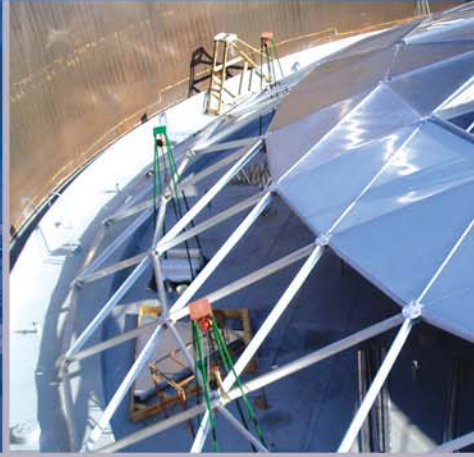




www.kfloat.com

Stop Loss Keep Clean

Best effective prevention for vapor loss and contamination of stored products



K-FLOAT[®]



OUR MISSION

When you engage in Korea Float experience, you gain access to a rich heritage of expertise, service and innovation unlike any other. Since 1996, a group of experts in Above-ground Storage tanks have devoted themselves to the best engineering and mechanical offerings around for Floating Roofs and Sealing systems.

Having set out to create an evolution in effective sealing and vapor loss, Korea Float has the experience and resources to have developed a vast reservoir of design understanding, chemical knowledge, manufacturing "Know-How" and constructing the reliability and the quality.

Korea Float has made the leap to become a VOC control system industry leader uniquely focused on the needs of our clients and environmental circumstances.



MAIN BUSINESS

Engineering & Manufacturing

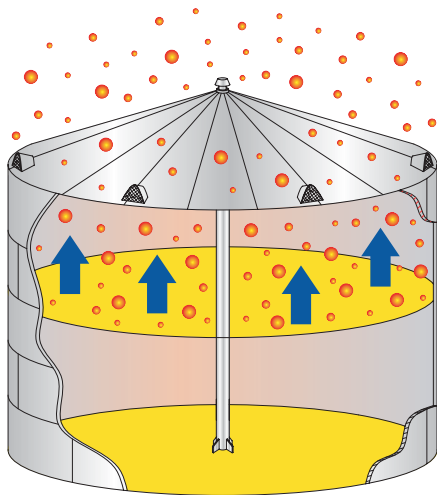
- External Floating Roof Seal System (EFR)
- Internal Floating Roof Seal System (IFR)
- Roof Drain System
- Floating Suction & Oil Skimmer System
- Aluminum Dome Cover & Waste Water Treatment Facilities Cover System
- Tank Accessories

Other business

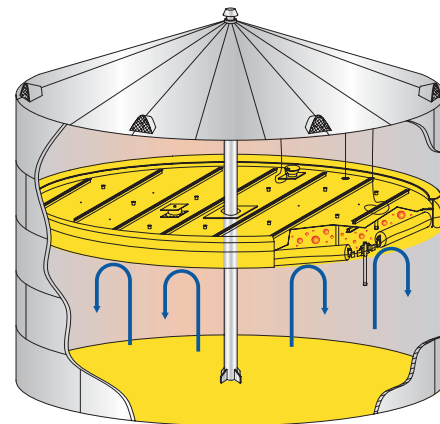
- Installation, Supervision & Inspection
- Tank cleaning & Repair

Internal Floating Roof

Many companies in petroleum, petrochemical and tank terminal throughout the world have turned to Korea Float for its superior design and efficiency on internal floating roof. The long life cycle, excellent emission control and no maintenance cost are well known now. Korea Float's design and manufacturing method meet API standards and specified national codes and regulations worldwide.



Vapor Loss Without Floating Roof



Vapor Prevention With K-Float Floating Roof

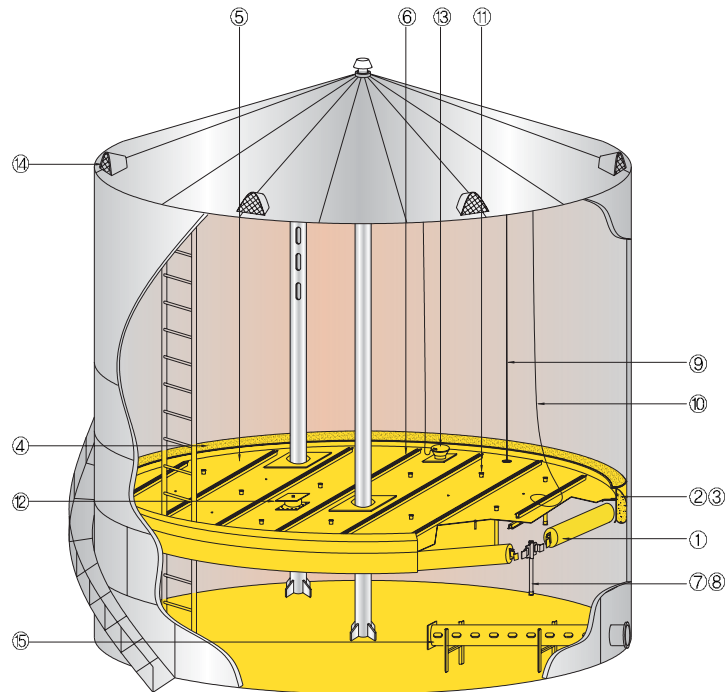
Korea Float's superior design and its material on Floating Roof are the most effective way of reducing vapor evaporation and VOC (Volatile Organic Compound) emission to the atmosphere, thus contributing to environmental protection, fire hazard prevention as well as saving a great deal of money by preventing evaporation loss.

