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Over 20 years industry  
experience and 100%  
Australian owned.



## ABOUT US

ATM Tanks is Australia's leading liquid storage provider, renowned for innovative services and world-class quality. We uphold our values of integrity, care, and excellence in all that we do. As a licensed supplier in the industrial water tank sector, we specialize in sourcing, engineering, and delivering tank components for various sectors, including government hospitals, power stations, food processing companies, and mines. Proudly 100% Australian-owned, we design and manufacture all components locally while offering competitive prices against imports. Our vision is to be Australia's top tank supplier.

### ATM Tanks has the following vital Performance Objectives and Targets:

- ✔ Zero customer complaints;
- ✔ All quotes returned within 24 hours;
- ✔ Client follow-up within 24 hours of any client communication;
- ✔ Zero safety/environment incidents;
- ✔ 100% completion of all relevant paperwork;
- ✔ Warranty response timing objectives consistently met;
- ✔ Zero notices from Workplace Health and Safety and EPA Inspectors

### Main Applications

Drinking Water

Municipal Sewage

Landfill Leachate

Industrial Effluents

Bio-energy

Agriculture

## Glass-Fused-to-Steel Tanks

### Advantages

- ✓ Short construction period, cost effective tank solution;
- ✓ Superior corrosion resistance, service life is more than 30 years;
- ✓ Easy to install, no need for big installation equipment
- ✓ Tank volume is easily expanded;
- ✓ It can be dismantled, removed and relocated;
- ✓ Elegant appearance, tank colour can be customised.

### Quality Control

#### Raw Material Test:

Raw materials ingredient analysis, impurity test etc.

#### Enamel Formula Test:

Enamel fluidity test, colour difference analysis, acid and alkali resistance test, adherence/impact test, slice microscope analysis Inspection

#### During Production:

Magnify experiment simulated operation environment

#### Final Quality Test:

Impact test, 1500V holiday test, coating thickness test

### Why Choose Glass-Fused-to-Steel Tanks:

- ✓ More than 20 years experience in Enameling Technology R&D
- ✓ Our GFS tanks meet strict engineering design standards: AWWA D103, OSHA, NSF61, ISO28765 etc
- ✓ We work with well-known international corporations



## GFS Tanks Application Fields



### Power & Energy

Coal storage	Biogas
Boiler feedwater	Process water
Fermentation tank	Fly ash silo
Biomass energy	
Reverse osmosis water	



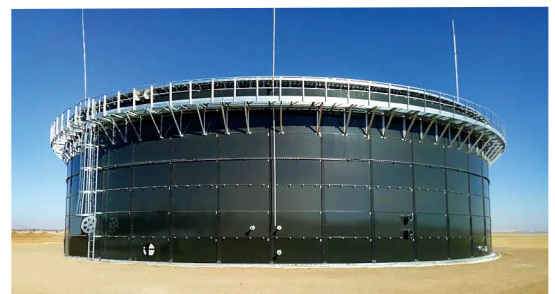
### Waste Water treatment

Buffer pool	Sedimentation container
Regulation tank	Irrigation water
Water purifying tank	Biological filter
Effluent treatment	Leachate storage
Aerobic reactor	Sludge tank
Anaerobic reactor	Animal wastes



### Water Supply & Treatment

Potable water	Lime silo
Water purifying tank	Bitter-brackish water
RO water	Disinfecting water
Fire-fighting water	Sea water desalination
Irrigation water	Biological filter
Saline water/Brine water	Sedimentation container
Raw water/Fresh water	Clarification pool
Aeration tank	

