

# **BTE**

### **Aluminium Geodesic**

#### **Dome Roof**







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#### Other Quality BTE Products include:

Heavy Duty Aluminium & Stainless Steel Internal Floating Roofs Specialised Aviation & general purpose suction lines from 3" to 36" diameter Floating Roof Primary & Secondary Seals Floating Roof Drain Systems Floating Skimmers



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## **Aluminium Geodesic**

#### **Dome Roof**

The BTE Heavy Duty Geodesic Dome Roof is the result of over 25 years practical tank equipment experience by BTE engineers.

Our aim is to provide a dome to the AST industry that is extremely durable and overcomes many design problems that exist in other well-known brand domes.

These days when the concern is "Whole of Life Cost", we believe the quality engineered BTE Geodesic Dome Roof offers tank owners the best possible value for money.









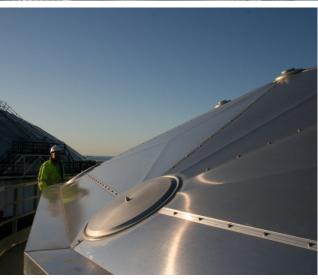
The BTE Geodesic Dome for oil storage tanks incorporates the very latest design technology. BTE has also used many years of tank equipment design experience to develop the ultimate in geodesic dome design.

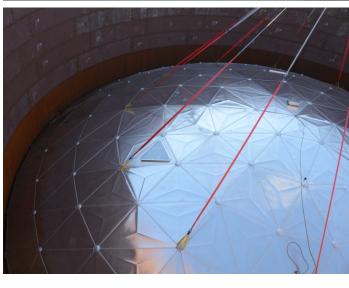
Potential dome leak points may include main panel seams, dome hubs, & roof penetration points such as gauge poles, walkways or other tank appurtenances. BTE's careful design has paid particular attention to eliminating these leak points.

BTE use the latest 3-D & Finite Element Analysis (FEA) software to ensure structural integrity & 3D positional accuracy at all times.









BTE walkways & platforms are well designed, and robust, with an improved method of attachment to the dome structure. BTE walkways do <u>not</u> connect to the panel battens.

The externally smooth surface of BTE's Dome means that rain water does not pool on the roof. Another source of leaks is eliminated.

Domes can be lifted by crane or by using the BTE synchronized grip hoist lifting system.

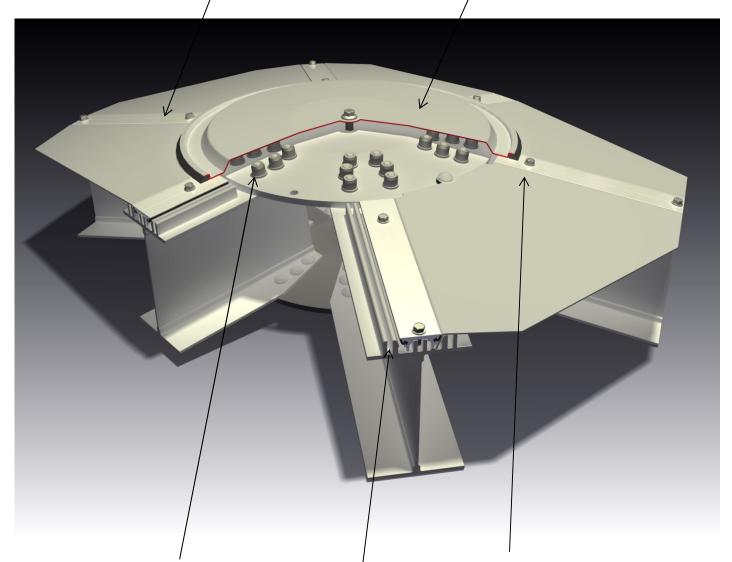
Shoe supports to connect the dome to the tank shell use PTFE slider plates beneath each support shoe to allow expansion & contraction due to temperature variation & movement due to wind loads.



# With BTE Quality Tank Products we've got you covered outside & inside the tank

Flush battens & main roof panels mean that sealing around the hub is easier. Water drains away, & the dome cap is better able to seal across both the battens & roof panels because they are all on a similar plane.

Anodized hub covers give enhanced corrosion resistance, as well as enabling silicone sealing around the hub to more effectively adhere to the cap. The unique hub cover design ensures that the bulk of applied silicone sealing is hidden from the sun.



Lock (Huck) Bolts at hub connections ensure a pre-determined uniform tension is applied to all structural connections. These bolts become permanent fasteners.

200mm pitch batten screws and deep section battens ensure constant sealing pressure is applied along the main struts thereby giving a leak free panel-to-strut joint.

Two extra screw rails for secure connection of walkways & other roof top attachments. Other manufacturers make roof appurtenance connections through the central battens which can cause leaking as the walkways or other roof attachments move, causing the panel clamping batten to move. Panel sealing may be compromised.