Advantages of K-Float Floating Roof

- Meeting API 650 Appendix H Standard
API Bulletin 2517 & 2519 (Vapor Loss)
- Highly efficient vapor loss prevention design
- Excellent quality Seal Material
- Wide range of storage application
- Superior chemical resistance
(100% Aromatic Protection)



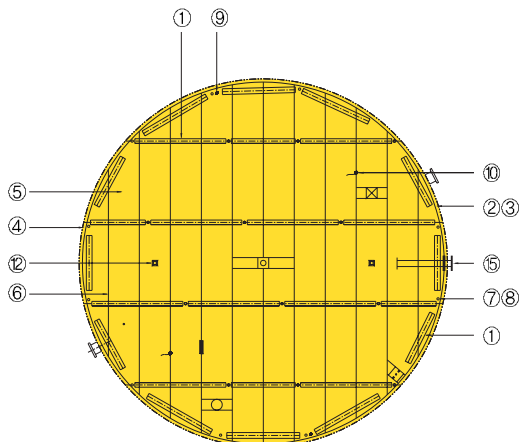
INTERNAL FLOATING ROOF



Metallic internal floating roofs on floats have their deck above the liquid, supported by closed pontoon compartments for buoyancy.

These roof decks are typically constructed of aluminum alloys or stainless steel.

ORIENTATION OF INTERNAL FLOATING ROOF



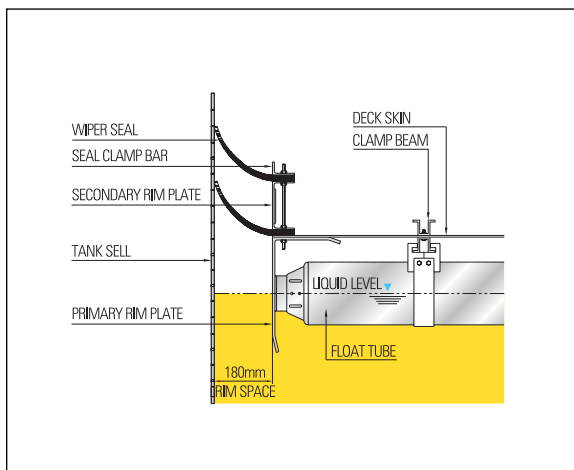
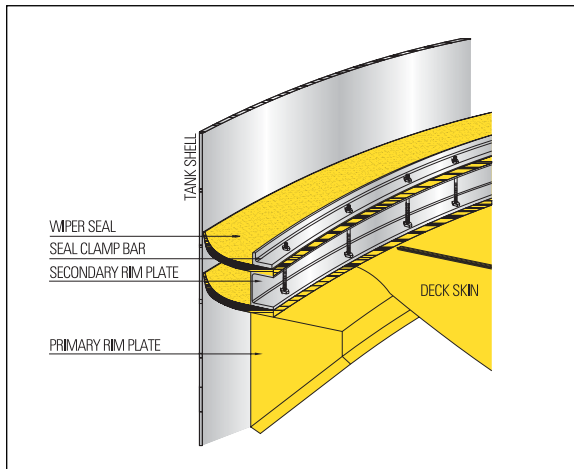
- ① MAIN/RM FLOAT TUBE
 - ② FOAM BLOCK
 - ③ ENVELOPE
 - ④ WIPER SEAL
 - ⑤ DECK SKIN
 - ⑥ CLAMP BEAM
 - ⑦ LEG PIPE & SHOE
 - ⑧ HOUSING
 - ⑨ ANTI-ROTATION CABLE
 - ⑩ GROUND CABLE
 - ⑪ STUB DRAIN
 - ⑫ VACUUM BREAKER
 - ⑬ SAMPLING DEVICE
 - ⑭ ROOF VENT
 - ⑮ INLET DIFFUSER LINE
 - API 650 APPENDIX "H"
 - API 2000
- *STAINLESS MAT'L IS ALSO AVAILABLE.

Korea Float offers various tank seal designs for any specific service requirement including single & double wiper seal, foam log seal, and mechanical shoe seal. In addition, many different seal materials are also available for most petroleum and chemical applications.

Korea Float's Floating Roof utilizes top grade aluminum, high quality Stainless steel and excellent rubber materials to maximize strength and to assure Corrosion resistance.

Korea Float's Internal Floating Roof Seal System

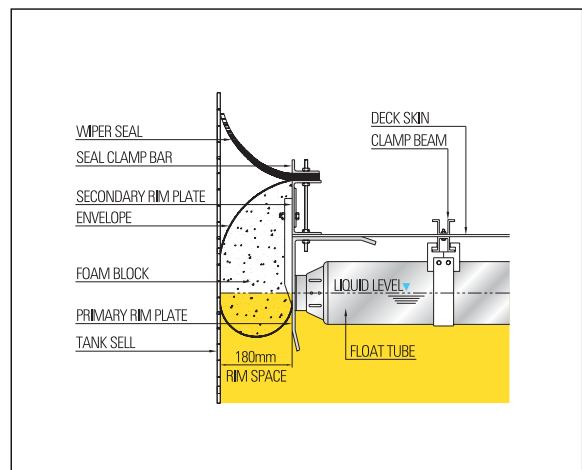
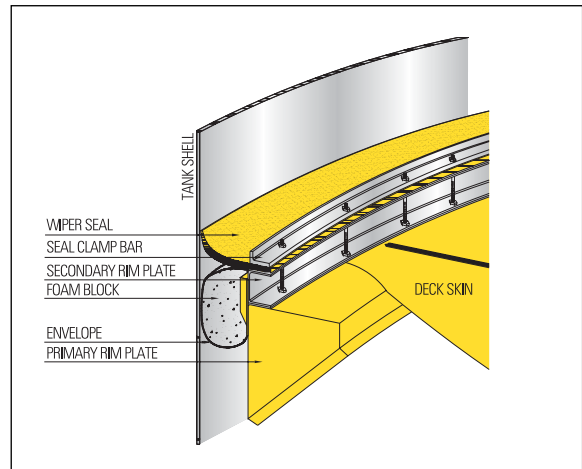
KFIS-1 : Single Wiper Seal
KFIS-2 : Double Wiper Seal



KFIS-2

One economic way of sealing is to apply vapor-mounted single or double seal type. Its flexible wiper seal will cover the rim space and can last long even after long years of floating roof's movement. 100% aromatic prevention quality will meet your needs and requirement.