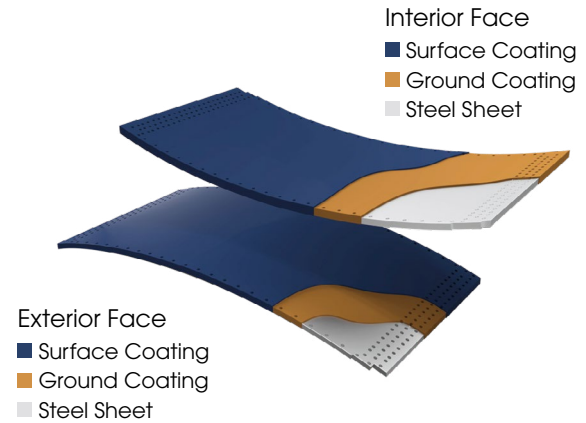


### Industrial Dry Bulk Storage

Mineral	Plasthetics
Chemicals	Stone/Clay/Glass
Foods	Mining Industry
Wood product	Grain/Seeds
Petrochemicals	

## What is Glass-Fused-to-Steel Tanks?

After firing at high temperatures of 820 °C-930 °C, the molten glass reacts with the steel plate surface to form an inert and inorganic bond, which combines the strength & flexibility of steel and the outstanding corrosion resistance of glass, therefore GFS tanks can provide many advantages over standard epoxy or welded painted storage tanks. Glass-Fused-to-Steel technology is the premium coating technology in the storage tanks market, and GFS tanks are widely used in bio-energy, municipal sewage, landfill leachate, industrial wastewater treatment and other applications.



## GFS/Enamel Sheet Specifications

Category	Specification
Coating colour	Black blue, grey olive, forest green, cobalt blue, desert tan
Coating thickness	10-18 mils, 250-450 microns
Acid & alkalinity proof	Standard PH: 3-11, special PH: 1-14
Adhesion	3,450N/cm
Elastic	7.9* 10 <sup>4</sup> MPA
Hardness	6.0 Mohs
Service life	>30 years
Holiday test	>1500V
Easy to clean	Smooth, Glossy, Inert, Anti-adhesion
Corrosion resistance	Excellent, Suitable for harsh environment





## Glass-Fused-to-Steel Tanks Production Introduction



### Plate CNC Cutting

Inputting the confirmed drawing into the computer, bolt holes and openings will be cut by CNC laser cutting machine automatically.



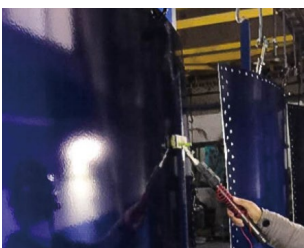
### Automatic Enamel Spraying

Spray the glass coating on both sides of the steel panels automatically. Coating thickness is controlled within 250 microns to 450 microns.



### High Temperature Firing

After enameling and drying, follows the firing of steel panels in the oven at temperatures ranging from 820°C - 930°C, which facilitates the interfacial fusion reactions that combine the two materials.



### Quality Inspection

A quality inspection is conducted during and after fabrication, including coating thickness test, 1500V holiday test, anti-acid test and colour consistency test etc.

### Anti-microbial Enamel Technology

After years of research and development, the test report shows that the anti-microbial enamel steel has excellent performance with mold resistance. It suppresses all kinds of composite mold. The anti-microbial enamel steel conforms to standard JC / T897-2002 (antibacterial capabilities of antibacterial enamel) . Composite mold includes: aspergillus niger (AS3. 4463), aspergillus (AS3. 3935), penicillium (AS3.4253), penicillium funiculosum (AS3. 3875), ureobasidium pullulans AS3. 3984), chaetomium globosum (AS3. 4254)

### Anti-microbial Enamel Applications

Drinking water plant, medical enamel and commodity enamel, etc.

### Glass-Fused-to-Steel Tanks Colour Options

More optional colours can be customised according to project request.



Grey Olive



Black Blue



White



Forest Green



Red



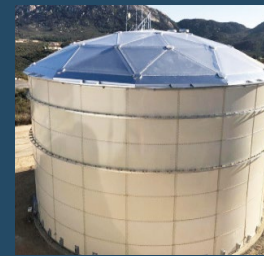
Sky Blue



Evening Haze



Cobalt Blue



Desert Tan



Mist Green



In Australia, Europe, USA and many other countries, enamel bolted tanks have been utilised for more than 100 years, most commonly in waste water treatment, potable water, dry bulk storage, etc.

