



ALLENTECH

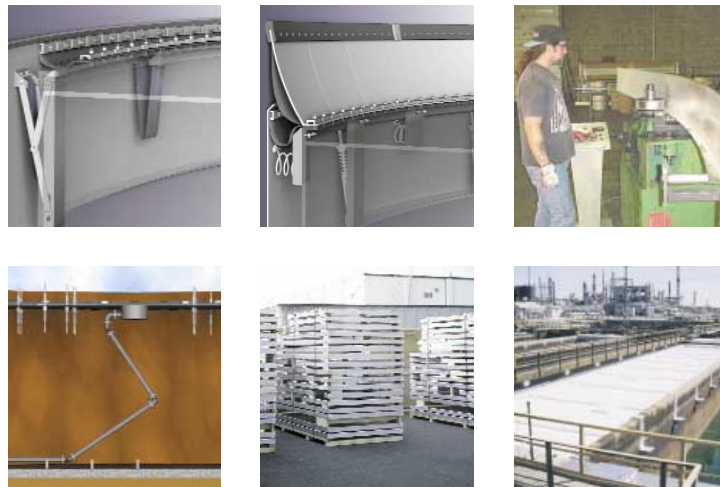
ALUMINUM INTERNAL FLOATING ROOFS FOR ABOVE GROUND STORAGE TANKS

PERIMETER SEAL SYSTEMS FOR INTERNAL AND EXTERNAL FLOATING ROOFS

OIL / WATER SEPARATOR COVERS FOR API SEPARATOR BASINS

ABOVE GROUND STORAGE TANK APPURTENANCES





SUPERIOR SYSTEMS — UNSURPASSED SERVICE

ALLENTECH's success is built upon our solid reputation for providing innovative, reliable and long-lasting products backed with service second to none. Our comprehensive product line provides owners with a single source for aluminum and stainless steel floating roofs, floating roof seals, floating oil/water separator covers and other tank appurtenances.

Confidence in our products, service and response has enabled us to build long-term partnering relationships with our customers who know that they can count on ALLENTECH to meet their requirements from design through installation. You can count on ALLENTECH to offer the support you desire and need.

Our innovative culture, coupled with a highly motivated and experienced staff, modern production facilities, large inventory and resources of a proven company help

resolve unusual problems and conditions in an expeditious manner.

Our commitment is to provide the highest quality products and service to our customers, and to aid our customers in protecting the environment by minimizing the escape of hazardous air pollutants.

We offer a complete line of proprietary products that includes:

- Aluminum Floating Roofs
- Perimeter Seals for Internal and External Floating Roofs
- Oil Water Separator Covers
- Tank Appurtenances



ALLENTECH PONTOON TYPE INTERNAL FLOATING ROOFS



Underside view of pontoon type IFR

Our tubular aluminum pontoon type Internal Floating Roof (IFR) is the model for cost-effective, efficient and long-lasting Internal Floating Roofs. Pontoons manufactured to the highest of quality standards using only certified welders and ASME qualified weld procedures are arranged on a tightly spaced grid to provide excellent distribution of buoyancy. The vapor integrity of the roof is ensured by our unique sheet clamping system. The strong extruded and rolled perimeter section allows us to install primary shoe seals and secondary seals without the need for additional stiffening. This roof is also available in hybrid aluminum/stainless steel or all stainless steel for highly corrosive services.

ALLENTECH floating roofs are custom designed and completely pre-fabricated for each application resulting in the highest quality product and efficient installation.



Top view of cable suspended IFR

ALLENTECH CABLE SUSPENDED ROOF

Our cable suspension design allows the IFR to be suspended from the tank roof at various customer specified elevations.

- Increases the emission retention efficiency of the IFR
- Eliminates in-service entries to adjust the leg position
- Allows unobstructed access for inspection and repair of the tank bottom

ALLENTECH ALUMINUM HC FULL CONTACT TYPE INTERNAL FLOATING ROOFS



Top view of Aluminum HC Full Contact IFR

Interlocking joint with cap channel
for strength and vapor integrity

Protected by U.S. & Foreign Patents

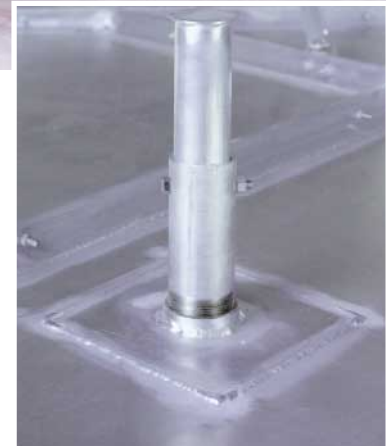
Our patented, welded module Aluminum HC Full Contact IFR is designed for owners who prefer the benefits of the full contact aluminum floating roof concept. ALLENTECH's welded module design eliminates costly failures and product compatibility concerns associated with an exposed adhesive design. Factory-installed test ports allow future field-testing of each module so that the tank can be certified gas free without concern that dangerous vapors or product may be trapped inside the module.