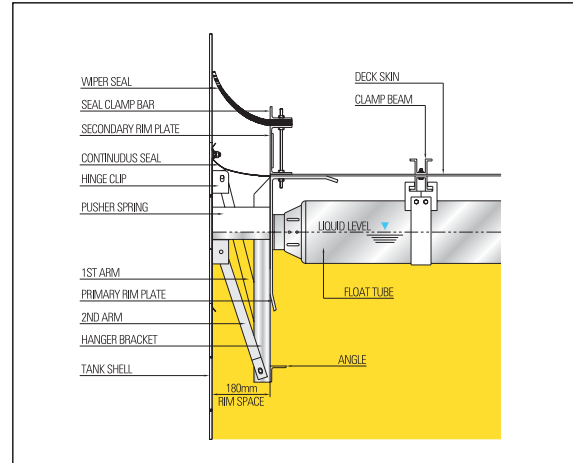
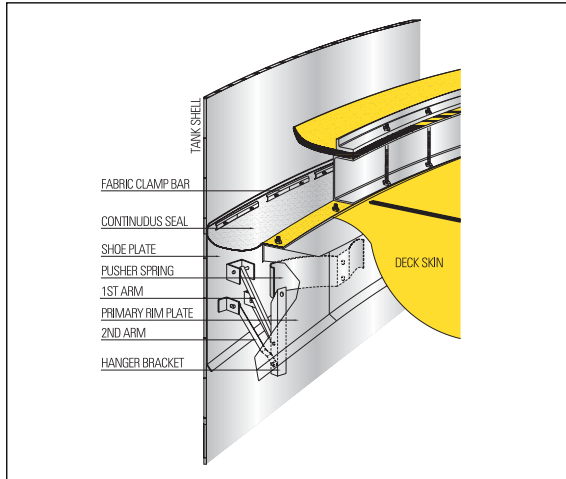
KFIS-3 : Primary Foam & Secondary Wiper Seal



KFIS-3

Excellent liquid-mounted foam seal and secondary wiper seal have been chosen from many customers around the world. The foam block's resilience provides excellent sealing effect and secondary wiper seal reinforces the sealing effect.

KFIS-MS: Mechanical seal



KFIS-MS

Stainless Shoe is always in contact with tank shell due to powerful stainless steel Pusher Spring. KF Mechanical seal system have been used especially for strong chemical content such as Petrochemical Industry as well as Petroleum. Continuous seal is perfectly reducing the vapor loss with top quality material. Mechanical seal system's life time can cover more than several decades.



Korea Float Installation, Maintenance and Repair services

Inspection

Experts perform regularly scheduled inspection of tanks with seals to determine whether or not they are performing safely and efficiently.

Supervision

Experts supervise the complete installation to make sure of smooth operation.

Repair

Repair work can be done during operation or with minimum disturbance to operations.



ALUMINUM DOME COVER

Environmental regulations governing petroleum and chemical storage have been recognized worldwide and more strict policies are demanded to reduce hazardous Vapor emissions. Finding cost-effective ways to address these regulations is a top priority for storage tank facilities.

Korea Float's al. dome roof has provided environmental efficiency, protected stored products and reduced maintenance costs, and its reputation has been built on its economic budget, light weight, and simple installation.



Installation Procedure

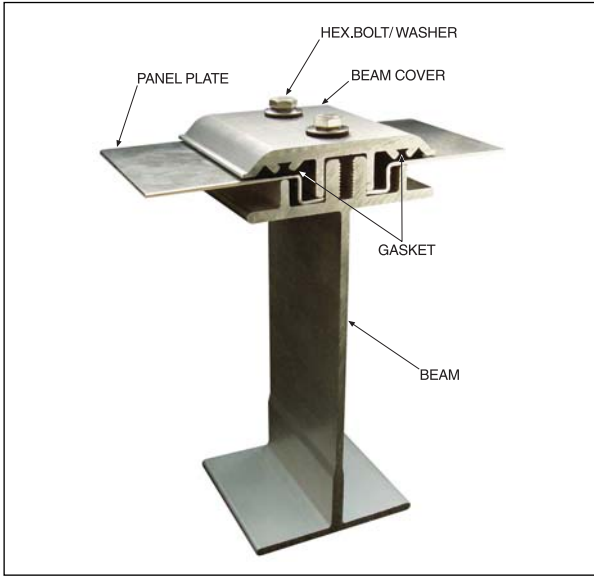
- Have the material ready
- Assemble Hub and Beam from the top of the dome.
- Lift the dome after assembly.
- Finish up on the tank shell.
- Complete.



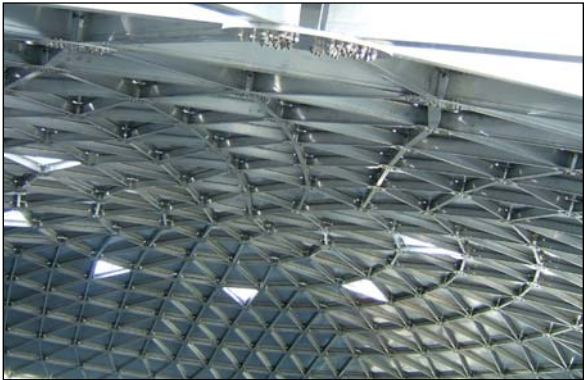
KF ALUMINUM DOME COVER Design

Korea Float al. dome roof is supported only from the rim of the tank. Primary horizontal Thrust is connected by an integral tension ring. Industry proven design with Korea Float's experience has been welcomed and accepted to many parts of the world.

Korea Float has researched and developed structurally self supported al. dome roof with triangulated al. space truss and struts to satisfy regulations and comply with environmental awareness. Having API 650 appendix Gas the basic concept, Korea Float has outdone itself on al. dome roof design with its accumulated knowledge on storage tanks of petrochemical and petroleum industries and long history experience on tank maintenance services.



Korea Float Al. dome cover can be utilized for various purposes such as water Treatment facilities.



