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PACKMAN
Industrial Group



Oil Expansion Tank
powered by PACKMAN industrial group



Oil Expansion Tank

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Product Description

Since The Fluid with in a closed-loop system is heated during liquid phase, it will expand Your system must be designed to accommodate the liquid expansion in order to avoid the overflow of hot oil or over pressurization of your system's equipment and their consequent damage. Since the fluid's volume is changing but the fluid mass is not, calculating the expansion tank's capacity requires a simple conservation of mass equation. The mass of fluid in the system depends upon the volume of liquid (when the system is first filled) and the ambient temperature. The expanded volume can thus be achieved considering the highest temperature and constant mass of the oil.

PACKMAN Oil Expansion Tank Properties

PACKMAN's Atmospheric Oil Expansion Tanks are made of SA 36 (St 37.2 in accordance with DIN standard) or in the case of a customer's emphasis they can be made of 17MN4 (which is Suitable for boiler construction) with a certain thickness and without any change in price.

Manufacturing Standards

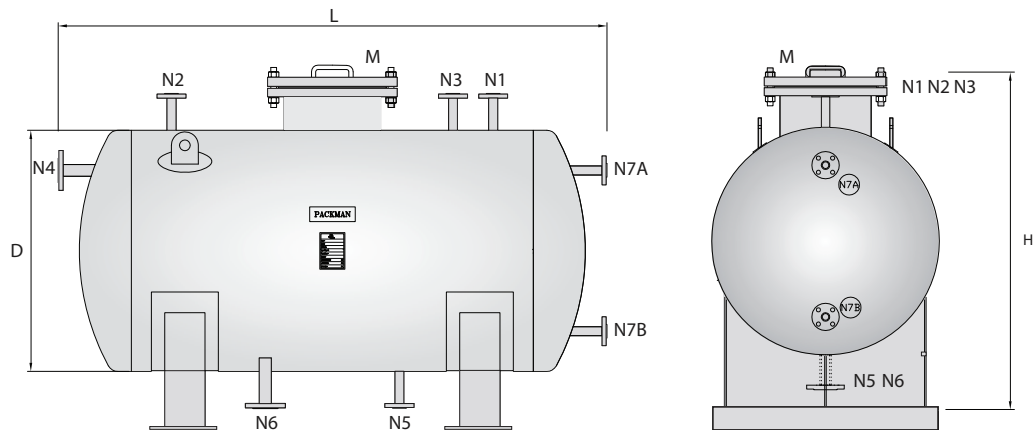
ASME Sec VIII, Div. 1 is observed in construction of Oil Expansion tanks.

Torispherical / Elliptical Head

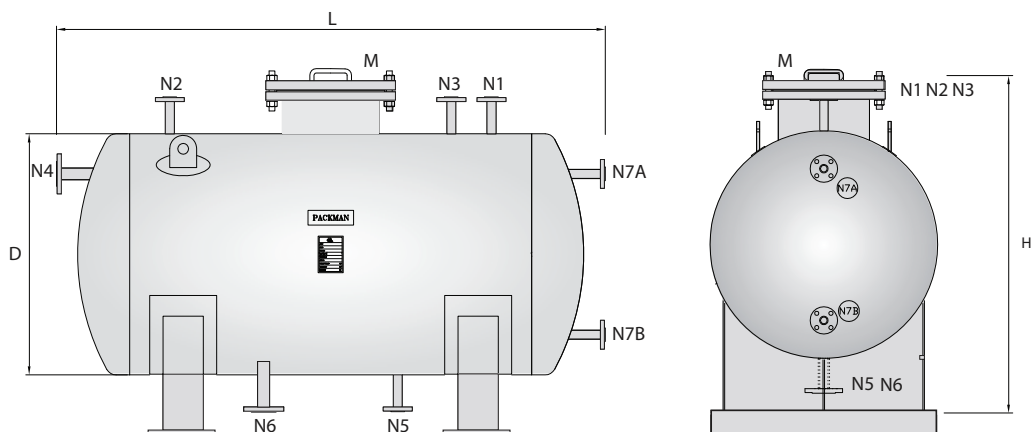
PACKMAN's Oil Expansion tank's heads are Torispherical. This type of head has a longer life and a higher pressure strength compared to other shapes with the same thickness. The production price per kilo of these heads can reach up twice the price ratio of the usual heads on the market.

Welding Procedure

Welding is done with the Swedish ISBU submerged arc welding equipment. After constructing the tank and welding the lugs, the body of the tank is connected to the heads using a submerged welding method. The heads are welded internally and externally, which increases their life and strength. In the root pass, the TIG, argon or other welding methods with the 6010 cellulose electrode is used. The EW7018 electrode is used in fill pass. Finally the submerged method with EW7018 electrodes is used in the cover pass.