The ALLENTECH Aluminum HC Full Contact IFRs have been designed around strength and safety, eliminating concerns of leaking modules and product entrapment associated with other designs.

- No exposed failure prone adhesives
- Surface sheeting is more than 2ft times the required minimum thickness to reduce corrosion effects and increase strength
- Each module is tested and certified leak free prior to shipment
- ALLENTECH's standard Aluminum HC Full Contact IFRs have enough strength and buoyancy to be fitted with single or double shoe seals
- Our standard HC IFR can support 750 pounds on the outer edge while floating with buoyancy to spare



Enlarged section
and detail of factory
seal-welded
reinforcing plate



ALLENTECH ALUMINUM HC FLOATING OIL WATER SEPARATOR COVERS



Completed first bay of multi-bay project

ALLENTECH Aluminum HC Full Contact Floating Oil Water Separator Covers minimize emissions and odor control problems. Our design incorporates all of the safety features and long-term value of our Aluminum HC Full Contact Internal Floating Roof.

- Roof coating available prior to installation using a two-part epoxy coating selected for specific site conditions.
- Skimmer troughs and other custom-designed features are available.

THE PREFERRED CHOICE — Engineers, owners and operators throughout the world have come to recognize and rely on ALLENTECH's expertise, quality and service.



Fixed cover and false wall.



Double perimeter wiper seals.

ALLENTech FLOATING ROOF SEALS

We offer a complete line of primary and secondary floating roof seals for all types of internal and external floating roofs. For steel floating roofs, choose from our patented **Flex-A-Span™** primary shoe seal and **Flex-A-Seal™** secondary compression plate seals which have been installed in thousands of tanks with excellent success and reliability or our newest innovation, the ALLENTech

V-Spring™ primary shoe seal. Our patented stainless steel shoe seal designed specifically for aluminum internal floating roofs reduces emissions and saves owners excessive costs in replacement seals, tank cleaning and downtime costs when compared to wiper seals. ALLENTech seals can be installed on most existing floating roofs without any major modifications.

ALLENTech PRIMARY MECHANICAL SHOE SEAL FOR ALUMINUM INTERNAL FLOATING ROOFS



Primary stainless steel shoe seal

ALLENTech primary stainless steel shoe seals have been installed on thousands of new aluminum internal floating roofs and have been retrofitted on roofs from all major manufacturers since 1992. This seal compatible with most petrochemical products including both MTBE and ethanol.

- Stainless steel shoes resist corrosion
- Laminated Teflon vapor barrier is compatible with most products
- Unique hoop spring provides a nearly continuous band of pressure against the tank shell
- Meets or exceeds all current U.S. E.P.A. regulations

The stainless steel shoe offers superior chemical resistance and life performance over wiper seals.



Protected by U.S. & Foreign Patents

ALLENTECH SECONDARY MECHANICAL SHOE SEAL FOR ALUMINUM INTERNAL FLOATING ROOFS



Protected by U.S. & Foreign Patents

ALLENTECH is the first to introduce the secondary mechanical shoe seal for aluminum internal floating roofs. This innovative design ensures that ALLENTECH customers are not affected by changes in the chemical composition of their stored products. The low profile secondary shoe seal minimizes capacity loss as compared to other non-elastomeric secondary seals.

