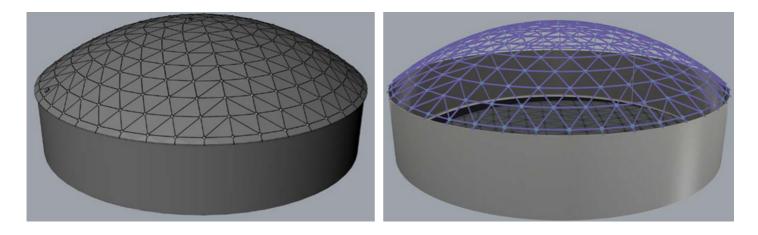
# Storage Tank & Reservoir Equipment

### Tank Dome®

### **General Information:**

A Tank Dome is a clear-span Aluminium cover and integrated roof system designed to minimize hazardous vapour emissions while, at the same time, preventing water from entering the storage tanks.

Ideal for both new construction and retrofit projects, dome covers are corrosion resistant, lightweight, durable and virtually maintenance-free, which translates to longer life and lower costs. They can be shipped anywhere in the world and erected quickly on site, usually with no interruption to the tank operation.



### **Design and Construction:**

The assembled structure complies with the design requirements API 650 Appendix G. Calculation and design are done according to EUROCODE 1 and 9 with Matrix Methods of Structural Analysis.

The dome is a fully triangulated structure designed to be self-supporting from its periphery: integral tension distribution eliminates the need for roof columns and extensive reinforcement of tank walls. "I" type beams are joined to Aluminium node plates with bolts and nuts. This assembled structure has a truncated semi-spherical shape with a radius of 0.7-1.2 times the tank's diameter.

The dome covers are fabricated from high strength Aluminium alloys that resist corrosion as well as chemical, ultraviolet and ozone degradation.





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### Accessories:

The dome covers are custom engineered to accommodate a wide variety of shapes and spans, and address entry, ventilation, maintenance or other requirements (a wide range of accessories including vents, skylights, hatches are available to meet the customer's needs).

### **Benefits:**

- Lowest cost solution and short-term payback.
- Eliminates rainwater entry and possible product contamination.
- Prevents the possibility of a sunk roof due to rain or snow accumulation.
- Easy to install (plus minimum downtime).
- Maintenance-free structure due to all aluminium construction.
- Strong, durable and corrosion resistant.
- Lightweight design (minimal additional weight to existing foundations).
- Makes all the problems associated with either hose or pipe drains obsolete.
- Protects the existing seals from ultraviolet and other environmental hazards.
- Minimum evaporation losses (no wind related losses).



### **Standards:**

- API-650 Ap. G
- NFPA "National Fire Protection Agency".
- AISI Stainless Steel Cold Formed Structural Design Manual.
- AWWA D-100.
- EUROCODE

### **Applications:**

- Conversion of an existing External Floating Roof tank to a Covered Floating Roof Tank.
- A maintenance-free fixed roof for a new tank.
- Replace existing corroded steel fixed roofs.
- Column free roof for new tank construction.