## Stainless Steel Tanks

ATM Tank Builders offers AISI 304/316 stainless steel tanks as a good containment solution to meet the clients' requested requirements with high purity pharmaceutical water or harsh environments. Stainless steel tanks can be provided as a complete tank kit, and we can also design and engineer hybrid tanks with glass fused to steel in the lower rings and stainless steel in the upper rings, which provides the best cost effective combination of various materials according to the process design requirements.

Brine Water

Municipal Sewage

Landfill Leachate

Pharmaceutical Water

Industrial Wastewater

Biogas Tanks

Anaerobic Digester

Dry Bulk Storage

### Advantages

- ✓ Friendly to the environment, no painting, no rust, and no solvents
- ✓ Natural corrosion resistance, provides longer service life
- ✓ Virtually maintenance free, does not require coating / painting
- ✓ Green materials and can be recyclable
- ✓ Hygienic materials - maintains drinking / food process water quality and purity.





## Aluminium Geodesic Dome Roofs

Aluminium geodesic dome roof is an innovative self-supporting cover solution, widely utilised on bolted, welded and concrete tanks. Manufactured in state of the art facilities and engineered with cutting-edge 3D computer modelling, ATM domes have superior structure strength, fabrication precision and aluminium inherently corrosion resistance, no need to paint or repaint after construction, and its clear-span design, fast construction, little-to-no maintenance cost, making ATM domes a popular choice in many project applications worldwide.

### Design Standards

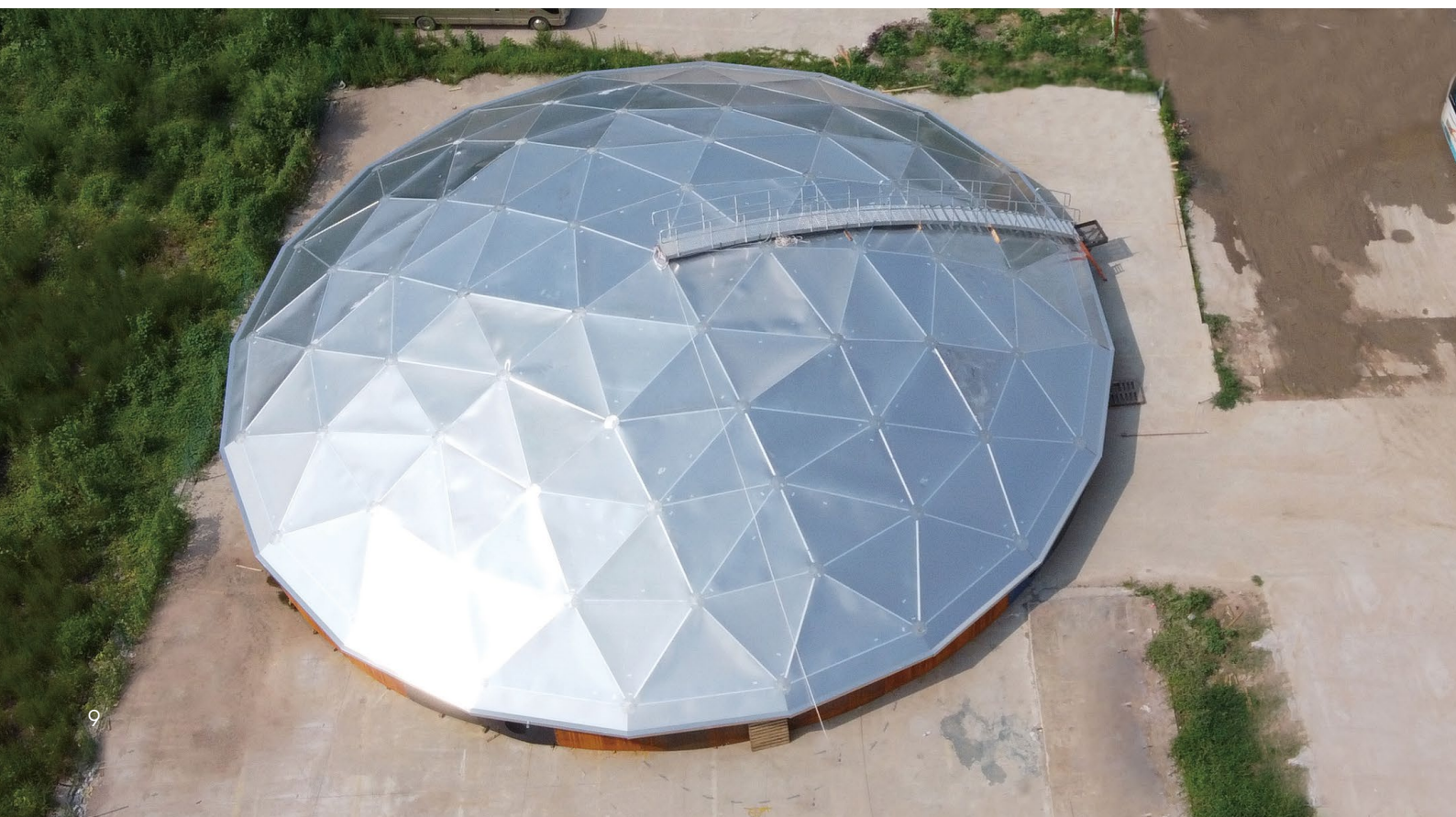
AWWA D108, API 650 Standards, ADM2015, ASCE7-10, IBC 2012