- **Metallic components are corrosion resistant stainless steel and aluminum**
- **The double shoe seal exceeds current U.S. E.P.A. requirements**
- **The secondary shoe seal can be retrofitted above most existing primary seals**



INSTALLATION

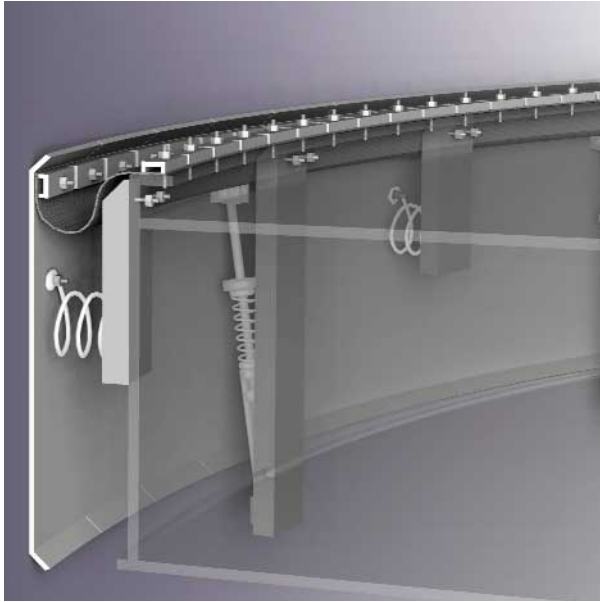
Domestic installation of all ALLENTECH aluminum products is performed by ALLENTECH installation crews, the best in the industry. We understand from our extensive field experience the importance of doing the job safely, correctly and efficiently the first time.

ALLENTECH-trained representatives can perform international installations on a turnkey basis. Also, factory-trained technicians are available to guide installations performed by your installers.

Highly skilled ALLENTECH craftsmen produce our products at our state-of-the-art facilities. Our integrated facilities allow the engineering and project management teams to work closely with plant personnel to ensure quality and on-time deliveries.

ALLENTECH STEEL FLOATING ROOF SEALS

PRIMARY SEALS

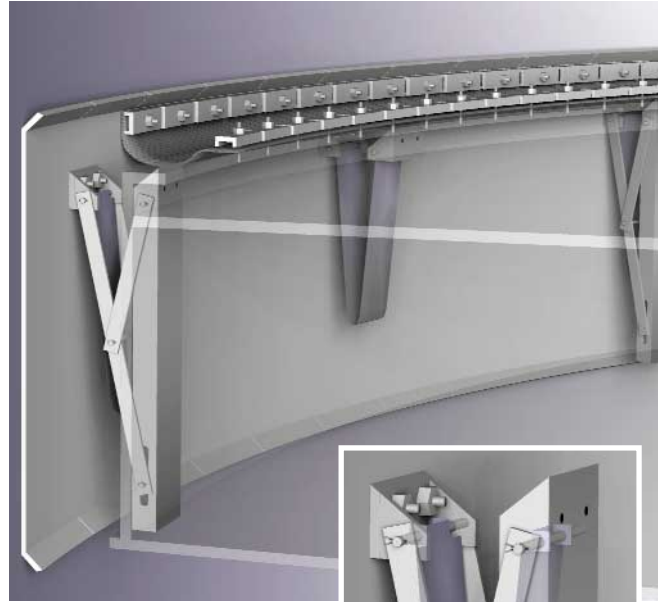


Flex-A-Span™ Primary Shoe Seal

U.S. Patent No. 5,036,995

The ALLENTECH **Flex-A-Span™** primary mechanical shoe seal provides excellent sealing and long service life through its use of coil springs, spring-loaded hangers and our patented expansion joint. Our unique expansion joint eliminates gap problems associated with alternate designs. Vertical misalignment and radial separation are eliminated without compromising circumferential expansion and contraction.

Flex-A-Span™ provides the benefit from nearly 50 years of proven field experience.



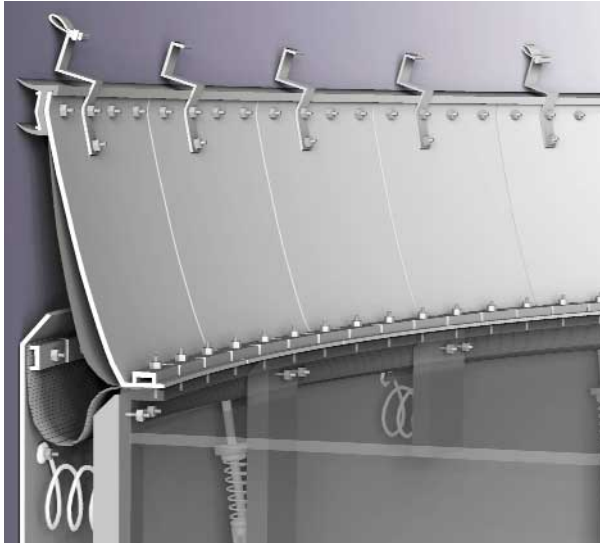
V-Spring™ Primary Shoe Seal

Both **Flex-A-Span™** and **V-Spring™** offer the following features:

