



Unideck - Aluminium Internal Floating Deck

HMT's commitment to providing quality products to meet every budget has led to the marketing of the Unideck.

The UNIDECK Internal Floating Roof has been designed for use in new and existing fixed roof storage tanks. It is designed to conserve and protect stored liquid products. Design and structural requirements equal or exceed *API. 650, Appendix H.* The main structure is a high strength-to-weight ratio interconnected grid consisting of contamination-free and corrosion-resistant aluminum alloy tubular pontoons and extruded channel beams. The tubular pontoons and channel beams provide maximum flotation and beam strength capable of withstanding loads generated by product turbulence and inspection personnel.

A peripheral rim traps the saturated vapor layer and is of sufficient distance from the tank shell to allow for irregular shell plates. All parallel pontoons and channel beam ends are secured to the peripheral rim. The entire grid is covered with aluminum deck sheeting to unitize the grid structure and trap the vapor layer.

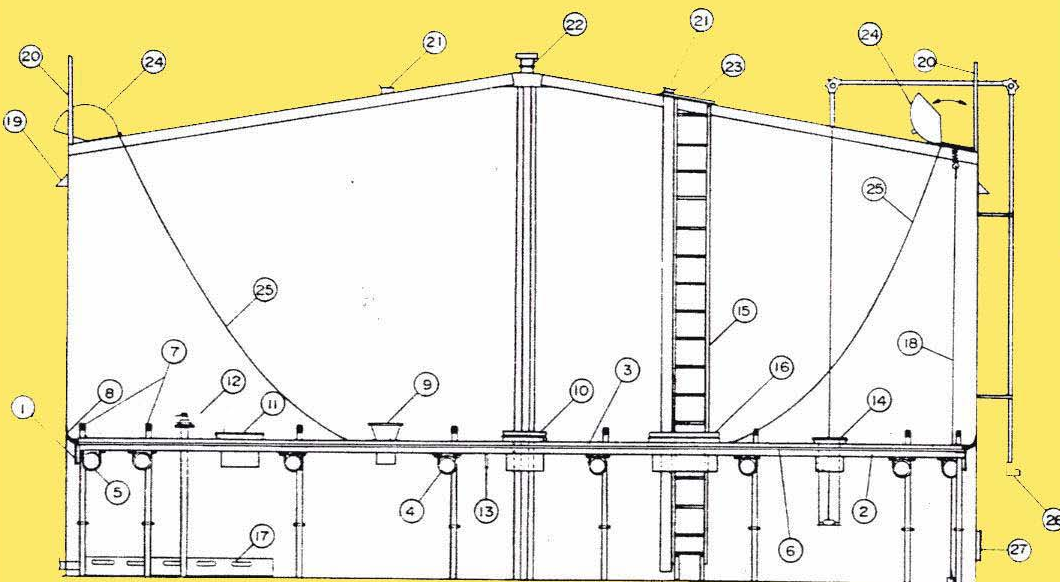
A seal is attached to the peripheral rim and conforms to the actual shape of the tank. Rivets, plate laps, dents, or buckles in the tank shell are readily negotiated throughout vertical travel.

All UNIDECK IFR penetrations, i.e.: columns, ladders, gauge pipes, etc., are provided with negotiator wells, creating a positive liquid seal which isolates the area within the well from the main saturated vapor layer. A sliding seal plate with a flexible seal traps the saturated vapor emitted from within the negotiator well.

High quality manufacturing, welding and testing standards are achieved under controlled shop conditions. All components and materials are designed to pass through existing tank manways, eliminating additional expense and downtime for the removal of roof or shell plates.

Installation is accomplished by experienced crews and supervisory personnel, who are full-time employees.

UNIDECK SECTION VIEW



- 1 PERIPHERAL SEGMENTS
- 2 CHANNEL BEAMS
- 3 CAP CHANNELS
- 4 MAIN PONTOONS
- 5 PERIMETER PONTOONS
- 6 DECK SHEETING
- 7 TOP ADJUSTABLE LEGS
- 8 PRIMARY RIM SEAL
- 9 SAMPLING FUNNEL
- 10 COLUMN SEAL ASSY.
- 11 DECK MANWAY
- 12 PRESSURE/VACUUM VENT
- 13 DECK DRAIN TUBES
- 14 FLOATWELL
- 15 LADDER & GAUGE PIPE
- 16 LADDER SEAL ASSY.
- 17 DIFFUSER
- 18 ANTI-ROTATION DEVICE
- 19 OVERFLOW VENTS
- 20 SAFETY RAILINGS
- 21 GAUGE HATCH
- 22 CENTER VENT
- 23 LADDER MANWAY
- 24 COMBINATION AIRSCOOP VENTS/
INSPECTION HATCHES
- 25 GROUNDING CABLES
- 26 AUTOMATIC TANK GAUGE
- 27 TANK MANHOLE

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UNITED TANK TECHNOLOGY, INC.		
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