Examples of ALUMINUM DOME COVER

Control Tank

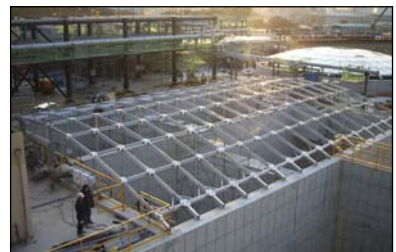
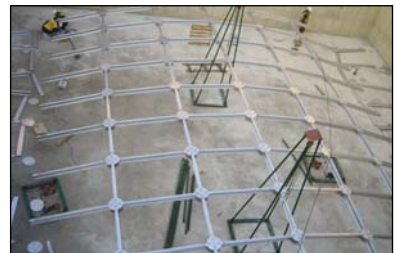
Before



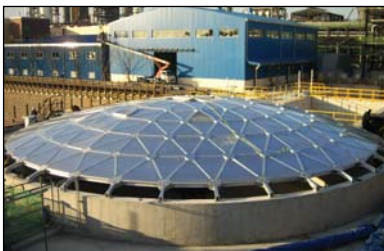
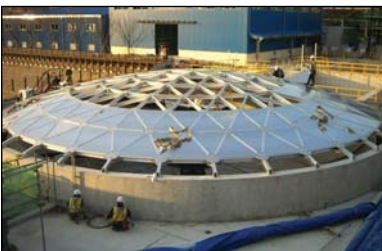
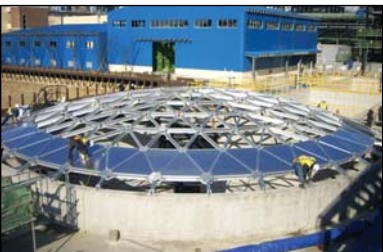
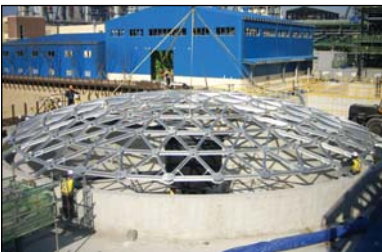
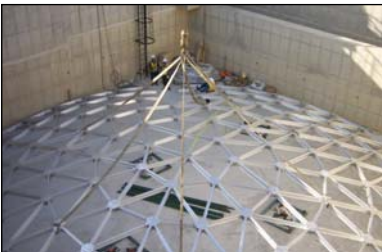
After



Purifire Tank



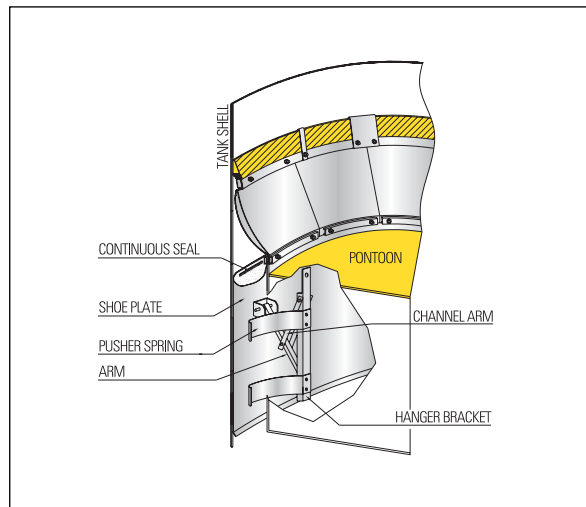
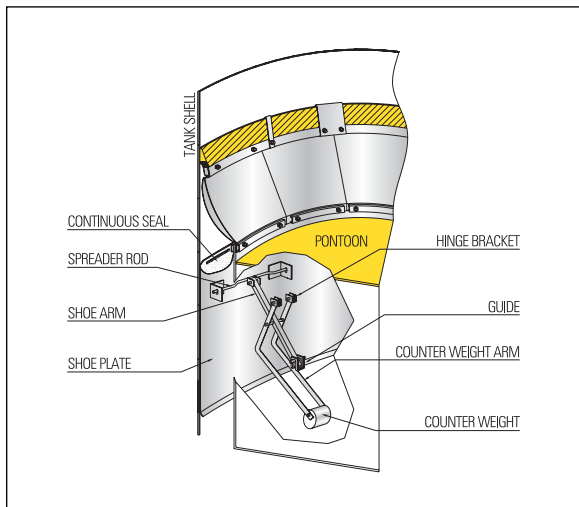
Precipitation Tank



External Floating Roof Seal System

Korea Float's External Floating Roof Seal has been designed to comply with the requirement of API 630, Appendix C and environmental regulations worldwide. The space between the outer periphery of the roof and the tank shell shall be sealed by a flexible device that provides a close contact on the shell surfaces.

Mechanical seal (KF-1 & KF-1S)



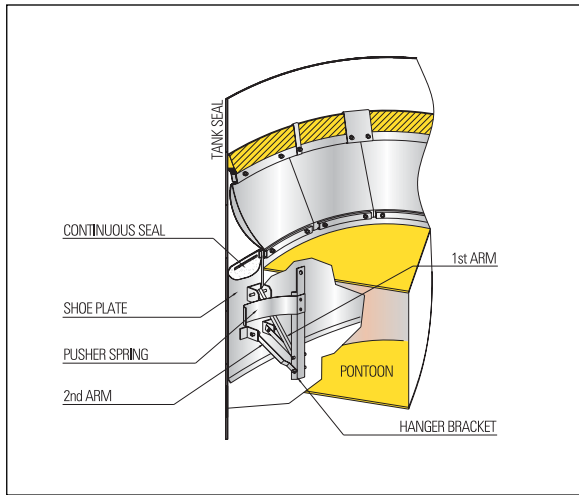
KF-1 Pantograph Type Mechanical Seal

KF1's Pantograph type with counter weight is one of the types that are popular and welcomed all over the world.

KF-1S Spring Type Mechanical Seal

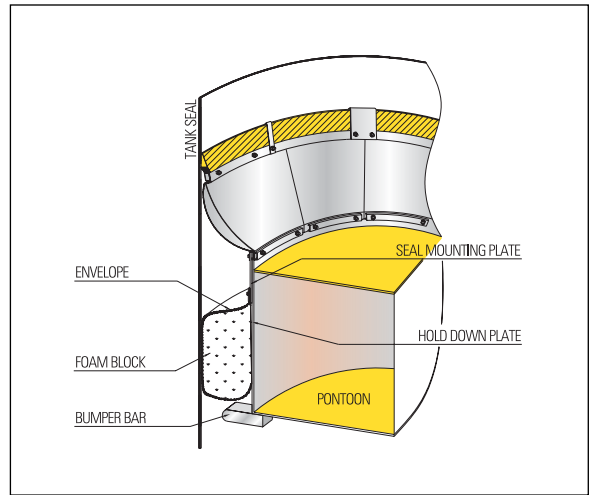
One big advantage of KF1S is its two pusher springs up and down, which really push shoe plate to the shell. For KF1S installation, only bolting and nutting are ok without welding.