### Unique Batten Bar Design

Our aluminium geodesic dome roofs beams are designed for maximum beam strength, and the silicone gaskets will not deteriorate under ultra-violet light or elevated temperatures. The unique batten bar design of an aluminium dome is a real asset, which is not only the foundation of the leak-free dome structure, but also increases the structural strength of the dome roof.

### Node Design

Note detail utilises proprietary extrusion design.  
Spun aluminium gusset cover provides precision seal.



## Accessories



### Roof Handrails

Full perimeter / partial roof handrails can be constructed on tanks according to related safety regulation. Material Options: HDG Carbon Steel / SS304 / SS316



### Access Ladders

HDG / SS ladder with step off platform is available, the design conforms to OSHA and other international safety specifications. Types: Vertical / Spiral / Rotatory



### Manways and Nozzles

ATM tanks include manways and nozzles, which provide access for man / liquid to enter or exit the tanks. Material Options: HDG carbon steel / SS304 / SS316 / FRP / Epoxy



### Three-Phase Separator (GLSS)

UASB reactors are commonly equipped with Three-Phase Separator (GLSS) to separate gas, liquid and solids, the structural materials can be PP, Stainless Steel, GRP, PVC and Carbon Steel.



### Mixing System and Other Systems

CSTR / AD tanks are generally equipped with a mixing system like mechanical agitator or hydraulic agitator. Furthermore; a Pumping System, Insulation System, Cathodic Protection, Heating System, Biogas Purification System and other equipment can be provided as requested.

## Fusion Bonded Epoxy Tanks

With more than 30 years engineering, fabrication and construction experiences of GFS modular tanks, ATM have jointly developed innovative and optimum Fusion Bonded Epoxy coating technology with AkzoNobel, the world leading producer of paints and coatings. ATM epoxy tanks quickly get the clients' acceptance after its launch because of its cost-effective performance and advanced electrostatic spraying technology. Which is the same as our superior high-quality commitment to GFS tanks, ATM also give the clients the best quality assurance of Fusion Bonded Epoxy modular tanks, which meet or exceed the requirement of AWWA D103-09 and ISO 9227 / ASTM B117 etc.

