



Kc Compliant Primary Seal - LM

The HMT Kc Compliant Primary Seal - LM for aboveground storage tanks is the liquid mounted primary seal of choice for external floating roofs with Slotted Guide Poles or targeted effort to reduced emission. This seal was designed by HMT in 2024 to comply with updated Environmental Protection Agency (EPA) regulations NSPS Subpart Kc (New Source Performance Standards).

For a liquid-mounted primary seal that will outlast alternative designs, perform well through heavy use, adapt to tank roundness anomalies, span a wide range of rim spaces, and most importantly, maintain tank shell contact resulting in no gaps.

Key benefits:

HMT's Kc Compliant Primary Seal - LM relies on innovative design features that contribute key benefits to the end user:

Best-in-Class Emission Reduction — EPA tested and proven liquid mounted seal

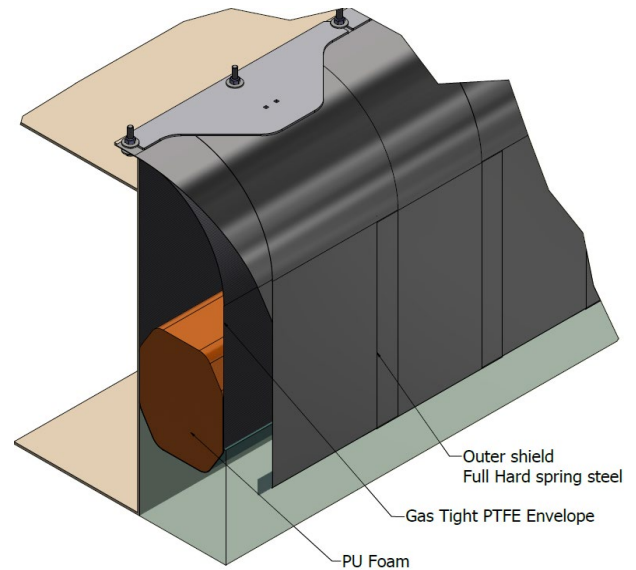
Handles wide range of rim spaces — stainless steel compression plate, coupled with customized, resilient foam design performs well in rim spaces

No gapping — tight-fitting seal even with wide-ranging rim spaces and tank roundness anomalies

Long life — compression plates made from hardened stainless steel, ensuring spring longevity and long-lasting seal performance

Low maintenance — eliminates abrasion of fabrics compared to legacy foam log designs

In-service install — no hot work required



Key design features:

- Worry-free operation that centers the floating roof and dampens horizontal roof movement
- Hardened steel will not fatigue
- Continuous pressure against the shell
- Premium fabrics for long-life and durability of vapor barrier
- Bolt-on design allows for installation and repair while in service
- Each HMT seal is designed and sized to fit the specific tank and floating roof dimensions
- PTFE fabrics have excellent flame-retardant properties; meets DIN 22118 standard

DESIGN DETAILS

THE KC COMPLIANT PRIMARY SEAL – LM DESIGN

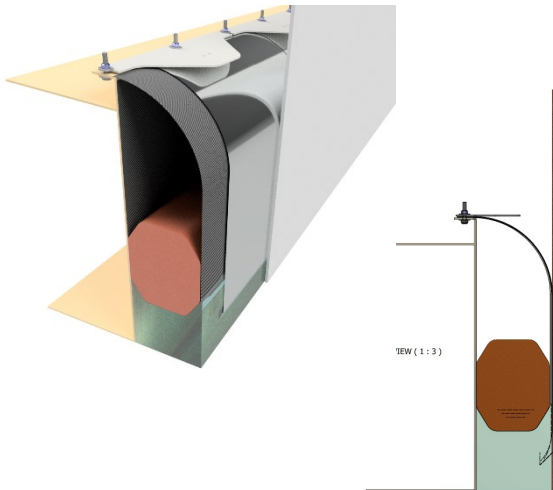
HMT's seal design revolutionized liquid mounted primary seal and remains unsurpassed in function and performance. Here's why:

1. Best-in-Class emission reduction

The HMT Kc Compliant Primary Seal - LM similarly encloses the rim vapor space, with the additional feature of extending the fabric membrane down the full height of the spring plates, encapsulating the resilient foam.

2. Even pressure application

The spring plates of the HMT Kc Compliant Primary Seal - LM provide more uniform outward pressure than do any of the mechanical devices illustrated above for the traditional mechanical-shoe seal, in that the mechanical devices for the traditional mechanical-shoe seal provide pressure against the metallic shoe only at discrete points of contact, whereas each spring plate of the HMT Kc Compliant Primary Seal-LM presses outward along its entire lower edge.



OTHER KEY FEATURES AND BENEFITS

Increased durability & life-expectancy

A critical ingredient in all our seals is the type of stainless steel we use. This steel, purchased direct in mill-run quantities, is hardened to our specification to maximize spring pressure and longevity. Historically proven, HMT components are designed to spring back and avoid fatigue longer than any other seal on the market. This translates directly into longer life, lower maintenance, and most importantly—no gapping.

Superior centering forces during operations

The HMT Kc Compliant Primary Seal - LM is designed to ensure excellent centering of the floating roof, if the rim gap gets smaller the seal exerts a progressively increasing force on the tank shell and vice versa. Keeping the roof centered is critical to safe operation for any floating roof tank. The HMT Kc Compliant Primary Seal - LM design also keeps the floating roof from moving excessively during windy conditions or under turbulence from filling; this dampening capability is also critical to safe and effective operations

Other benefits and options

- Stainless or galvanized shoe options
- PTFE or polyurethane fabric options
- Wax scrapers available
- Bolt-on design for in-service installation and repair
- Available external floating roofs
- Compliance with federal, state and local regulations
- Compatible with welded or riveted tanks
- No coil springs or under-roof counterweights
- Available with secondary seal systems
- Retrofit options available

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.

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