



Protecting your world, one tank at a time®

MINI-SHOE® PRIMARY SEAL FOR ALUMINUM INTERNAL FLOATING ROOFS

The MINI-SHOE® Primary Seal for Aluminum Internal Floating Roofs is the first primary metallic shoe seal developed for aluminum roofs where tight rim spaces are encountered. The MINI-SHOE® has excellent chemical compatibility for nearly any product stored in a floating roof tank when combined with HMT's PTFE laminated fluoropolymer vapor barrier fabric.

For a long lasting seal, compatibility that will no longer be a problem for hydrocarbons such as benzene, methanol, toluene, naphtha, MTBE, ETBE or TAME, and a seal that has the ability to operate in narrow rim spaces, choose the MINI-SHOE® Primary Shoe Seal.

Key benefits:

The MINI-SHOE® Primary Shoe Seal's benefits include:

Compatibility — compatible with virtually all stored products

Gap sealing — unparalleled pressure application system ensures tight sealing across the entire shoe

Working range — accommodates rim spaces as small as 2.5"

Long life — key components made from custom-hardened stainless steel, ensuring spring longevity and long-lasting seal performance

Maintenance-free operation — workhorse design and materials

Lightweight — designed especially for light-weight aluminum internal floating roofs



Key design features:

- Channel style shoe hanger assembly, accommodates all aluminum pontoon roofs
- Even pressure distribution across the entire shoe
- Compatible with virtually all stored products when installed with PTFE vapor barrier
- Designed to function with roofs in any position without imposing adverse loading on the roof
- Premium fabrics for long-life and durability of vapor barrier
- Horizontal and vertical rim mounts
- Available with secondary seal systems
- Designed with guidance from EPA and local regulations

THE MINI-SHOE® PRIMARY SEAL FOR ALUMINUM INTERNAL FLOATING ROOFS DESIGN

HMT's MINI-SHOE® Primary Seal for Aluminum Internal Floating Roofs makes good economic and environmental sense for today's aluminum roof. Here's why:

1. Designed for tight rim spaces

The innovative feature of this seal is the HMT MINI-SHOE® Type Hanger Assembly. It successfully maintains positive gap sealing ability while accommodating rim spaces as small as 2.5". Made of lightweight stainless steel, the MINI-SHOE® Type Hanger Assembly combines superior strength with exceptional corrosion protection.

2. Even pressure application

This seal was designed to have equal force applied to the shoe in six specific contact points. This design ensures even pressure distribution and allows the shoe to conform well to local anomalies in shell roundness. The MINI-SHOE™ Primary Shoe seal is a long lasting seal that was designed to function with the roof in any position without imposing adverse loading on the roof. In addition, the shoes are notched to provide additional flexibility.

3. Handles a wide range of products

Seal compatibility is no longer a problem for such hydrocarbons as gasoline, crude oil, benzene, methanol, toluene, naphtha, MTBE, ETBE or TAME. The MINI-SHOE® Primary Shoe Seal, combined with HMT's PTFE laminated fluoropolymer vapor barrier fabric, is resistant to virtually all products stored in floating roof tanks.

OTHER KEY FEATURES AND BENEFITS

Custom-hardened stainless spring steel

A critical ingredient in all our seals is the type of stainless steel we use for pressure application. This steel, purchased direct in mill-run quantities, is custom-hardened to our specification to maximize spring stiffness and seal longevity. While annealed or off-the-shelf "quarter-hard" steel can lose its spring, HMT components will 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.

Industry-leading PTFE fabrics

The other area where HMT outperforms the rest is in the quality and durability of our fabrics. We offer a variety of fabric choices, depending on service requirements. Our standard PTFE fabrics are laminated, which are unsurpassed in terms of durability, impermeability and service life. HMT's fabrics will wear extremely well in even the most aggressive services.

Other benefits and options

- Bolt-on design for fast, easy installation and repair
- Channel style shoe hanger assembly, accommodates all aluminum pontoon roofs
- Designed to accommodate varying rim spaces 2.5" to 13"
- Works with both welded and riveted tank shells
- Teflon® materials contain additives to ensure the dissipation of static build-up
- PTFE or polyurethane fabric options
- Stainless steel bolting hardware
- Hanger assembly and clamping bars made of aluminum for lighter weight
- 18 (1.2 mm) gauge stainless steel shoes specially designed for welded storage tank applications

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 - Painting, Coating & Lining - Engineering Services.

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