### Fusion Bonded Epoxy Tanks Advantages

- ✓ Installation requires less field equipment and less labor
- ✓ No cathodic protection required due to excellent edge coverage of panel edges and bolt holes
- ✓ Provides excellent corrosion resistance and long-term performance due to leak-free coating
- ✓ Can be repainted after service life to extend the life of the product
- ✓ Better mechanical resistance (shock and flexibility), which helps reduce damage to the coating during shipping and handling
- ✓ Easily repaired in the field if damaged
- ✓ UV resistance in the harshest sun conditions and durability and consistency of colour and gloss.

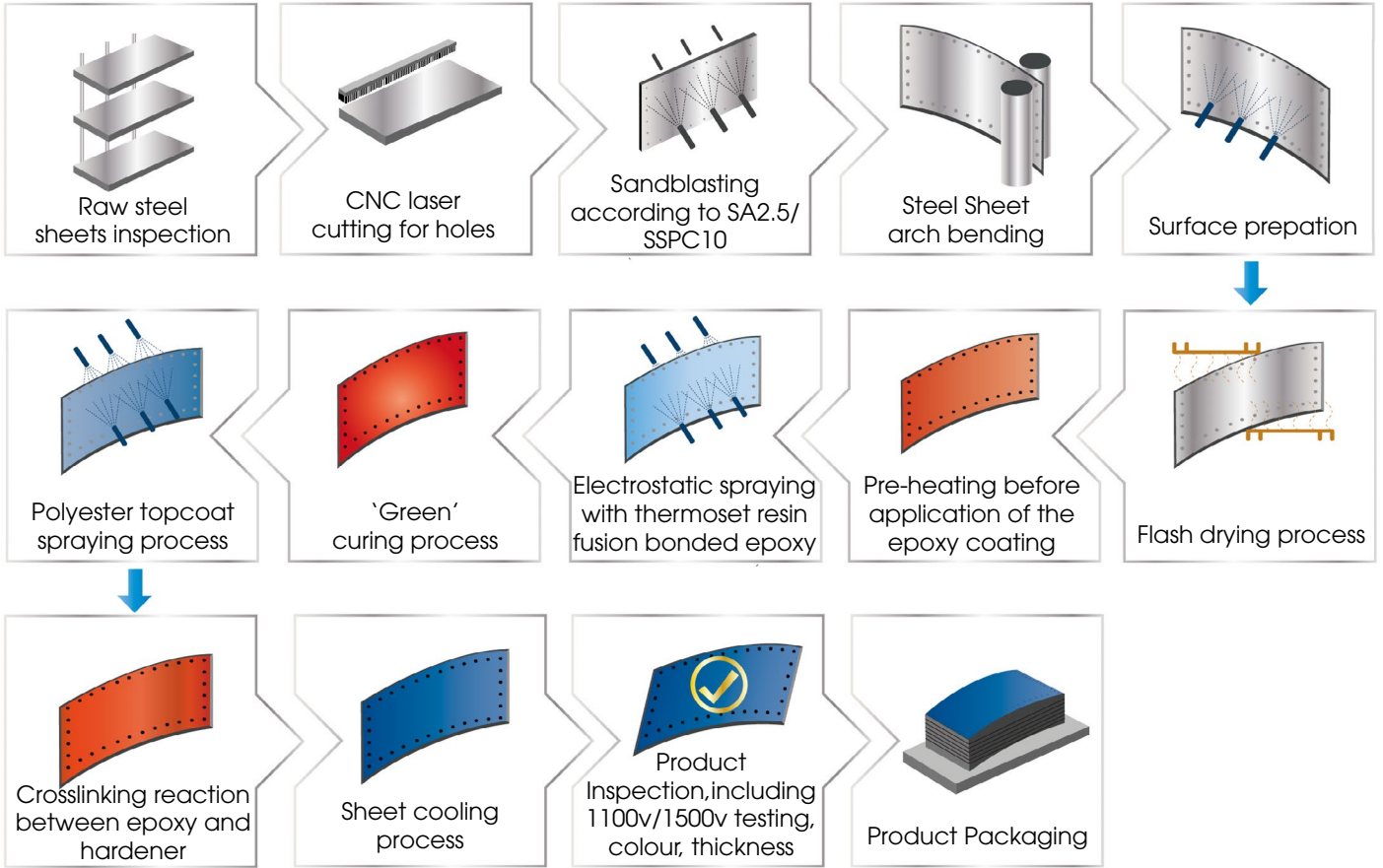
### Applications

Epoxy bolted steel tanks are excellent in many applications

Drinking water storage, fire water, wastewater, crude oil, refinery distillates, drilling fluids, brines, acids, alkalis, ethanol, biofuels, vegetable oils, harvested rainwater, etc.



### Fusion-Bonded Epoxy Coating Process



## Properties of Fusion-Boned Epoxy Steel Tanks

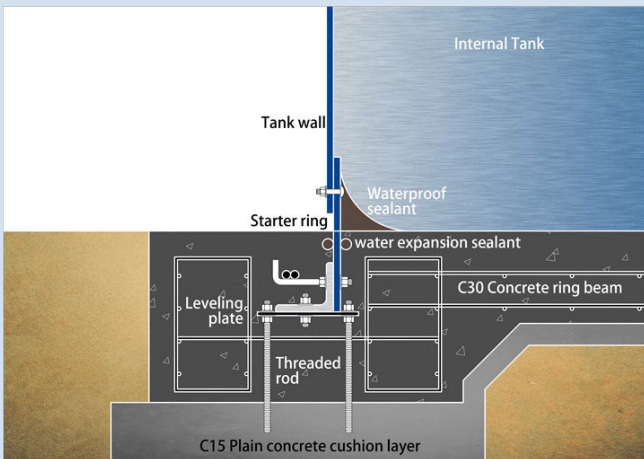
Application	Test Standard	Result
Holiday Test	≥1100V (all panels)	Zero-discontinuity at test voltage
Hot water immersion 90 days, 70°	AWWA C550-05	Meets/exceeds standard
