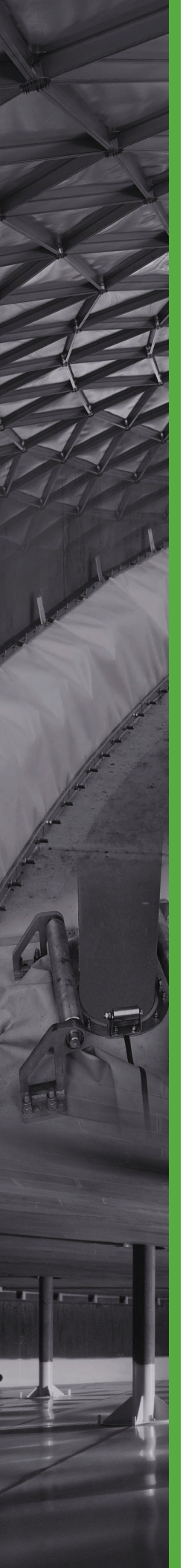


ALUMINATOR® WD
WELDED HEAVY DUTY SKIN & PONTOON

The Aluminator WD (Welded Deck) internal floating roof is the premier solution among low-emissions aluminum IFRs.

Built on the proven structural components of the Aluminator 1000 heavy-duty AIFR, but with sheeting joints welded instead of bolted, this roof qualifies as welded construction per US EPA requirements.

The Aluminator WD has several advantages over welded-panel-based AIFRs, including decades of proven history in both the structural and buoyancy systems, emissions welds that are raised out of the product, and a more economical installed price.

Key benefits:

The HMT Aluminator® WD Internal Floating Roof is the strongest welded-deck-seam IFR on the market. The unique structural design is unmatched.

Zero deck-seam emissions – the welded sheeting-to-girder connection qualifies this IFR as welded construction per US EPA requirements.

Built to handle dynamic loads – the Sigma Strut® girder system offers best-in-class bending and torsional strength; bi-directional girders means virtually no stress on pontoons; side-slot connection system takes stress off fasteners, which means connections will last.

Heavy-duty rim – extruded structural aluminum rim and dual rim-to-girder connections create a robust rim connection that resists torque from seal drag.

Shorter lead time and faster installation – with no custom sketch panels and only standard components, this AIFR is quick to deliver and faster to install than other welded-deck-seam IFRs. And all components fit through a standard manway.

Key design features:

- Welded sheeting-to-structure connections qualify this roof as welded construction per EPA regulations
- Bi-directional Sigma Strut girder system delivers exceptional strength
- Extruded rim for exceptional strength at the IFR perimeter
- 0.040" deck sheeting is double the thickness required by API 650
- 10" diameter pontoons equipped with fully-threaded test port for vapor testing
- Pontoons attached to girders using saddles and straps; no landing stresses on welds
- Can be suspended or leg-supported
- Support connections anchor directly to the structure instead of pontoon end-caps, allowing load reactions to flow through the structure without imparting stress on pontoons
- No panel or deck-sheet welds in the product

THE HMT ALUMINATOR WD DESIGN

HMT's ALUMINATOR WD Skin & Pontoon Internal Floating Roof system is the strongest and best-in-class Aluminum IFR with welded deck seams. :

1. Welded construction for zero deck- seam emissions

The first welded skin & pontoon on the market, the ALUMINATOR® qualifies as welded construction per EPA air rules, and it's built upon on the proven legacy and durability of the HMT ALUMINATOR® structure.

2. HMT SIGMA STRUT girder and structural connection system

The Sigma Strut girder system allows for complete support of the roof independent of the pontoons. Sigma Strut® girders have more than double the section properties of the nearest skin & pontoon competitor. In addition, the Sigma Strut® girder connection system utilizes continuous side bolting slots and extruded connectors to join structural components, allowing reactions to flow throughout the system without placing stresses on fasteners.

3. Rim channel design

The Aluminator rim is extruded, not formed, providing superior strength at the perimeter of the roof, where it experiences the highest dynamic loads. The rim is designed with the strength to support both a primary mechanical shoe and secondary seal without the need for additional modifications.

4. Leg support connection

The leg supports connect to the girder structure instead of the pontoons, allowing for high cycle frequency without stresses on pontoons.

5. Deck sheeting

Deck sheeting is 0.040" nominal thickness which is *double* the thickness required by API Standard 650.

6. Pontoon connection

Standard 10-inch pontoons are attached to the roof structure using extruded pontoon saddles and straps. Pontoons do not utilize end-cap gussets as with conventional aluminum IFRs. This relieves stress from pontoons. In addition, each pontoon is equipped with a fully threaded port for vapor testing.

7. Suspension capabilities

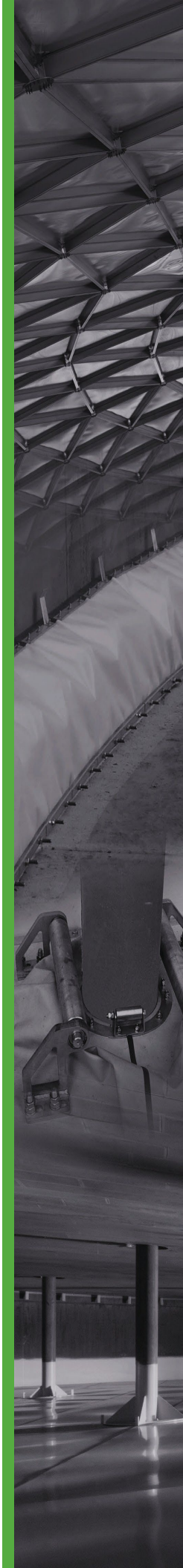
The Aluminator WD can be suspended from the tank's fixed roof, including cone roofs and geodesic dome roofs. This option allows AIFR height adjustments to be completed from the outside of the tank.

8. Pontoons easy to replace during out-of-service maintenance

As opposed to panel-based roofs, the pontoons of the Aluminator WD skin & pontoon AIFR are relatively inexpensive and easy to replace if damaged or found to contain vapors during inspection.

9. Shorter lead times, easier installation than other zero-deck-seam AIFRs

The Aluminator WD skin & pontoon AIFR components are all stock items, and can fit through a 24-inch manway, allowing for installation without a door sheet. Other panel-based welded roofs require prefabrication of sketch panels and also require cutting a door sheet or at minimum, a slot in the shell or cone roof to get panels into the tank.



ABOUT HMT

HMT is the global leader in aboveground storage tank solutions. HMT provides advanced solutions to reduce emissions, optimize tank capacity, reduce stranded inventory and engineer a tank system that exceeds safety standards and extends maintenance intervals.

HMT's full suite of tank products includes: Internal/External Seal Systems - Internal/External Floating Roofs - Drain and Floating Suction Systems - Aluminum Domes - Emissions Reduction Devices.

HMT's quality services include: Tank Repair & Maintenance - Floating Roof & Seal Repair/Replacement - Installation Services - Fabrication Services - Project Management/Turnkey - Inspection, Calibration, Verticality & Roundness Studies - New Tank Construction - Engineering Services.

HMT LLC | 19241 David Memorial Dr., Suite 150, The Woodlands, Texas 77385
Ph: +1.281.681.7000 | Fax: +1.281.419.7689 | Locations worldwide
www.hmttank.com