



**Plas-Tanks**  
INDUSTRIES, INC.



Certificate Number 97/38

Fabrication to:



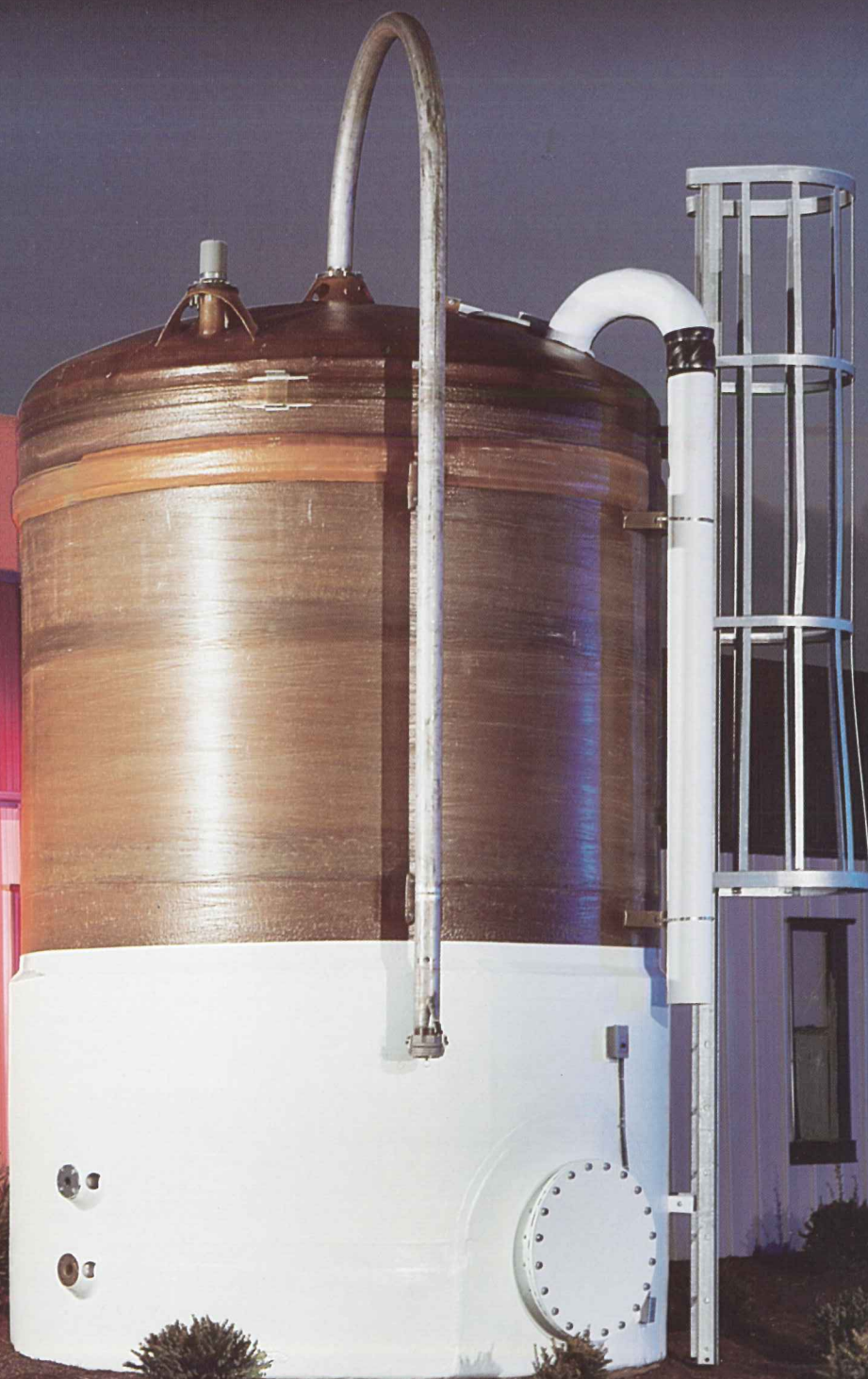
Certified to  
ANSI/NSF 61

Available

**Bryneer™**

**Bulk Salt  
Storage/Brinemakers**

Dependable, low-maintenance salt storage and saturated sodium chloride brine production systems serviced by pneumatic truck delivery of dry salt.