Corrosion Resistance	Salt Spray ISO 9227/ASTM B117	Pass
Impact Resistance	ASTM D2794	Pass 160 in- lbs direct & reverse impact
PH Range	3~12	
Abrasion Resistance	Adhesion ASTM D3359	Adhesion ASTM D3359
Hardness	ISO15184 / ASTM D3363	2H
Chemical Immersion test	50% NaOH, 50% H2SO4	Meets/exceeds industry standard
UV Resistance	outdoor exposure testing	5 years
Colour Stability	outdoor exposure testing	5 years
Coating Colour	Standard RAL 5015 sky blue	Other colours are available
Dry Film Thickness	Average Dry Thickness	5~10 miles /125 ~250 microns (internal) 5~10 miles /125 ~250 microns (epoxy primer+ topcoat)

## Galvanised Steel Tanks

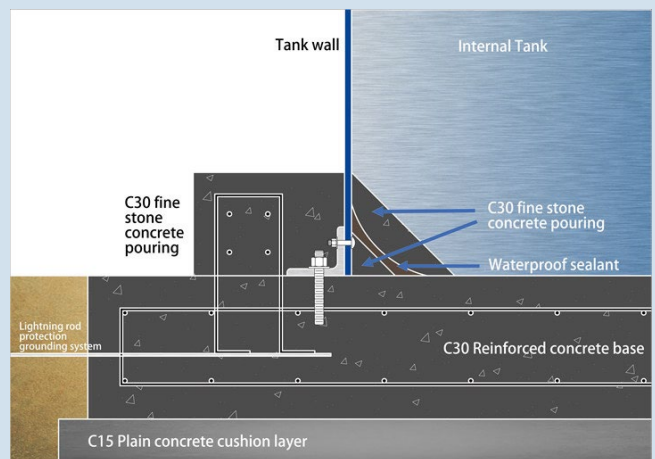
Galvanised steel tanks are an economical way of storing liquids and are primarily used for the storage of fire water, drinking water, and irrigation water applications. These tanks are designed strictly to comply with AS2304, AWWA D103-09 standards and galvanised according to GBT13912-2020 standards. Meanwhile, it is fabricated with galvanised steel panels bolted together, making them economical, easy to transport to the project site, easy to erect, and have a long-lasting interior and exterior finish.