Model	Unit	POET-300	POET-800	POET-1000	POET-1500	POET-2000	POET-2500	POET-3000
Technical Data								
Design Standard	-	ASME SEC. VIII. DIV.1						
Vessel Type	-	Horizontal						
Volume Capacity	litr	300	800	1,000	1,500	2,000	2,500	3,000
Connectoins Size								
Hand Hold or ManHole(M)	in	8	8	14	14	14	16	16
Vent (N1)	in	1	1	1	1	1	11/2	11/2
Oil Inlet (N2)	in	1	1	1	11/2	11/2	2	2
Vapor Inlet (N3)	in	1	1	1	1	1	11/2	11/2
Over Flow (N4)	in	1	1	11/2	11/2	11/2	2	2
Oil Outlet (N5)	in	1	1	11/2	11/2	11/2	2	2
Drain (N6)	in	1	1	1	1	1	11/2	11/2
Level Gauge (N7A), (N7B)	in	1	1	1	1	1	1	1
Material								
Shell	-	Carbon Steel						
Toris Head	-	Carbon Steel						
Vessel Dimensions								
Vessel Diameter (D)	mm	610	800	900	1100	1200	1320	1320
Vessel Lengeth (L)	mm	1700	2200	2200	2200	2200	2200	2600
Vessel Height (H)	mm	1000	1200	1400	1600	1800	1900	1800



Model	Unit	POET-4000	POET-5000	POET-6000	POET-7000	POET-8000	POET-9000	POET-10000
Technical Data								
Design Standard	-	ASME SEC. VIII. DIV.1						
Vessel Type	-	Horizontal						
Volume Capacity	litr	4,000	5,000	6,000	7,000	8,000	9,000	10,000
Connectoins Size								
Hand Hold or ManHole(M)	in	16	16	16	16	16	16	16
Vent (N1)	in	11/2	11/2	11/2	11/2	11/2	11/2	11/2
Oil Inlet (N2)	in	3	3	3	3	3	3	3
Vapor Inlet (N3)	in	2	2	2	2	2	2	2
Over Flow (N4)	in	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2
Oil Outlet (N5)	in	3	3	3	3	3	3	3
Drain (N6)	in	2	2	2	2	2	2	2
Level Gauge (N7A), (N7B)	in	1	1	1	1	1	1	1
Material								
Shell	-	Carbon Steel						
Toris Head	-	Carbon Steel						
Vessel Dimensions								
Vessel Diameter (D)	mm	1592	1592	1750	1750	1910	1910	1910
Vessel Lengeth(L)	mm	2650	3200	3300	3500	3400	3800	4300
Vessel Height(H)	mm	2100	2100	2250	2250	2400	2400	2400

PACKMAN GROUP

History

The Packman Company was founded in February 1975, and was soon afterwards registered in companies Registration Office. In early years the Packman construction and service branch focused on building installations. Different mega power plants were built by cooperating with Brown Boveri and Asseck companies in 1976.

The company started its official activities in construction of High-Pressure Vessels such as Hot-Water Boilers, Steam Boilers, Storage Tanks, Softeners and Heat Exchangers from 1984.

Packman Company is one of the first companies which supplied the high quality and standard hot water boilers to the customers.

Packman has exported its products to countries such as Uzbekistan, United Arab Emirates and other countries in the Middle East. It is one of the largest producers of hot-water and steam boilers in the Middle East.

Now we are proud to announce that the Packman industrial group has five major sub-brands that have product titles in all field of HVAC equipment and engineering services, and we do not know this success except with the help and support of our customers.

1. Construction Services Industry Association
2. Industry Association
3. Construction Companies' Syndicate
4. Technical Department Association
5. Mechanical Engineering Association
6. Engineering Standard Association

Departements:

Sales Deps:

- ⌒ Power Plant & Petrochemical
- ⌒ Industrial
- ⌒ Hospitality Service
- ⌒ Commercial & Residential
- ⌒ Sport Complex & Pool

Technical Deps:

- ≡ Manufacturing R&D
- ≡ Innovation Center
- ≡ EPC Execute Unit
- ≡ Product Develop Unit
- ≡ Sales Engineering Dep.

Others:

- ≈ After Sales Service
- ≈ Project Control
- ≈ Financial Office
- ≈ Commercial Office
- ≈ Marketing Department



PACKMAN GROUP Brands



PACKMAN
Industrial Group

Designer&manufacturer
of Condensing, Hot
Water, Steam, Hot Oil &
Waste Heat Boilers, Heat
Exchangers, Autoclave
Pressure & Storage
Vessels & etc



GREENMAN
Green mindset, green future

Engineering &
Designing Commercial
Greenhouse Plant, CO2
Dosing System, Flue
gas Condenser &
Special HVAC Systems,
Sustainable Agriculture
& etc



ROMAN
Water solution

Designer&manufacturer
Reverse Osmosis Plant &
Package, Water
Treatment, Softener &
Filters and Chemical
Dosing Systems & etc



RAADMAN
a look to the future

Designer&manufacturer
of Industrial Mono & Dual
Block Gas, LPG, Light &
Heavy Oil Burners,
Premixed & Postmixed
Burners, Water tube
burners, Process burners,
Special application
burners & Combustion
Solutions & etc



CHILLMAN
Coolest hvac around

Designer&manufacturer
of Air & Water Cooled
Chillers, Air Handling
Units, Fancoil, HVAC
Equipment, Cold
Storage Room & etc



1. Isfahan Factory



2. Vilashahr Factory



3. Parand Factory



4. Parand (2) Factory



5. Bonyad Factory

SOME OF Certificates are



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+982142362

www.packmangroup.com

No 14, 10th Alley, Beihaghi St., Argentina Sq., Tehran-Iran