KF-2S Spring Type Mechanical Seal

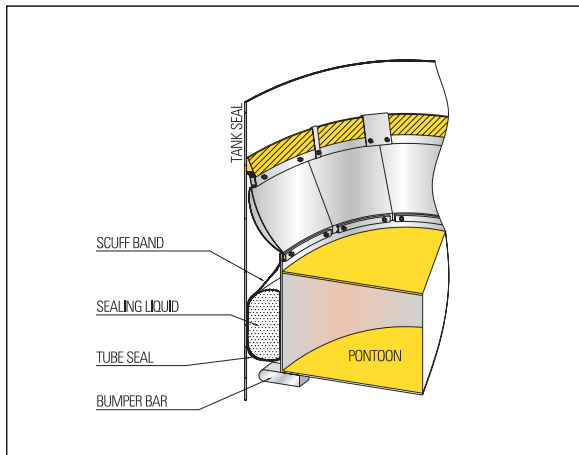
It is used when the pontoon is relatively small. It utilizes a light-gauge metallic band (shoe plate) as the sliding contact with the shell and a fabric seal to close the annular space between the metallic band and out rim of the pontoon.



KF-FOAM Seal

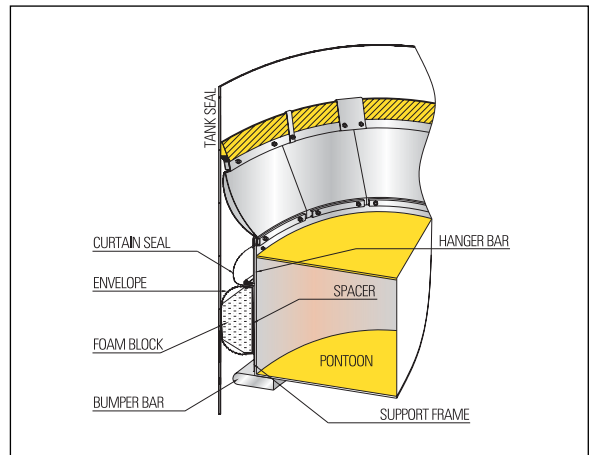
There are two types of KF-Foam; one is vapor type and the other is liquid mounted type.

Regardless of the tank condition and specification, KF-Foam are liquid tight and its polyurethane foam is in accordance with ASTM D 3453.



KF-TUBE Seal

KF-Tube seal's material can meet various kinds of liquids and resist chemically strong contents.



KF-7 TYPE FOAM Seal

KF-7 is an advanced version with support frame holding foams securely. Foam's flexibility can provide the excellent sealing effect.



Advantages of Korea Float's External Seal System

- Meeting API 650 Appendix C Standard
- Superior sealing capability with vapor
- Tight and weather protection
- Wide range of storage applications
- Superior chemical resistance (100% Aromatic Protection)
- Excellent resiliency
- Easy to install
- Extraordinary longevity

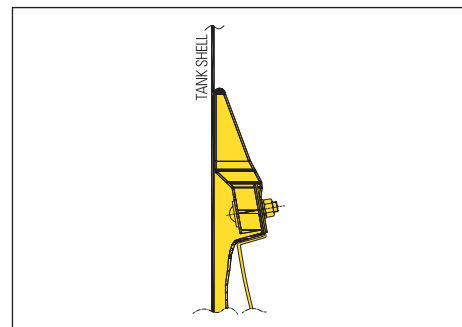
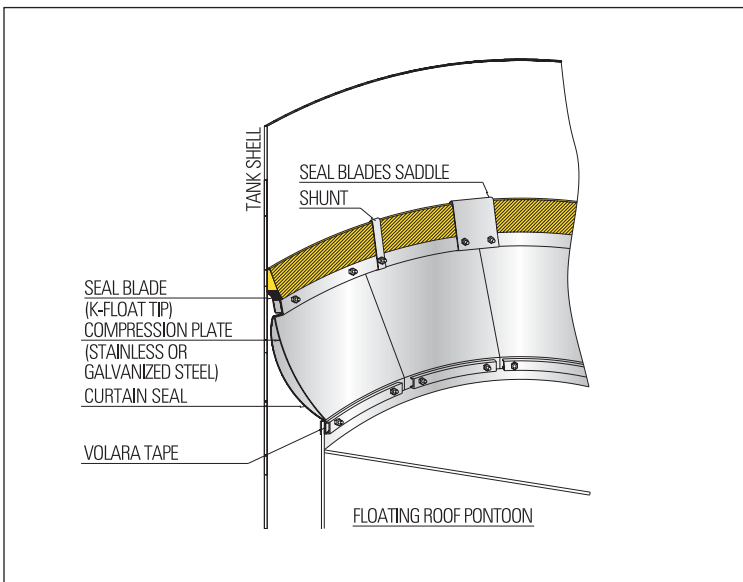
KF-20 Secondary Seal System for External Tanks

KF 20 Secondary Seal system has proven its excellent sealing ability with vertical shape of sealing blade. KF20 can be used on tank containing all types of crude oils and prevent vapor emission from the stored product.

KF 20 Secondary Seal system is very easy and convenient to install.



KF20 Secondary Seal System



KF20 'I' type wiper seal





Thank You Letter

We appreciate this chance to meet you and introduce ourselves to you today.

We know that it is never easy to have full satisfaction from the customers, but we also would like to celebrate the recognition and experiences that we have gained through the years.

You can always turn to us with questions and inquires you might have, and your comments and input are always welcome and valuable.

Thank you for your attention and look forward to seeing you again at the job site as well.

Thank you very much.

