# **Pressure Tanks**

### Certifications



KTW & WRAS: PENDING

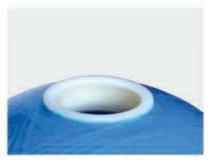
#### **Pressure Tanks**



Pressure tanks are made of high performance Composite material with Fiber glass filament winding



All pressure tanks are made by a complete seamless molding technology



All thread inlet made from 30% glass filled PP provides higher strength, temperature and pressure limits



HDPE Liner wall thickness available from 3.0 mm to 8.0 mm corresponding to the tank diameter



Water contact parts are made by Food-Grade materials



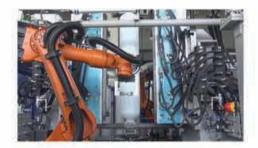
All pressure tanks are 100% rustproof and corrosion resistant

- . Full choice of pressure tank from 5"-63" in diameter and from 13"-86" in height
- . Top and bottom opening type available for some of pressure tanks
- · Reinforced composites are one third the weight of steel tanks
- . Scientific structure insures the base can endure impact and abrasion and provides better performance
- Nice appearance, constant dimension
- · We provide more accessories and fittings on water treatment related to pressure tanks, save time and money for you

## Manufacture Procedure of Robot



To begin the process, the concentrated feeder system draws plastic particles into the hopper. The raw material will then enter into the extruder. High temperatures produced in the extruder melt the plastic particles.



As the robot arm grabs the thread insert, material is checked for quality, if it does not meet specific standards it will be eliminated in the delivery process.



Once complete, the mold opens and the robot arm takes the finished liner and transfers it to a cooling rack. Once cooled, the liner is put on a conveyor belt to be transferred to the liner storage rack.



At the measurement station, the robot arm automatically grabs the shaft and waits for measuring to begin. During this time, the bottom plate of the shaft will be returned to the designated shaft area.



After the shaft is screwed into the liner, a bottom plate must be installed. This is a process automatically completed by the Bottom Plate Transporter. If there is any failure in this process an alarm is sounded causing the robot arm to remove the liner and place it in the unqualified area.

#### **Pressure Tanks**



The robot arm will load tanks onto the carousel until the loading number is reached. At this point, the carousel will automatically rotate 90°C into the Plasma Station where the surface treatment will begin. During the plasma surface treatment, an inflating process is performed where air is filled into the liner to prepare it for the winding process. The tank is also tested for air leaks during this time. If a leak is found, the robot arm will remove the tank and place it in the unqualified area.



After the plasma surface treatment and inflation process are complete, the carousel will automatically rotate 90° where the robot arm will place the tanks onto the winding machine. When the liners are fixed into place, the winding process begins.

The winding process automatically controls the following actions: fix fiber, helical winding, hoop winding, resin volume control, tension control and fiber



The tank is hung on the transport chain and then moves through a solidification process. This process moves the tank through three different ovens at varying temperatures. The use of three ovens is utilized to achieve a better solidification effect.



After the tank exits the oven, the chain will transport the tank to the Separating Station. Here the robot arm will remove the tank, screw out the shaft and reload the shaft on the bottom plate. The tank is then placed on the Tank Storage Rack.



From the Tank Storage Rack, the tanks will then be moved to an automatic Packing Machine, where the tanks will be packed.

Operation Pressure :	150psi (10.5Bar)
Operation Temperature	34-122° F(1-50° C)
Max Vacuum	140 mm Hg
Mini exposed Temperature	-30° C(-22° F)



#### Test

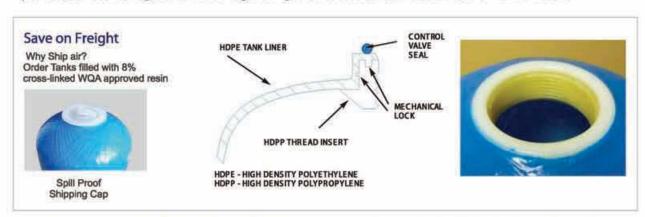
250,000 times of cycle test from 0-150psi withstanding pressure. (NSF's requirement is 100,000 times)

Burst test to FOUR times of its operating pressure. (600psi)

#### Color

Basically we provide 3 colors for your choice: Natural(Standard)black and blue. Other customized color is available on request.