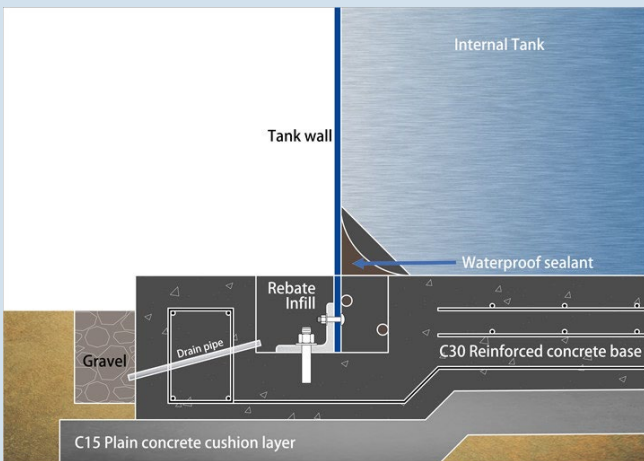
### Tank Foundations



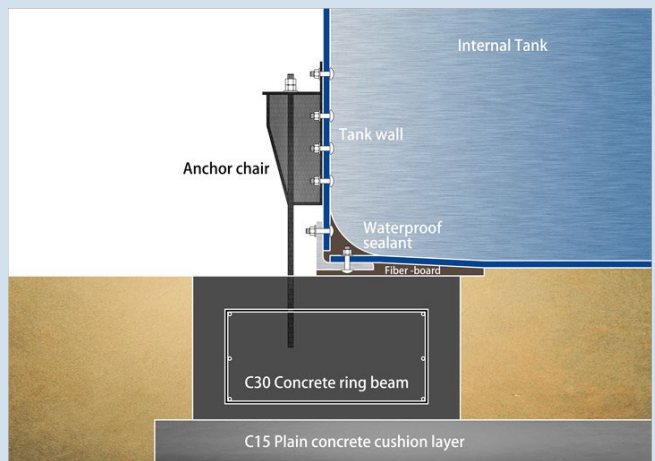
**Starter Ring Foundation**



**Above Floor Foundation**



**Embedded Foundation**



**Enamel Floor Foundation**

## GFS / SS Tank Roof Options



### Glass-Fused-to-Steel Roof

- Air-tightness, often utilised for pressurised structures and providing a suitable option for odour control
- Cone shape roof with external / internal beams
- Viable solution for demanding applications

### Aluminium Alloy Trough Deck Roof

- Economical option for potable water, waste water, and fire water storage etc.
- Keep out rain and wind, odour control
- Without air-tightness

### Single and Double Membrane Roof

- Superior option for anaerobic digestion processes and biogas applications
- Air tightness, utilised for biogas collection and odour control
- Integrated AD tank with the cover on top, cost effective

### FRP Roof

- Suitable for no air-tightness required situation such as drinking water, agriculture, fire water, and wastewater storage
- The shape of FRP roof can be dome or flat

### Stainless Steel Roof

- Air-tightness, often utilised for pressurised structures and provides a suitable option for odour control
- Super anti-corrosion performance and long service life
- Viable solution for harsh environments

## The ATM Difference.

100% Australian owned

We deliver on time, in full, within budget

More than 20 years industry experience

Products are certified to Australian Standards

Specialised in turn-key projects

Our maintenance program will take over your  
warranties from other manufacturers.



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