## BRINE - The Ideal Salt Handling Method

Saturated sodium chloride brine, continuously produced in an automated FRP bulk storage brinemaker, is ideal for distributing salt in industrial processes. A consistent NaCl brine concentration over a wide temperature range permits accurate volume metering. In-plant pumping of brine through plastic pipes almost totally eliminates corrosion hazards. Brinemaking technique and filtration eliminates undesirable impurities. Most importantly, capital costs for brine systems are 20-30% of those for dry salt storage and conveying systems, with appreciably lower operating costs.

Typical Chemical Analysis of Brining Grades of Salt

	Southern			
	Vacuum Purified	Granulated Common	Coarse Rock	Coarse Solar
	(% )			
Sodium Chloride	99.97	99.8	98.9	99.6
Calcium Sulfate	—	0.15	1.0	0.22
Calcium Carbonate	0.01	—	—	—
Sodium Sulfate	0.02	—	0.01	—
Other Salts	—	0.03	0.02	0.15
Insolubles	0.001	0.01	0.08	0.03

Hardness Of Industrial Salt Brines (1)

Salt Grade	Down Flow Dissolving		
	Fully Wet	Semi-Wet	Voidance
	(ppm Ca/Mg as Calcium)		
High Purity Vacuum (2)	2-15	—	—
Common Vacuum (3)	75-300	—	—
Coarse Solar	100-600	100-400	—
Southern Coarse Rock	400-1300	250-800	100-400

(1) excluding hardness contributed by water

(2) Morton Culinox 999 Salt

(3) Morton Purex Salt

Saturated Sodium Chloride Brine,  
Density and Solubility At Various Temperatures

F	C	Specific Gravity	Sodium Chloride		Brine
			(Wt %)	(lbs/gal)	
32	0	1.2093	26.34	2.652	10.07
50	10	1.2044	26.35	2.644	10.03
59	15	1.2040	26.40	2.647	10.03
68	20	1.1999	26.43	2.643	10.00
77	25	1.1978	26.48	2.642	9.98
86	30	1.1957	26.56	2.645	9.96
104	40	1.1914	26.71	2.651	9.92

Physical Properties of Brining  
Salt Grades

	Vacuum Granulated	Coarse Rock	Coarse Solar
Particle Size Range (inch)	0.01-0.03	0.125-0.500	0.100-0.375
Bulk Density (loose) lbs/ft <sup>3</sup>	75	70	68
ft <sup>3</sup> /ton	26.7	28.5	29.4
Angle of Repose	32° - 35°		
Liquid Void Area Under Brine			
Percent	40	44	46
Brine, gal/ft <sup>3</sup> salt	3	3.3	3.33
Brine, gal/ton salt	75	82.5	83.3

Brinemaking Sludge Accumulation

Salt Grade	Down Flow Dissolving		
	Fully Wet	Semi-Wet	Voidance*
	lbs/tons Salt Dissolved		
Vacuum Granulated	Nil	—	—
Coarse Solar	1-3	—	—
Southern Coarse Rock	5-10	10-20	20-35

\*Rapid Brining to avoid dissolution of anhydrous CaSO impurity.

For technical information on salt brinemaking technology contact:

Morton Salt  
100 North Riverside Plaza  
Chicago, Illinois 60606  
Technical Service (312) 807-2562

Morton maintains a nationwide staff of field technical service engineers who are well trained in the application of various grades of salt, in all types of brinemaking and materials handling systems.

