

PACKMAN
Industrial Group

 Condensate Tank

powered by PACKMAN industrial group



Condensate Tank



www.packmangroup.com



Product Description

Condensate Tanks recover condensate returns and add fresh water to meet boiler or deaerator water requirements. It means that One purpose of the condensate tank is to deliver the condensate back to the boiler where there is insufficient differential pressure to flow the condensate to the boiler plant. Also at the main condensate collection point in the boiler operation, where there is a need to collect the condensate and pumping it to the pressurized deaerator system. The preferred method of receiving and delivering condensate to the boiler plant operation is by using a properly sized and designed condensate tank with an electric-motor-driven pump. An efficient steam system will collect condensate in the plant and either return it to a deaerator, send it to a boiler feed tank, or use it in another process. A high percentage of these systems are modulating process steam systems, where steam pressure to the heat transfer varies with the processes. These modulating systems require condensate to flow by gravity from the heat transfer equipment to a vented condensate tank system. The condensate tank system is always vented to the atmosphere to keep pressure out of the condensate return lines.

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PACKMAN Condensate Tank Properties

PACKMAN's Atmospheric Condensate 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 changing the price.

Manufacturing Standards

ASME Sec VIII, Div. 1 is used in the construction of atmospheric condensate tanks.

Torispherical / Elliptical Head

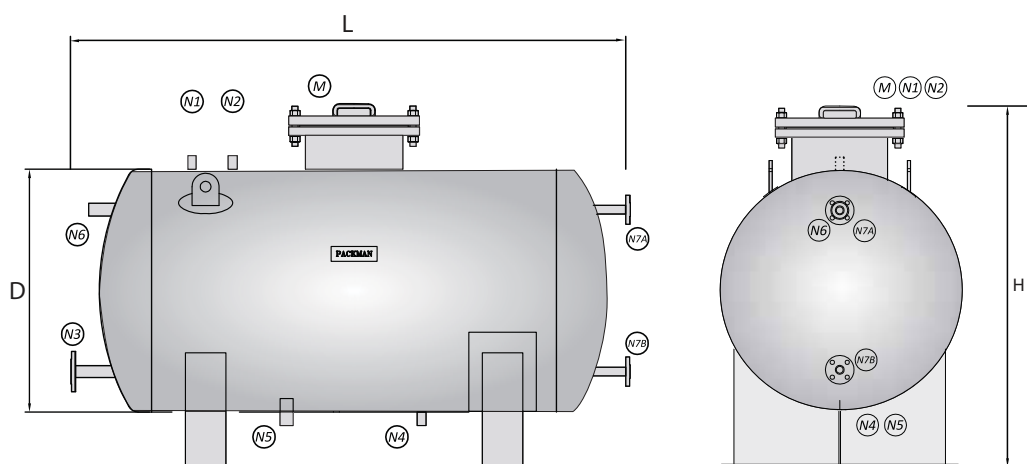
PACKMAN's Condensate tank head is Torispherical. This type of head has a longer life and a higher pressure strength at the same thickness against other shapes. The production price/per kilo of these heads is even up to two times the size of the usual heads on the market.

Welding Procedure

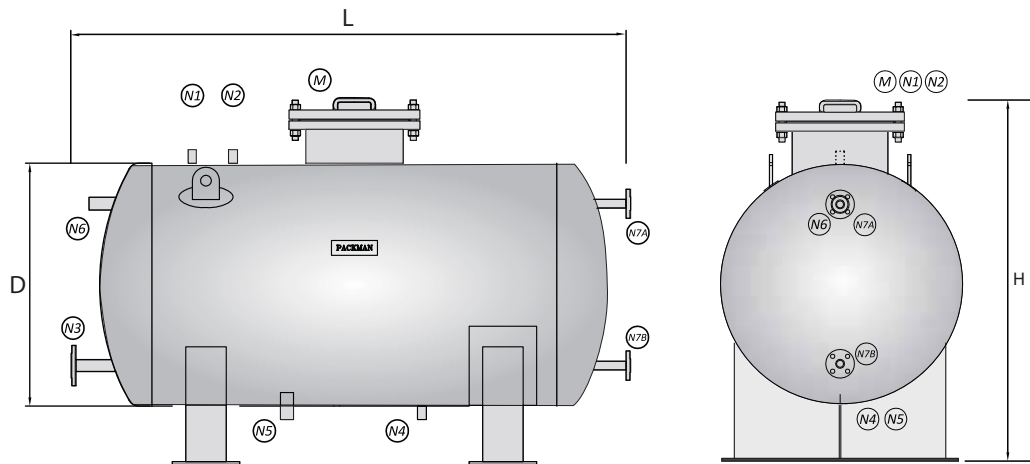
Welding is done by using the Swedish ISBU submerged arc welding equipment. After constructing the condensate tank and welding the lugs, the body of the tank will be connected to the heads by welding with a submerged welding method. In addition, the head is welded internally and externally, which increases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

