Bolted Tank Coatings: 50%
Tank Connection's external coating utilizes its exclusive base coat and top coat fused together. The combination of the protective properties of both the primer and top coat creates an external coating that outperforms all other coating systems. In recognized exposure testing (Southern Florida Exposure Tests) this system is rated at 5 years without change.

**Characteristics**
- Outstanding toughness with proven weatherability
- Fusion bonded to FBE base coat
- Gloss retention > 30%
- Enhanced resistance to chalking or fading
- Superior exterior durability
- Can not be scratched off independent of the base coating

**PHYSICAL PROPERTIES**

<table>
<thead>
<tr>
<th>CONDITION</th>
<th>TEST METHOD</th>
<th>PERFORMANCE</th>
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<tr>
<td>Adhesion</td>
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<td>Elongation</td>
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<td>Exterior Durability</td>
<td>AAMA 2604-05</td>
<td>5 year Florida</td>
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<td>Hardness</td>
<td>ASTM D3363</td>
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<tr>
<td>Corrosion Resistance</td>
<td>ASTM B117</td>
<td>&gt; 10,000 hrs</td>
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</table>

**SPECIFICATION & PERFORMANCE**
- Film Thickness: 6-10 mils DFT
VERSUS

GLASS

VERSUS

FUSION COATINGS OUTPERFORM GLASS/VITREOUS ENAMEL COATINGS

GLASS COATING EXAMPLES

Glass is subject to enamel slip, leading to insufficient coating coverage in the bolt holes and panel edges.

Due to the inflexibility of glass coating, it often cracks at the bolt heads.

Tank panels must be offset to minimize cracking during installation.

Panel unzipping as a result of corrosion and joint failure.

Glas...
When it comes to precision design and expert knowledge, Tank Connection maintains one of the most extensive engineering departments in the tank industry, with P.E.’s that sit on AWWA D103, AWWA D104, AWWA D106 and AWWA D108 committees. Tank Connection also maintains an expanded listing of P.E. stamps throughout the U.S. Starting with steel procurement at the mill and finishing with construction services in the field, all design, manufacturing, project management, system integration and field installation services are available through Tank Connection’s experienced personnel.

Tank Connection’s storage products are designed for low maintenance and long term performance. Bolted RTP tank construction outperforms all other types of bolted tank construction through superior design, proprietary coating systems and safe and expedient field installation processes. Let Tank Connection’s expert industrial designers and shop technicians, with decades of experience in tank production, turn your specifications into a specialized tank built to last.

At Tank Connection, quality and safety are second nature. Tank Connection’s field installation utilizes a synchronized jack process, which allows field crews to install tanks at grade level. This process promotes cost and time efficiency and receives the highest industry ratings for quality control and safety in the field.

Tank Connection jacking systems are stored at various global locations for expeditious results at the lowest factored cost.
BOLTED RTP LAP JOINT PANEL CONSTRUCTION

Tank Connection's bolted RTP tanks are heavy, modular tank designs. This Category 1 design does not require external web truss support. Tank Connection's RTP panel construction utilizes lap joint panel connections, which require exact manufacturing tolerances. The precision fabricated panels form vertical bolt seam patterns for improved strength, enhanced aesthetics and accurate panel connections. When combined with the appropriate gasket and sealant, a leak-free barrier is maintained between panels.
### Recommended Application Matrix

<table>
<thead>
<tr>
<th>APPLICATION</th>
<th>CATEGORY 1</th>
<th>CATEGORY 2</th>
<th>CATEGORY 3</th>
<th>CATEGORY 4</th>
<th>CATEGORY 5</th>
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<td>FIELD WELD</td>
<td>BOLTED RTP</td>
<td>BOLTED RTP</td>
<td>BOLTED API 12B</td>
<td>BOLTED FLAT PANEL &amp; CORRUGATED PANEL</td>
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<td>Diesel Fuel</td>
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<td>Liquid Manure</td>
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<td>Irrigation</td>
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APPLICATIONS

- **MUNICIPAL WATER**
  - REPUBLIC OF SINGAPORE

- **HYBRID TANK**
  - GUAM, US TERRITORIES

- **MUNICIPAL WATER**
  - REPUBLIC OF SINGAPORE

- **PROCESS WATER**
  - WEST VIRGINIA, USA

- **WASTEWATER**
  - ST. CROIX, USVI

- **ELEVATED WATER TANK**
  - WEST VIRGINIA, USA

- **FIRE PROTECTION**
  - MEXICO

- **ANAEROBIC DIGESTION**
  - SPAIN

- **STAINLESS STEEL**
  - KANSAS, USA

- **PETROLEUM**
  - PANAMA

- **LIQUID CHEMICAL**
  - IOWA, USA

- **ALUMINUM COVERS**
  - COLOMBIA

- **ELEVATED WATER TANK**
  - WEST VIRGINIA, USA

- **WASTEWATER**
  - WEST VIRGINIA, USA

- **SOUTHERN TRUST ESTATE**
  - ST. CROIX, USVI

- **STAINLESS STEEL**
  - KANSAS, USA
Tank Connection's growing line of premier aluminum tank covers take product protection to the next level. Tank Connection Covers feature enhanced design and manufacturing methods that provide increased flexibility and strength.

Tank Connection Covers' proprietary design components are the result of decades of experience that remove problematic installation issues commonly faced with other aluminum covers in the industry. Lighter overall aluminum covers are now possible without sacrificing strength. Advanced features offer superior vapor and product loss protection for geodesic domes; and easier access and higher field performance in aluminum flat covers.

All the components of an APEX Dome are engineered to achieve the highest performance. The result is a premier dome design that maximizes strength and flexibility with enhanced protection against leaks, vapor loss, or product loss.

The Tank Connection Covers design team have developed a solution that remedies common issues with existing flat cover designs in the industry. Tank Connection's flat cover design team have accumulated decades of experience in design innovation for multiple, high profile, large scale, complex projects around the world.
GOLDEN RULE CUSTOMER SERVICE

Tank Connection provides a full service approach to storage tank construction and field services. Whether its consulting, project management or tank and auxiliary design, Tank Connection's Golden Rule customer service will meet and exceed client expectations.

WE WILL MEET & EXCEED YOUR EXPECTATIONS.

- Tank Connection designs and builds the highest quality products that will stand the test of time.
- Honesty, integrity and a targeted focus on client success and satisfaction are paramount.
- Tank Connection is home to the leading experts with the most experience in the industry.
- Quality, technological innovation and accountability are driven by a progressive vision.

CERTIFICATIONS
- ISO 9001:2015 (International Standards Organization)
- FM 4020/4021 (Factory Mutual)
- NSF/ANSI/CAN 61 (National Sanitation Foundation) Drinking Water System Components
- ANQAS - Indonesian Potable Water Storage
- AS/NZS 4020 - Australia/New Zealand Potable Water Storage

REQUEST A QUOTE AND GET CONNECTED WITH REAL PERFORMANCE FROM THE INDUSTRY LEADER, TANK CONNECTION!

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WEB: TANKCONNECTION.COM  |  TANKCONNECTIONCOVERS.COM

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