



INTERNAL FLOATING ROOF

The internal floating roof consists of float tubes joined together by clamp beams on deck skins are fitted and equipped with a continuous closure device (primary / second seal) and between the tank shell and the floating roof edge.

The purpose of the internal floating roof is to have a minimal vapor zone above the stored liquid.



This system reduces emissions and evaporative losses of storage products and the tank its subjected to less corrosive or oxidizing elements by removing the vapor zone from the fixed roof storage tanks.

Floating roof has been the most widely used system for storage of petroleum products.

TTS provides internal floating roof in aluminum & stainless steel based on our years of experience in designing, manufacturing and installing all types of tank seal accessories.

Our internal floating roof complies with environmental regulations and the latest edition of API 650 Appendix H standard.



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Specifications

Item	TTS Internal Floating Roof
Pontoon	Floating Tube Type, Aluminum or Stainless Steel
Deck Skin	Aluminum or Stainless Steel
Rim Space	Normal 180mm ± 100mm (* larger rim space is available)
Application	A portable solution to convert a fixed roof into a floating roof tank
Type of Seals	<ul style="list-style-type: none"> ▪ Primary Seal: Wiper Seal, Liquid Mounted Foam Seal or Mechanical Seal ▪ Secondary Seal: Wiper Seal
Advantages	<ul style="list-style-type: none"> ▪ Reduce product evaporation loss ▪ Reduce potential for vapor space explosions and fire hazards ▪ Preserve the environment ▪ Better peripheral sealing and lower seal cost ▪ Cost effective initial investment ▪ Long service life ▪ No normal maintenance requirement ▪ 100% aromatic protection available ▪ Complies with API 650 Appendix H standard ▪ Compatible with all stored products: Crude oil, Naphtha ▪ Designed to access all components through the manhole

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Seal Types (* Secondary Seal is optional)



TTS-I2 Double Wiper Seal

Two wiper seals mounted above each other that completely cover the space between the tank shell and the edge of the internal floating roof. The wiper seal is continuous and both wiper seals are vapor mounted type. The wiper seal is made from high quality material which has 100% aromatic resistance.

Double wiper seals are easy to install and have a low cost.



TTS-I3 Foam Seal & Wiper Seal

The primary foam seal is liquid mounted type which is composed of foam and envelope and the secondary wiper seal is vapor mounted type. The envelope is designed to prevent liquid capillary action and provide a long service life for B.T.X and other strong chemical storage tanks.

This foam seal can effectively reduce VOC emissions and project losses of liquid products completely.



TTS-I5 Mechanical Shoe Seal & Wiper Seal

The mechanical shoe seal is a metal sheet held vertically against the wall of the storage tank by spring and is connected by brace arms to the floating roof. A flexible coated fabric (continuous seal) spans the annular space between the shoe plate and the rim plate of the floating roof. This seal offers virtually universal resistance to all storage products, good emission reduction, long service life and liquid mounted advantages.

