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PACKMAN
Industrial Group

 Spiral Domestic Hot Water Tank
powered by PACKMAN industrial group



Spiral Domestic Hot Water Tank

www.packmangroup.com



Product Description

PACKMAN'S Spiral Domestic hot water Tanks are made of Stainless Steel (St 37.2 in accordance with DIN standard) or in case of customer's request they can be made of 17MN4 (which is Suitable for boiler construction) with a certain thickness.

PACKMAN'S Spiral domestic hot water tank is used for supplying clean hot water, for buildings and industries. These tanks are capable of operation in two circuit system.

The shells are made of either steel with three-layers of epoxy coating, hot-galvanized steel if its made by carbon steel grade (suitable for the manufacturing of pressure vessels with no direct heat exposure) or 17MN4. The tanks are made of vertical cylinders with two heads, in various diameters and thicknesses. Epoxy coating/galvanizing methods are used to provide potable & clean water. Normally PACKMAN suggests shells with stainless steel and no need to special coating.

The tank contains a stainless steel coil with a thickness of 1 mm for transferring heat from hot fluid to the cold one. The tank also has a hand hole for capacities lower than 2000 liters (Man-Holes are used for greater capacities) which provide accessibility to it's inside. It should be noted that access to the inside of the tank is also possible through the the coil flange.

Manufacturing Standards

ASME Standard is observed in construction of Spiral Domestic hot water tanks.

PACKMAN'S Domestic hot water tank's head is Tori spherical. This type of head provides long life and a high pressure resistance for the system compared to the other shapes with the same thickness. The production price per kilo of these heads can reach to twice the price ratio of the usual heads on the market.

Welding Procedure

Welding is done with 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.



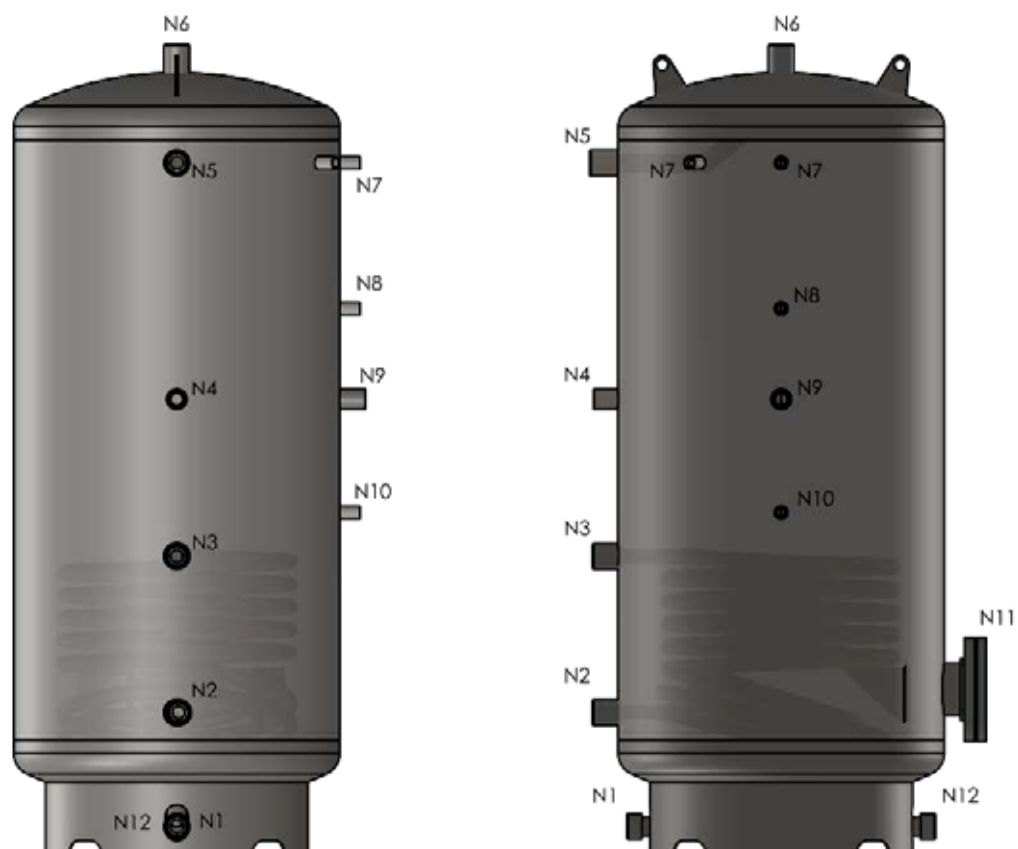
Interior and Exterior Coating And Painting Conditions

For carbon steel shell, PACKMAN'S Spiral DHW is coated with three layers of epoxy colors with a total thickness of 305 microns and is heat-resistant and suitable for use in sanitary applications.