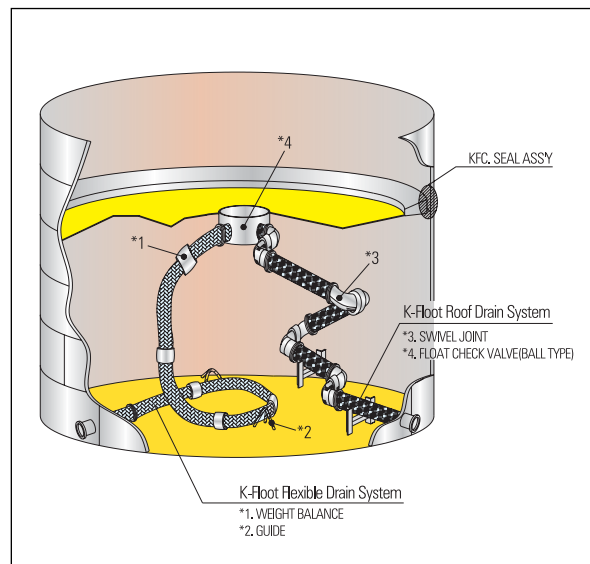
Korea Float Co., Ltd.

Roof Drain System for External Floating Roof

Articulate Rigid Pipe Drain System (Swivel Joint Assembly)

K-Float's Roof Drain System with jointed type is the most common system for all external floating roof tanks.

The swivel joints are fully sealed units specifically designed for submerged service with an articulated pipe drain. Korea Float drain system is capable of preventing the roof from accumulating a water level greater than design at the maximum rainfall rate specified by the customer. A check valve can be supplied upon request to prevent backflow of the stored product if leakage occurs.



Flexible Drain System

Flexible drain hose can cover most applications from continued submergence in 100% aromatics to 300 F hot tanks to Ethanol and Methanol applications. Flexible drain is designed to prevent kinking of the hose or pinching of the hose under the deck support legs.

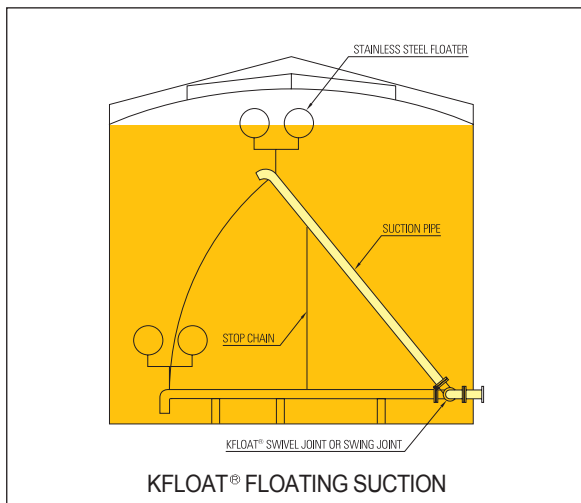


Floating Suction Line System & Oil Skimmer Line System

Floating Suction Ass'y

Floating suction system is designed to draw out the cleanest fluid by self-buoyancy of float tube, eliminating a high percentage of water and sediments. KF floating suction has been used for aircraft fuel, motor fuel, heating oils, petrochemicals and marine bulk terminals. Also for a bigger size, swing joints are available for customer satisfaction.

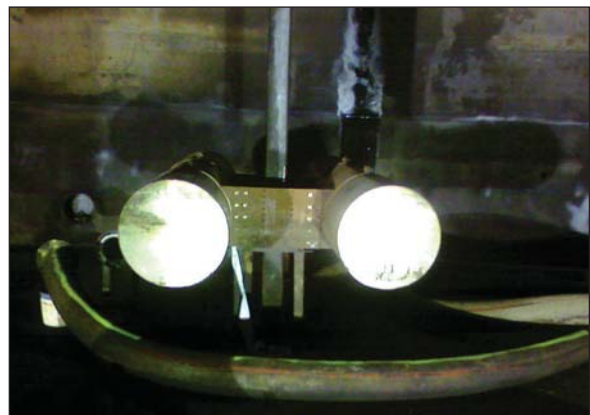
KF-SUCTION (IFRT)



Pipe & Swivel Joint Type

Floating Oil Skimmer Ass'y

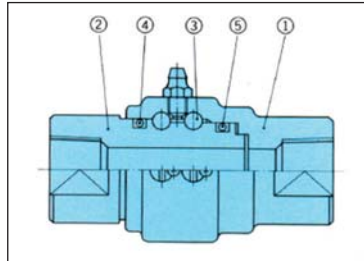
Korea Float Oil Skimmer has done a great job with skimming deposits floating on the liquids of many tanks around the world. Floating tubes make the skimmer nozzle always facing toward the surface of the liquids. Oil Skimmers are completed with either Swivel joints or Swing joints depending on their sizes.



Flexible Hose Type

Swivel joint assembly

KFJ-2000



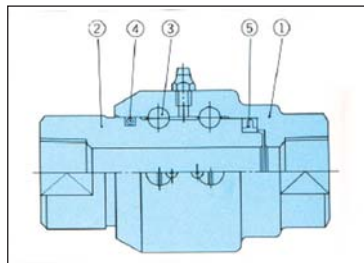
REF. No.	DESCRIPTION
1	BODY
2	NIPPLE
3	STEEL BALL
4	O-RING
5	O-RING

Ductile Cast Iron

Fluid : Water, Air, Oil, Gas, Petroleum Products
 Max.Service Pressure : 40kg/cm²G
 Max.Service Temperature : 100°C NBR Packing
 180°C Viton Packing
 Connection : Female Thread

A short tube with flanges is installed to permit flange connection.
 Double ball-race swivel joint for low pressure service.
 Seal : Oring (NBR or Viton)
 The spring-loaded TFE packing can be installed as required

KFJ-3000



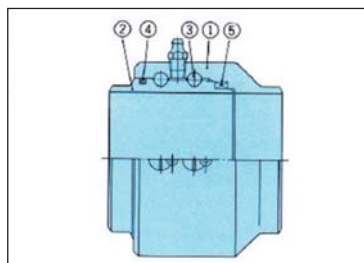
REF. No.	DESCRIPTION
1	BODY
2	NIPPLE
3	STEEL BALL
4	O-RING
5	PACKING

