# **Standard Tank Construction**

# **Highland Products**

Highland Tank's team of professionals in design, engineering, fabrication, sales, delivery and service provide you with outstanding solutions for all your storage needs.

Our steel tanks are competitively priced, and readily available from our strategically located regional distributors and manufacturing facilities. Our reputation for timely delivery of high-quality tanks by professional drivers experienced with tank handling is second to none. And we are the only tank manufacturer with a full-time service representative who will visit your site to troubleshoot any problems that may arise.

Our diversified product line includes underground and aboveground steel storage tanks, lube tanks, ASME pressure vessels, grease removal systems, oil/water separators and interceptors, and oil interceptors. Our products are used in numerous liquid storage and wastewater treatment applications at petroleum, transportation, industrial, military, commercial, and municipal facilities throughout the world.

We offer proven carbon steel or stainless steel designs and construction with many specialty coatings to meet your specific needs.

## The Strengths of Steel

In quality and design, Highland's steel tanks are beyond compare. Steel is unmatched for its structural integrity and strength. Because of its product compatibility, it is the best choice for your liquid storage needs including motor fuels (especially those with high ethanol content), aviation fuels, heating and lube oils, chemicals, potable water, and wastewater. Beyond performance, steel has the highest overall recycling rate of any material. Overall, you can be assured that steel – a durable, cost-effective, lightweight, dimensionally exact, corrosion resistant, and aesthetically appealing material – will be around for a long time.

Most tank designs are available in single-wall or double-wall construction. We fabricate, test and label most tanks in accordance with Underwriters' Laboratories tank construction codes UL-58, UL-1746, UL-142, UL-80, and UL-2085. Construction and testing to other codes such as NFPA 30 AWWA, NFPA 22, API, etc, is also available.

Highland tanks are constructed to comply with NFPA 30 & UL venting requirements. Depending on the need, more sophisticated emergency vents are available.

#### **Double-wall**

Double-wall tanks consist of a primary steel tank wrapped by an exterior steel shell. The space between the tanks, known as the interstice, can be monitored to detect a leak in either tank using a Highland Monitoring System or manual probe.

All Highland double-wall tank interstices assure fluid migration at a rate not less than one centimeter per second – vastly superior to the allowable rate. All double-wall tanks are shipped with a vacuum on the interstice.

### Double-wall UL-2085

Fireguard fire-rated tanks are insulated cylindrical or rectangular tanks. The interstice, a minimum of 3" around the inner tank, is filled with a lightweight material that provides thermal insulation and enables monitoring of the tanks. Both the inner and outer tanks are equipped with emergency vent fittings. Our Fireguard tanks meet or exceed required standards for insulated, fire-rated storage tanks.

#### **Double-wall UL-1746**

The inner tank is constructed like a UL-58 single-wall steel tank, but the outer tank is made from either fiberglass reinforced plastic (FRP) of thermoplastic creating an economical double-wall tank. The interstice design assures fluid migration to the monitoring system.

## **Fabrication Options**

- 30 psi hydrostatically tested dished head design complies with New York City storage tank codes.
- Fittings in various sizes and styles (NPT and flange) enable connection to external piping systems.
- Single-walled aboveground fuel storage tanks have normal and emergency vent fittings. Both the inner and outer tanks of double-walled tanks have emergency vent fittings per fire codes.
- 24", 30", or 36" diameter cylindrical or rectangular manways allow for safe, unconfined access.
- Seal-welded and standard or NSF lined interiors are available.
- State of the art exterior coatings are available for long-term corrosion protection.
- Impervious bulkheads create multiple compartments within the tank for multiple fuel storage applications.
- Overfill protection chambers are available for aboveground or belowground applications.
- A wide variety of tank support and hold down systems.
- Tanks can be fabricated to API, ASME, NFPA-22, AWWA-D100, UL-58, UL-142, UL-1746 and UL-2085.