## **Operating Parameters**

PIVOT	Operating Temperature	Working	Overall	Weight
MASTER®	Range*	Pressure	Length	Each**
3" Diameter	-30 / +180 °F	50 PSI	24.125 in	65 lb
	-34 / + 82 ℃	344 kPa	613 mm	29.5 kg
4" Diameter	-30 / +180 °F	50 PSI	29.625 in	98 lb
	-34 / + 82 ℃	344 kPa	752 mm	44.5 kg
6" Diameter	-30 / +180 °F	50 PSI	36.75 in	192 lb
	-34 / + 82 ℃	344 kPa	933 mm	87.1 kg
8" Diameter	-30 / +180 °F	50 PSI	53.125 in	373 lb
	-34 / + 82 ℃	344 kPa	1349 mm	169.2 kg
10"Diameter	-30 / +180 °F	50 PSI	79.875 in	640 lb
	-34 / + 82 ℃	344 kPa	2029 mm	290.3 kg

\*Continuous operating temperature is noted above. In addition, the PIVOT MASTER® can tolerate intermittent temperatures up to +212 °F (+100 °C).

\*\*Weight does not include packaging or shipping crate.

### Advantages of the PIVOT MASTER® vs. Swivel Joints and Hose Drains

	HMT PIVOT MASTER®	RIGID PIPE	FLEXIBLE RUBBER HOSE	METALLIC HOSE
Continuous slope promotes free flow	•	•		
Continuous slope eliminates sediment trap areas	•	•		
Fixed position doesn't interfere with tank internals	•	•		•
Small, unobstructed area required for operation	•	•		
Fixed position doesn't scrape or drag on tank bottom	•	•		
Compatible with wide range of products	•	•		•
No maintenance required	•		•	•
No lubrication required	•		•	•
No stress or load on hose end connections	•	•		
No leaking due to offset tank joints	•		•	٠
No leaking due to deterioration of O-rings, bearings or seal	s •		•	٠
System designed for submerged, external pressure use	•		•	•
High operating pressure	•	•		
No system damage due to tank turbulence	•	•		
In stock for immediate delivery	•			

### **ABOUT HMT**

HMT is the global leader in aboveground storage tank solutions. HMT providies advanced solutions to reduce emissions, optimize tank capacity, reduce stranded inventory and engineer a tank system that exceeds safety standards and extends maintenance intervals.

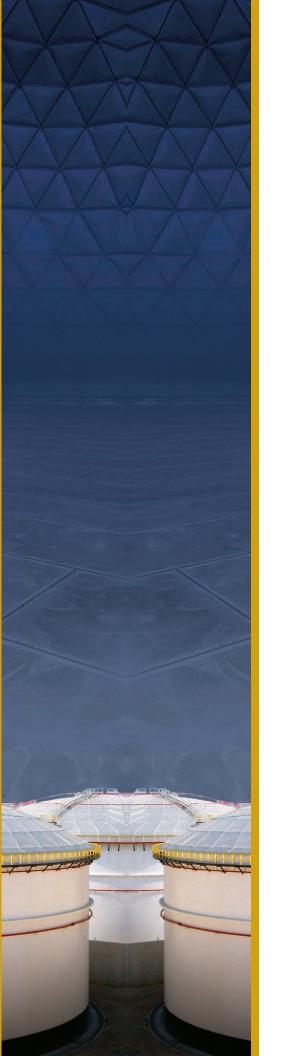
HMT's full suite of tank products includes: Internal/External Seal Systems - Internal/External Floating Roofs -Drain and Floating Suction Systems - Aluminum Domes - Emissions Reduction Devices.

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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**Skimmer Systems** 

### Protecting your world, one tank at a time®

# PIVOT MASTER<sup>®</sup> Flexible Joints

# PIVOT MASTER<sup>®</sup> Floating Roof Drain System

# PIVOT MASTER<sup>®</sup> Floating Suction and

www.hmttank.com

### **HMT PIVOT MASTER® Flexible Joint**

The HMT PIVOT MASTER® Flexible Joint was designed to provide a superior solution to floating roof drainage over mechanical swivel joints and flexible hoses. The HMT PIVOT MASTER® Flexible Joint consists of a specially designed composite type hose containing ANSI 150# raised faced flanges secured in place by a pivotal steel side plate structure.