Product Capacity Calculation & Selection

Selection of a Condensate Storage Tank is based on boiler size, pump required flow, and water storage requirements. Contact your local PACKMAN authorized representative for detailed component sizing information. For the normal installation, it has been found customary to select a receiver of sufficient size to hold a volume equivalent to the condensate evaporated by the boiler in a one-third to one-half hour period at the normal firing rate of the boiler. First of all, we determine the volume of the condensate source based on the amount of steam output from the boiler in kilograms per hour and the percentage of total return condensation and the time required to store the return condensate in the tank and the amount of boiler blown-off.



Model	Unit	PCT-300	PCT-400	PCT-800	PCT-1000	PCT-1500	PCT-2000	PCT-2500	PCT-3000	PCT-4000
Technical Data										
Design Standard	-	ASME SEC.VIII. DIV.1								
Vessel Type	-	Horizontal								
Volume Capacity	lit	300	400	800	1000	1500	2000	2500	3000	4000
Connectoins Size										
Vent (N1)	in	3/4	3/4	3/4	3/4	1	11/2	11/2	11/2	11/2
Drain (N5)	in	1	1	1	1	1	11/2	11/2	11/2	2
Level Gauge (N7A), (N7B)	in	1	1	1	1	1	1	1	1	1
Water Outlet (N4)	in	11/2	11/2	11/2	11/2	2	2	2	2	3
Hand Hold/ Man Hole (M)	in	8	8	8	14	14	16	16	16	16
Water Inlet (N2)	in	1	1	1	1	11/2	2	2	2	3
Condensate Inlet (N3)	in	11/2	11/2	11/2	11/2	2	21/2	21/2	21/2	3
Overflow (N6)	in	11/2	11/2	11/2	11/2	2	21/2	21/2	21/2	21/2
Material										
Shell	-	Carbon Steel								
Toris Head	-	Carbon Steel								
Vessel Dimensions										
Vessel Diameter (D)	mm	610	610	800	900	1100	1200	1320	1320	1600
Vessel Length (L)	mm	1500	1500	2200	2200	2200	2200	2200	2600	2650
Vessel Height (H)	mm	960	960	1200	1400	1600	1800	1900	1800	2100



Model	Unit	PCT-5000	PCT-6000	PCT-7000	PCT-8000	PCT-9000	PCT-10000	PCT-20000	PCT-25000
Technical Data									
Design Standard	-	ASME SEC.VIII. DIV.1							
Vessel Type	-	Horizontal							
Volume Capacity	litr	5000	6000	7000	8000	9000	10000	20000	25000
Connectoins Size									
Vent (N1)	in	11/2	11/2	11/2	11/2	11/2	11/2	11/2	11/2
Drain (N5)	in	2	2	2	2	2	2	2	21/2
Level Gauge (N7A), (N7B)	in	1	1	1	1	1	1	1	1
Water Outlet (N4)	in	3	3	3	3	3	3	3	4
Hand Hold/ Man Hole (M)	in	16	16	16	16	16	16	16	16
Water Inlet (N2)	in	3	3	3	3	3	3	3	4
Condensate Inlet (N3)	in	3	3	3	3	3	3	3	4
Overflow (N6)	in	21/2	21/2	21/2	21/2	21/2	21/2	21/2	21/2
Material									
Shell	-	Carbon Steel							
Toris Head	-	Carbon Steel							
Vessel Dimensions									
Vessel Diameter (D)	mm	1600	1750	1750	1910	1910	1910	2250	2500
Vessel Length (L)	mm	3200	3300	3550	3400	3800	4300	6000	5850
Vessel Height (H)	mm	2100	2250	2250	2400	2400	2400	2400	3050

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



Knowledge Based



PACKMAN



GREENMAN



ROMAN



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+9821 42 362

www.packmangroup.com

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