Canature also produces a special colored liner which is completely opaque to sunlight pass through and provides solution to algae and micro-organism growth in side the tank due to hot and humid weather



#### High Density Polyethylene (HDPE Tank Liner)

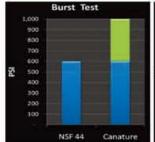
- Strict dimensional control. (+/- 3mm overall length)
- . High tensile strength (HDPE 4550 PSI vs. LDPE 1700 PSI)
- · Light weight
- · Good impact resistance
- · Low moisture absorption

#### High Density Glass Filled Polypropylene Threads

- · High strength
- · High chemical resistance
- High temperature resistance / melting point (150 to 200 degrees F)
- Abrasion Resistance

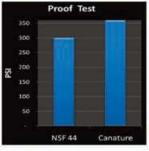
**Pressure Cycle Test** 

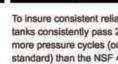
- Lightweight
- Excellent Dimensional Stability



To insure rugged durability and safety, Canature tanks

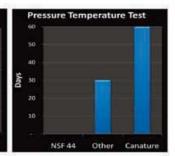
consistently pass the NSF 44 standard for burst and





Vcles (0-150 PSI) 150,000

50,000



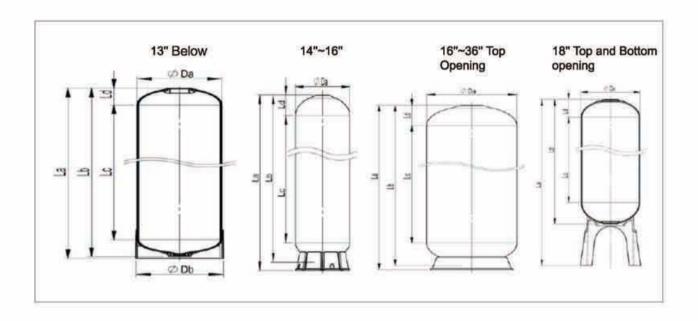
To insure consistent reliability, our tanks consistently pass 2.5 times more pressure cycles (our standard) than the NSF 44 standard

NSF 44

Canature

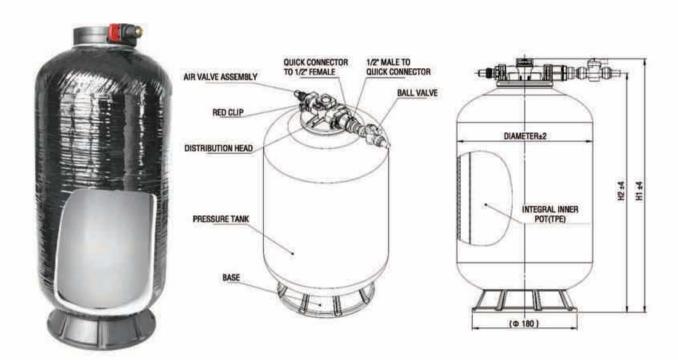
In fact the NSF standard does not cover performance in extreme environments. The Canature standard is 2 times higher compared to other manufacturers.

proof testing.



