



Geodesic Dome Roof



The HMT Geodesic Dome Roof features a clear span, all aluminum constructed, light weight corrosion resistant structure. HMT's exceptionally strong clear span design eliminates the need for interior support structures which eliminate floating roof penetration and reduce vapor emissions.

Eccentric loads provide a challenging environment for dome roofs. Design elements of the HMT Geodesic Dome such as the unique double web beam design and overlapping panels give this design a very high strength to weight ratio, allowing maximum flexibility and ensuring structural integrity.

The utilization of the HMT Geodesic Dome will eliminate rain water infiltration into the stored product, most wind induced vapor losses, environmental attacks on the floating roof seals, roof coatings and the floating roof.

Panels on the HMT Geodesic Dome Roof achieve superior wind and leak resistance through the use of a unique batten bar and hidden gasket system instead of the more traditional clamped system with exposed gaskets.

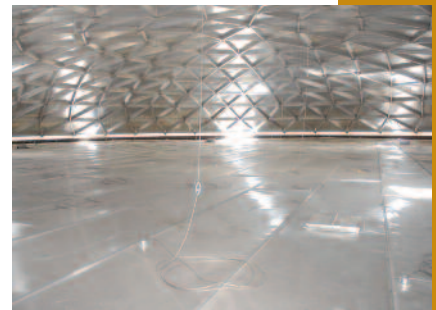
HMT Geodesic Domes are custom engineered to accommodate a wide range of shapes, spans, and operating service conditions including cable suspension of aluminum floating roofs. They are designed in full accordance to the latest revision of API 650, Appendix G, and can accommodate special loading and design conditions, specifications and requirements.

Let HMT put our three decades of experience in the design, manufacture, supply and installation of aluminum structures to work for you today.

Contact your local HMT representative to discuss the full suite of products and services that will satisfy all your AST needs.

HMT's Geodesic Dome Roof's Unique Design Features Include:

- The clear span design eliminates the need for interior support structures while high strength aluminum alloys and corrosion resistant materials provide for a long service life.
- A tension ring is standard on all HMT Geodesic Domes. Properly designed tension rings ensure that the lateral force generated by the dome is not translated to the tank shell, eliminating the need for additional tank shell reinforcement or modifications.
- Beams are designed with an extruded continuous threaded bolting slot as in HMT's patented ALUMINATOR™ aluminum floating roof. This bolting slot provides more thread engagement area and more pull resistance than in conventional designs.
- A dedicated geodesic dome engineering group utilizes state-of-the-art design programs to uniquely customize each HMT Geodesic Dome to its particular application. Panel layouts and finite element analysis for all design cases are performed on each dome.
- HMT's unique overlapping panel design prevents leaking. The overlapping panels naturally shed water and are secured in place with a patented batten bar and hidden gasket system. This design allows the roof panels to flex while keeping sheets from puckering and bolts from leaking.
- The HMT Geodesic Dome reduces wind induced vapor losses, aids in odor abatement and provides significant emission credits.
- The HMT Geodesic Dome requires minimum maintenance. All components are resistant to ultraviolet and ozone degradation. There are never any coatings to apply or reapply.
- Floating roof and seal maintenance are drastically reduced due to the lack of rainwater and UV exposure.
- A complete line of accessories are available including skylights, patches, doors, vents, etc.
- Installation is performed by experienced HMT personnel. Tanks can even remain in-service during installation.



HMT Inc.
24 Waterway Avenue, Suite 400
The Woodlands, Texas 77380
Ph: +1.281.681.7000
Fax: +1.281.419.7689

Locations worldwide to service
all your AST needs.

Visit us at www.hmmtank.com

ALUMINATOR™ is a trademark of HMT Inc.