- Available for both internal and external steel floating roofs
- Custom-designed
- Cost-effective and easy to install with the tank in or out of service
- Easily installed with no hot work required
- Galvanized or stainless steel components available
- Compatible with virtually any product

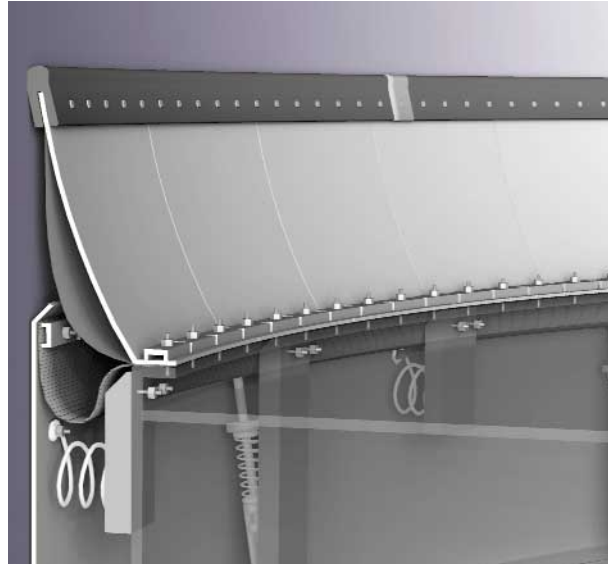
The ALLENTECH V-Spring™ scissor primary mechanical shoe seal, with its unique rigid attachment of the V-Spring™ to the shoe and floating roof, eliminates the concern of wear on both the shoe and the floating roof. The V-Spring™ design exerts excellent sealing force even in large rim spaces.

ALLENTECH SECONDARY SEALS FOR STEEL FLOATING ROOFS



Flex-A-Seal™ for riveted tanks

The patented ALLENTECH **Flex-A-Seal™** secondary compression plate seal reduces evaporation loss and rainwater contamination of stored product. To ensure



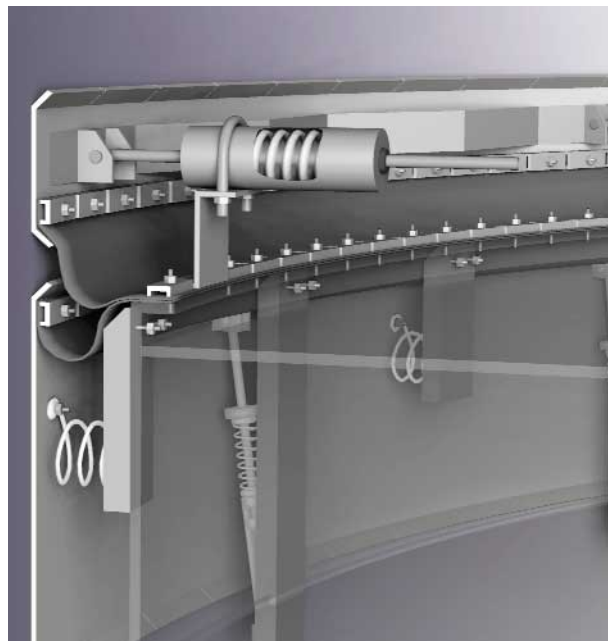
Flex-A-Seal™ for welded tanks

U.S. Patent No. 4,397,399

proper operation, the **Flex-A-Seal™** is custom-designed for each tank and is available in galvanized or stainless steel. These seal designs are easily installed on new and retrofit projects without hot work or the need to