"Forget steel (3/8" thru 2"), Cast steel (2 1/2")

Fluid : Water, Air, Oil, Gas, Petroleum Products
 Max.Service Temperature : 100°C NBR Packing
 180°C Viton Packing
 Max.Service Pressure : 420kg/cm²G T-packing
 210kg/cm²G T-packing

Connection : Female Thread, Bevel ends,
 Socket welds or Flange
 Double ball-race swivel joint for low pressure service.
 Seal : T or U packing (NBR or Viton)

KFJ-4000



REF. No.	DESCRIPTION
1	BODY
2	NIPPLE
3	STEEL BALL
4	O-RING
5	PACKING

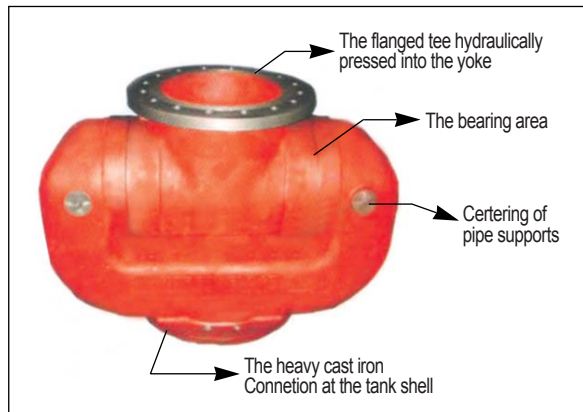
Carbon Steel, Stainless Steel

Fluid : Water, Air, Oil, Gas, Petroleum Products
 Max.Service Temperature : 100°C NBR Packing
 180°C Viton Packing
 Max.Service Pressure : 20kg/cm²G

Connection : Flange, Thread, Bevel ends, Socket welds
 Double ball-race swivel joint for low pressure service.
 Seal : O-ring(NBR or Viton), Spring-loaded TFE packing

Swing Joint

Central type design for floating suction assembly is balanced, leak tight, and will not tilt or pull apart.



Standard Specification

TYPE	DESCRIPTION
Size	12", 16", 18", 20", 24", 28", 30"
Connection	ANSI 150LB
Material	Cast Iron

Float Check Valve

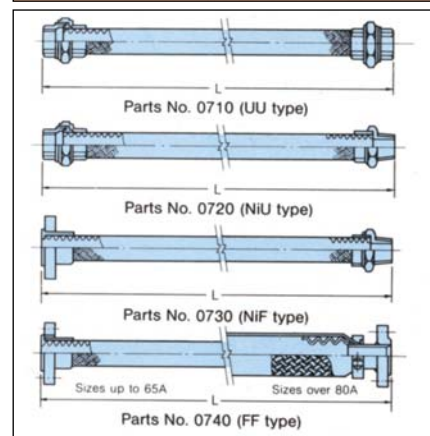
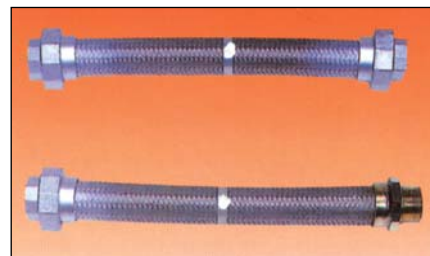


Standard Specification for Float Check Valve

TYPE	DESCRIPTION
Size	3", 4", 6", 8", 10"
Connection	ANSI 150LB*
Material	Cast Iron/ Stainless Ball
Packing	NBR PACKING

※Other connections are available

Flexible Hose



The excellent resistance to cracking, pressure, corrosion and vibration of the K/J Tufflex hose is due to its flexible structure and yet its outstanding durability. Joint can be welded by argon welding, silver soldering or soldering.

Tank Accessories

GAUGE HATCH SERIES



KSGE(Size : 2" through 12")



KSGH(Size : 4" through 12")

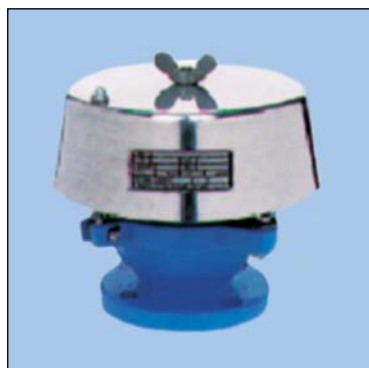


KSSD(Size : 4" through 8")

FLAME ARRESTER SERIES



KSFI(Size : 1/2" through 24")



KSFE(Size : 2" through 12")

BREATHER VALVE



Size : 2" through 12"