### Dome Hole Tank





Canature Pressure Storage Tank use Food-Grade TPE material as storage inner pot; pressure tank as the cabinet, water store in the inner pot can keep clean and safety. This unique design with below characterizes:

#### 1) Functions

- 1.Use pressure tank as the storage tank cabinet.
- A.Can enhance the operation pressure of the storage tank, max working pressure comes up to 10 bars, ordinary storage tank can only reach to 6 bars.
- B.The pressure tank liner is made from HDPE material, one-piece shaped, no sew, safe and out of corrosion.
- 2.Integral inner pot
- A.Using the seamless molding technology, improve the safety level.
- B. The inner pot is detachable, washable, replaceable.
- C.The inner pot is made from TPE(thermoplastic elastomer), it has excellent resiliency and the material is recyclable.
- 3. The distribution head is made from reinforced PP material, meet NSF safety requirement.
- 4. Time saving quick connectors, a variety of connectors to meet the installation requirements.
- 5. Time saving air valve assembly, there is no need to throw away the whole pressure storage tank when replace the air valve.
- 6.The pressure storage tank with plastic base present nice appearance, with the function of corrosion and impact resistance.

## Application:

According to the different sizes, the pressure storage tank can be used for commercial, residential and some special places.

- 1.Can be taken as the part of RO system, size from 1 gallon -10 gallon
- 2.Can be taken as the part of water pump, water storage and vibration absorption.
- 3.Can install built-in filter media to be drinking system, can be an end-using water filter.
- 4.Can be a cartridge; install built-in filter media used in multi-function water system.

Model	08×15	09×15	10×15	08×17	09×17	10×17	12×17
FRP Tank	0815	0915	1015	0817	0917	1017	1217
Inner pot model	08×15 08×17						
Working pressure (bars)		2.0-10.0					
Working temperature (°C)	1~49 C						
Pre-charge pressure (bars)	1.0						
Storage volume ( L ) 4.0Bars work pressure	5.6	7	8.4	6.5	8	10	13.6
Weight ( without water ) (Kgs)	2.5	2.7	3.1	2.6	3	3.4	4.4
Inlet and outlet size	G 1/2 (Male) 、G 1/2 (Fernale) 、G3/8 (Male)						
Dimension ( mm ) (Diameter × height)	Φ207×487	Ф232×487	Φ258×487	Φ207×538	Φ232×538	Φ258×538	Φ307×538
Color	Natural, Black and Blue						

Notes: Above storage volume will be different according to different inlet water pressure.





Size	Part No.	Material	Description
1054	06000004	Stainless Steel	Round Jacket
1044	06000014	Stainless Steel	Round Jacket
1035	06000015	Stainless Steel	Round Jacket
1017	06000016	Stainless Steel	Round Jacket
0844	06000017	Stainless Steel	Round Jacket



Size	Part No.	Material	Description	Color
1054	07000002	HDPE	Round Jacket	Gray
1054	07000037	HDPE	Square	Gray
1044	07000003	HDPE	Round Jacket	Gray
1044	07000074	HDPE	Square	Gray
1035	07000025	HDPE	Round Jacket	Gray
1017	07000015	HDPE	Round Jacket	Gray
1054	07000129	HDPE	Round Jacket	White
0942	07000116B	HDPE	Round Jacket	White



Part No.	Material	Description
07020003	ABS	Cap for 10" round Plastic jacket
07020004	ABS	cap for 10" round Stainless steel jacket
07020005	ABS	cap for 10" square plastic jacket
07020014	ABS	cap for 08" Stainless steel jacket
07020009	ABS	cap for 10" Stainless steel jacket
07020011	ABS	cap for 08" Stainless steel jacket



Part No.	Material	Description
07040001	Plastic	bottom cover for 10" stainless steel jacket
07040002	Plastic	bottom cover for 10" plastic jacket



Size	Part No.	Material	Description
1.05"	07060009	ABS	Top distributor



Size	Part No.	Material	Description
1.05"	02170012	ABS	Bottom collector



Size	Part No.	Material	Description
65"	02030027	ABS	Central Tube with collector
54"	02030026	ABS	Central Tube with collector
48"	02030025	ABS	Central Tube with collector
44"	02030024	ABS	Central Tube with collector
35"	02030016	ABS	Central Tube with collector
17"	02030018	ABS	Central Tube with collector