The composite hose is designed with inner and outer stainless steel wire helixes and multiple inner layers of polar and non-polar elastomeric materials. The stainless steel wire helixes maintain the hose rigidity when subjected to internal or external pressures. Utilizing various layers of Polar and Non-Polar elastomeric materials prevents permeation of products through the hose along with providing a 100% aromatic resistance.



The composite hose is secured within two reinforced steel side plates (primed or galvanized carbon steel or stainless steel). These side plates are joined by a stainless steel pivotal pin that uses stainless steel bushings and spacers to eliminate binding and assure flexibility.

Applications of the PIVOT MASTER® Flexible Joint include, but are not limited to, Floating Roof Drain Systems, Floating Suctions Systems and Floating Skimmer Systems.

### **HMT PIVOT MASTER® Floating Suction & Skimmer Systems**

HMT provides Floating Suction Systems designed to enable the removal of the stored product near the product surface, contaminate-free. HMT's Floating Suctions are engineered to operate in conjunction with all types of floating roofs or without a floating roof.

The HMT Floating Suction System is designed to meet all requirements of the storage tank size and submerged environment. All components are compatible with the stored product providing a long life and trouble free system that will be custom designed for your specific application.

HMT Floating Suction units (3" – 10") utilize the HMT PIVOT MASTER® Flex Joint instead of a mechanical swivel, rigid piping (carbon steel, stainless steel or aluminum) and custom designed pressure tested flotation chambers.

### Features:

 Available in carbon steel, stainless steel or aluminum Available in standard sizes of 3", 4", 6", 8" & 10" Larger sizes available upon request Designed according to tank characteristics Installed with all types of floating roofs

- Maintenance free, smooth controlled operation
- Compatible with stored product
- Allows for removal of non-contaminated product

HMT pre-fabricated Floating Suction Systems can be shipped to the site for final assembly and installation by an HMT service crew or installed by others.

HMT also provides Skimmer Systems. Mixtures of liquids with different densities (such as oil and water) tend to stratify in a storage tank. A Skimmer System is designed to enable the removal of the lighter product(s) that float to the top. HMT has Skimmer System designs that are engineered to operate in conjunction with all types of floating roofs or without a floating roof. Contact your HMT representative for additional information.

# HMT PIVOT MASTER® Floating Roof Drain System

The HMT PIVOT MASTER® Floating Roof Drain System is designed to innovatively provide a better solution to floating roof drainage problems. Introduced in 1982, this system combines the flexibility of the various flexible hose / pipe systems with the strength found in rigid pipe / swivel joint systems. The PIVOT MASTER® Drain System is a steel pipe drain system with flexible hose joints capable of withstanding an extremely wide range of service conditions.

The system effectively provides positive roof drainage with maintenance-free and worry-free operation. This results in extended service life, with no hose kinking or clogging and no stress loading on O-rings, bearings or seals. Instead of costly swivels, the PIVOT MASTER® employs unique flexible joints in a straight-line design, with no offsets to cause unbalanced loading.

The PIVOT MASTER® is easily installed in a fixed position, requiring a minimal operating area. With a designed continuous slope, the PIVOT MASTER® does not allow sediment to become trapped in the system. It is designed for submerged service with no lubrication required and there are no corrosion freeze-ups. PIVOT MASTER® components are compatible with 100% aromatic products and can withstand high design pressures.

### Available designs

Standard - For normal floating roof low leg heights Low Profile - Two designs for low heel tank designs Multiple - Two or more standard or Low Profile drains per tank

PIVOT MASTER® Drain Systems can be designed to avoid interferences with heating coils, diffusers and other internal obstructions. Stress and flow rate calculations are available upon request.