BREATHER VALVE WITH FLAME ARRESTER SERIES

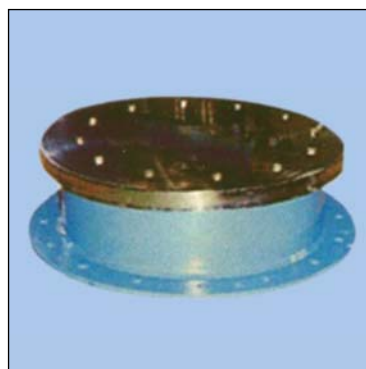


KSBBFH(Size : 2" through 12")
FM approved Conservation
vent with Flame arrester



KSBBFI(Size : 2" through 12")
Conservation vent
with Flame arrester

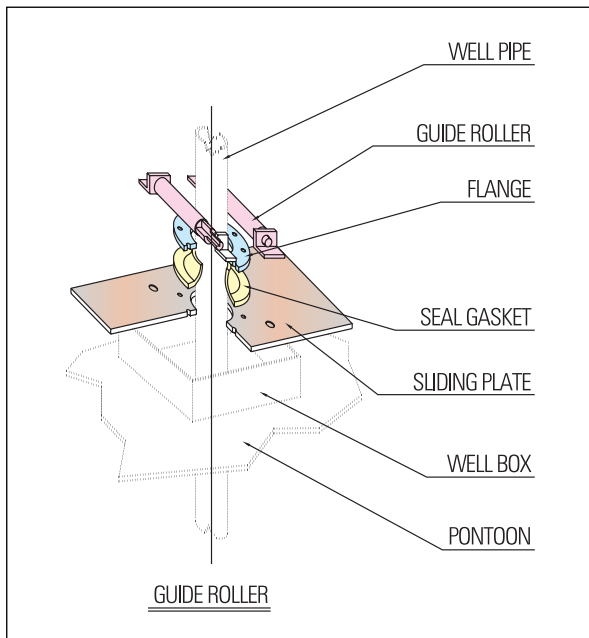
EMERGENCY VENT COVER



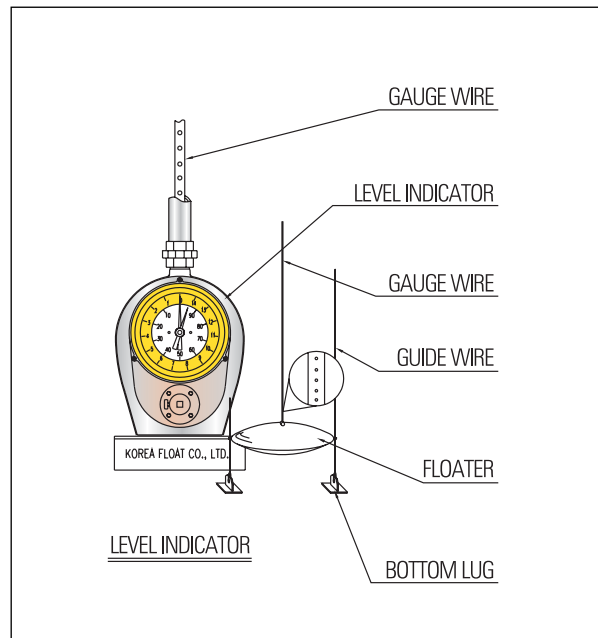
Size : 16" through 24"

External Floating Roof Other Accessories System

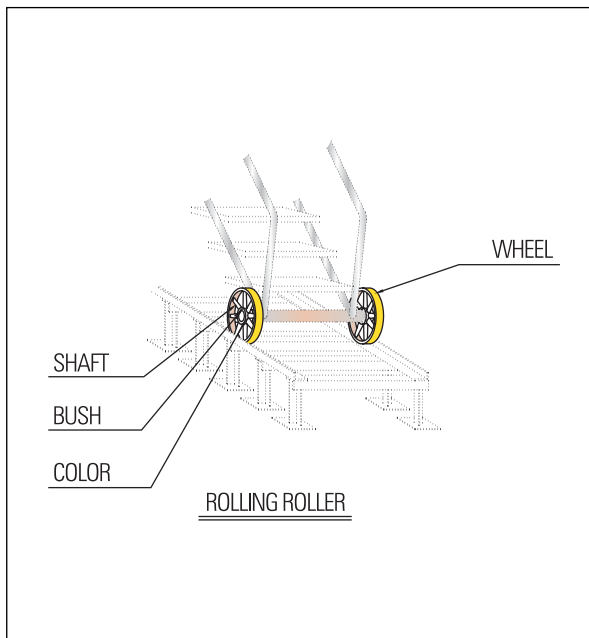
GUIDE ROLLER



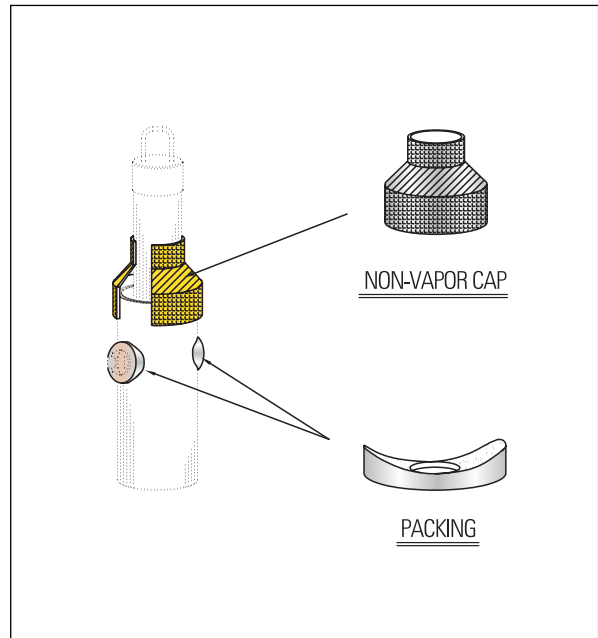
LEVEL INDICATOR



ROLLING LADDER



VAPOR CAP / PACKING



History

January 1996

Established as an Affiliate of K.S.P.C. to Pursue AST Engineering and Retro-fitting Business.

September 1998

Korea Float Co., Ltd was incorporated as a separate entity from K.S.P.C and moved to current location at Ansan Industrial Complex in Kyounggi province.

August 1999

Obtained ISO 9001 Certificate

June 2001

Nominated as an Outstanding Small and Medium Size Export Company by Kyunggi Provincial Government

August 2001

Research & Development Department established

October 2001

Confirmation by Kyunggi Provincial Government as a member of Futuristic Business Association

December 2001

Outstanding SME Award by Kyunggi Provincial Government

July 2002

Outstanding SME Award by Kyunggi Provincial Government - Second Year in a row.

October 2002

Korea Float Co., Ltd moved to current location at Shihwa Industrial Complex in Kyonggi province.

April 2003

Selected as an Exclusive Marketing Representative by John Zink Co. LLC for Korea

March 2004

Awarded Excellent company by Ministry of Commerce and Industry

June 2004

Obtained Certificate of specialist in Parts and Material by Ministry of Industry and Energy.

March 2005

Given Certificate of Clean Factory by the Ministry of Labor

October 2005

Obtained ISO 14001 Certificate





Our customer base ranges from the hot-dry Middle East region to wet South East Asia and the North & South American continents.

Korea Float has met these particular regional requirements by analyzing Customer's unique needs and demands and by offering the best possible Solution using Korea Float's technology to its fullest.

When called upon us, we are always at the customer's disposal to visit and consult our customer's needs wherever they are.



K-FLOAT®

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www.kfloat.com