The outer surface of the tank is also covered with an epoxy layer and an industrial paint layer with a total thickness of 150 microns. Galvanized shells will only be sprayed with industrial colors

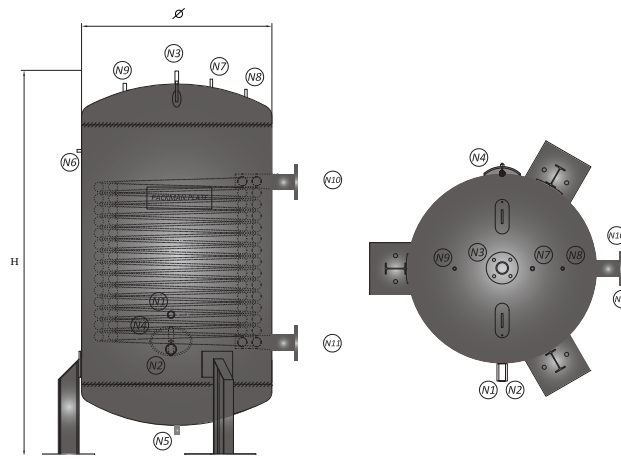
Distinctions of PACKMAN'S Products

Long life span of the device As a result of the quality of welding, material and etc. Manufactured with the latest technology in the world in welding and cutting. High strength against pressure due to the design thickness and quality of the material.





Model	Unit	DHWTS-400	DHWTS-500	DHWTS-600	DHWTS-700	DHWTS-800	DHWTS-1000
Technical Data							
Design Standard	Code	ASME SEC.VIII.DIV.1					
Vessel Type	Type	Vertical					
Volume Capacity	Liter	400	500	600	700	800	1,000
Heating Surface	m²	1.5	1.7	1.9	2.45	2.6	3
Thermal Capacity One Coil	kW	70	87	105	116	140	163
Thermal Capacity One Coil	kcal/hr	60,000	75,000	90,000	100,000	120,000	140,000
Water Design Temperature	° C	60	60	60	60	60	60
Connectoins Size							
Cold Water Inlet (N1)	in	1	1	1 1/4	1 1/4	1 1/2	1 1/2
Heat Exchanger Return (N2)	in	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4
Heat Exchanger Supply (N3)	in	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4
Circulation Return (N4)	in	1	1	1	1	1	1
Hot Water (N5)	in	1	1	1 1/4	1 1/4	1 1/2	1 1/2
Air Vent/Pressure Relief (N6)	in	1	1	1 1/4	1 1/4	1 1/2	1 1/2
Thermometer/ Temp Sensor (N7)	in	1/2	1/2	1/2	1/2	1/2	1/2
Pressure Gauge (N8)	in	1/2	1/2	1/2	1/2	1/2	1/2
Auxiliary (N9)	in	1	1	1	1	1	1
Thermometer (N10)	in	1/2	1/2	1/2	1/2	1/2	1/2
Handhole (N11)	in	4	4	4	4	4	4
Drain (N12)	in	1	1	1 1/4	1 1/4	1 1/2	1 1/2
Material							
Shell	Type	Stainless Steel					
Head	Type	Stainless Steel					
Coil	Type	Stainless Steel					
Vessel Dimensions							
Vessel Diameter (∅)	mm	635	635	720	720	860	860
Vessel Height (H)	mm	1,530	1,750	1,780	1,940	1,780	1,940



Model	Unit	DHWTs-1500	DHWTs-2000	DHWTs-2500	DHWTs-3000
Technical Data					
Design Standard	Code	ASME SEC.VIII.DIV.1			
Vessel Type	Type	Vertical	Vertical	Vertical	Vertical
Volume Capacity	Liter	1,500	2,000	2,500	3,000
Heating Surface	m²	5	6	8.5	9
Thermal Capacity One Coil	kW	233	326	436	488
Thermal Capacity One Coil	kcal/hr	100,000	120,000	150,000	200,000
Water Design Temperature	°C	60	60	60	60
Connectoins Size					
Cold Water Inlet (N1)	in	1 1/4	1 1/2	1 1/2	2
Heat Exchanger Return (N2)	in	1 1/2	2	2	2 1/2
Heat Exchanger Supply (N3)	in	1 1/2	2	2	2 1/2
Circulation Return (N4)	in	1	1	1	1 1/4
Hot Water (N5)	in	1 1/2	2	2	2 1/2
Air Vent/Pressure Relief (N6)	in	3/4	3/4	3/4	3/4
Thermometer/ Temp Sensor (N7)	in	1/2	1/2	1/2	1/2
Pressure Gauge (N8)	in	1/2	1/2	1/2	1/2
Auxiliary (N9)	in	1	1	1	1
Thermometer (N10)	in	1/2	1/2	1/2	1/2
Handhole (N11)	in	4	4	4	4
Drain (N12)	in	1	1	1	1
Material					
Shell	Type	Carbon Steel			
Head	Type	Carbon Steel			
Coil	Type	Stainless Steel			
Vessel Dimensions					
Vessel Diameter (∅)	mm	1,100	1,200	1,320	1,320
Vessel Height (H)	mm	2,200	2,200	2,300	2,750

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