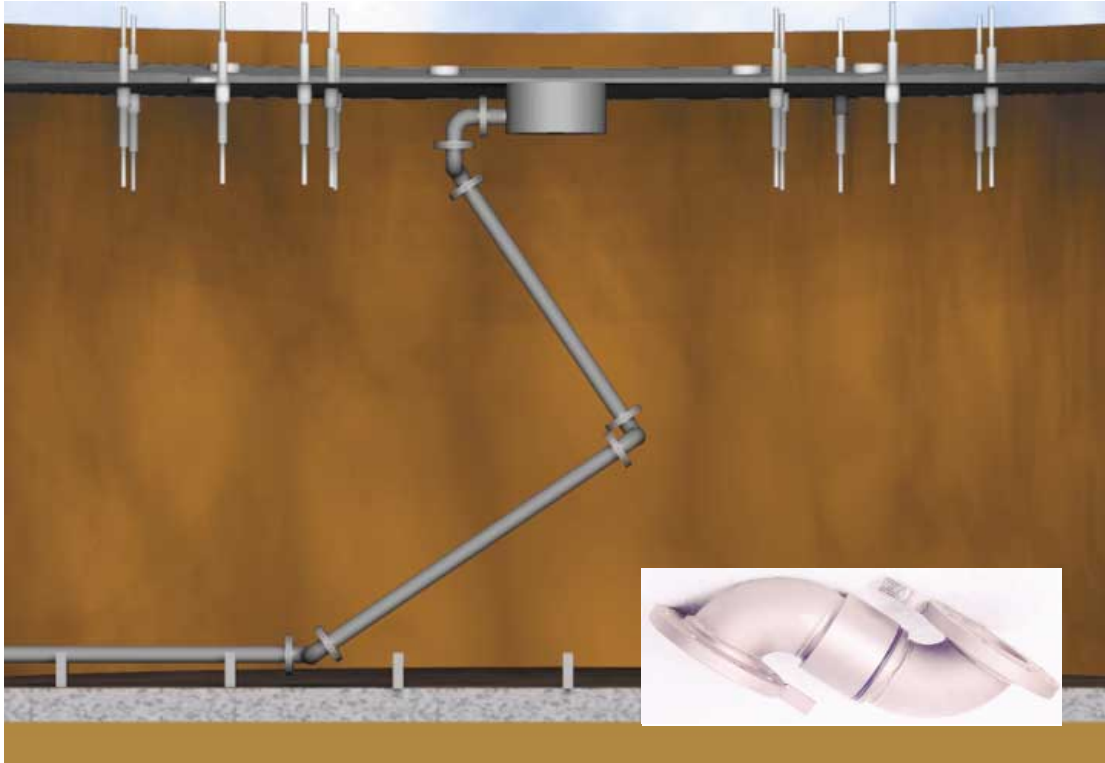
Safety is of the utmost importance to our customers and us. Our personnel are routinely trained and tested to ensure their competency and knowledge of safety procedures. Dedicated safety personnel ensure that we are in compliance with industry and customer standards.

The ALLENTECH Low Profile Secondary™ Shoe Seal provides optimum sealing through the use of spring-actuated pusher/hanger mechanisms and contact distribution springs. Its low profile minimizes tank capacity loss. Chemical incompatibility issues are virtually eliminated and service life far exceeds other types of secondary internal floating roof seals.



ALLENTECH's Low Profile Secondary™ Shoe Seal is available in galvanized or stainless shoe components.

TANK APPURTENANCES



ALLENTech's *Flex-A-Swivel*™ roof drain, 3-joint system shown — also available in 4-joint system

U.S. Patent No. 5,889,908

The ALLENTech *Flex-A-Swivel*™ roof drain is made of nickel-plated steel. It does not contain failure prone ball-bearings and flexible hoses. It is rugged and more chemically resistant than present flexible hose drains and swivel joints that use flexible hose at the joint. The threaded construction provides a secondary seal in the unlikely failure of the o-rings.



Float Retrieval System

Our Float Retrieval System minimizes emissions and eliminates spillage of product from the gauge pole float during gauging and sampling operations. Your operators will no longer face the danger of having to be careful not to spill fuel on themselves or the work area. Furthermore, they will not need to worry about tripping over cables or floats left lying outside of the gauge pole.

The ALLENTech Safety Hinge is a natural development for our company where safety is our number one priority. This device prevents back strains and foot injuries during removal of manway covers and is much less expensive than equipment required to lift covers during removal and reinstallation every time you open your tank.



Manway Safety Hinge

DESIGN & MANUFACTURING



DESIGN & MANUFACTURING

Our staff of professional engineers, designers and experienced specialists provides all of the expected professional services, with a special commitment to maintain a productive working relationship with our customers. Our project management team and engineers are available for inspections, technical assistance and quality control. With many personnel having spent more than twenty years in this industry, we have the experience and knowledge to offer creative solutions to any problem.

Other fabricated fittings and appurtenances available from ALLENTECH:

- Stairways
- Rolling Ladder with Self-Leveling Steps
- Manways
- Nozzles
- Clean Out Doors
- Roof Vents
- Floating Suction Line





SUPERIOR SYSTEMS, UNSURPASSED SERVICE

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 **A MATRIX SERVICE COMPANY**