Chemical Process,  
Pump & Systems  
Specialists

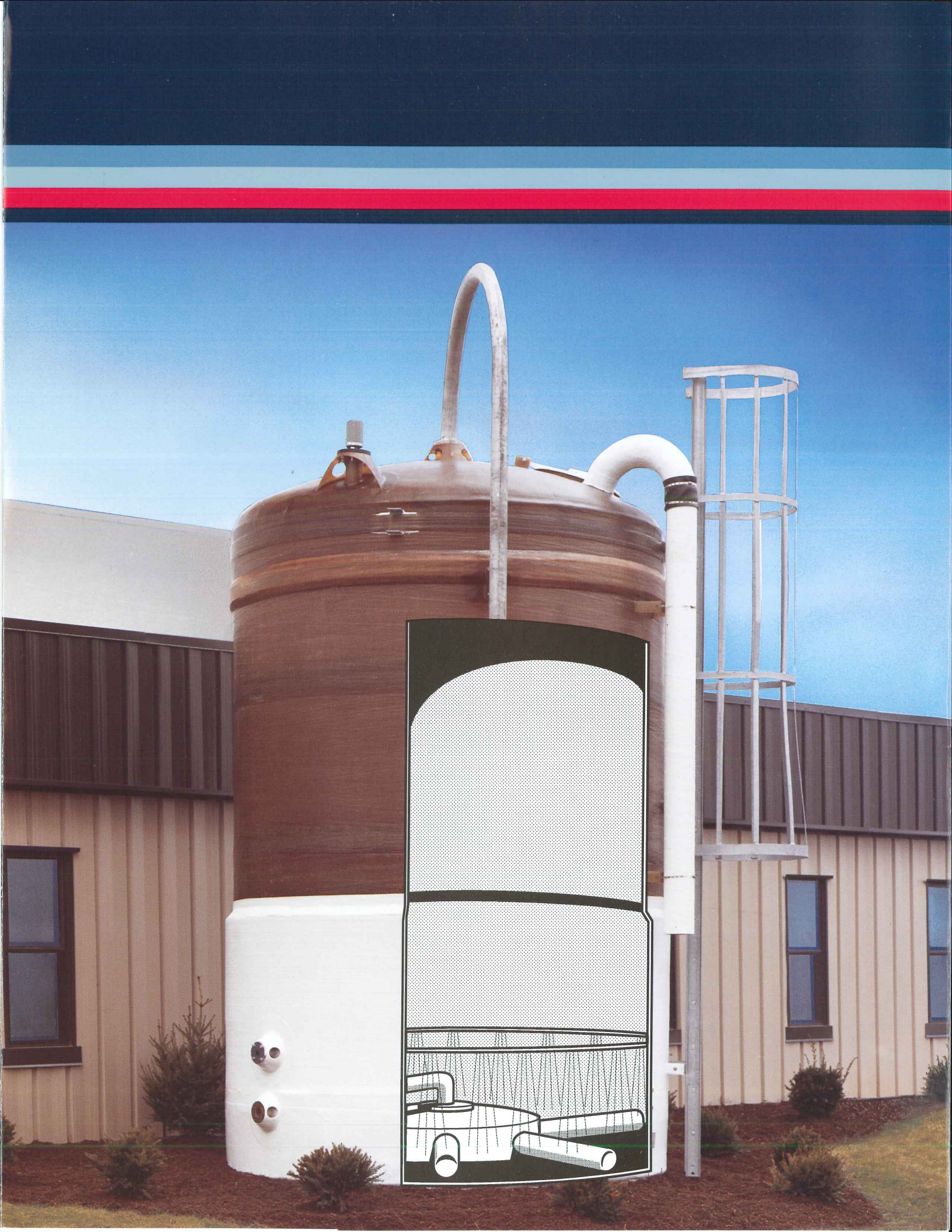
**KGO Group Ltd.**

www.kgogroup.com

1200 Speers Rd., Unit 52, Oakville, Ontario L6L 2X4, Canada

Tel: 905.847.1544 | Fax: 905.847.1699



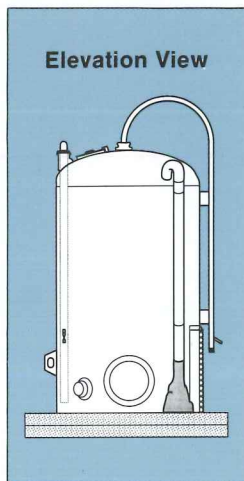




## BRYNEER SPECIFICATIONS

Model	8-15	10-15	12-15	12-20
Diameter	8' 0"	10' 0"	12' 0"	12' 0"
Straight				
Shell Height	15' 0"	15' 0"	15' 0"	20' 0"
Overall Height	17' 0"	17' 6"	17' 10"	22' 10"
Not Including Salt Pipe				
Empty Weight (lbs)	2,200	3,000	3,500	4,200
Max. Gross (filled) Weight (lbs)	54,900	85,500	112,500	170,000
Usable Dry Salt Storage (tons)	23	36	47	72
Recommended Max. Delivery (tons)	15	25	36	61
Dry Salt/Foot of Vertical Rise (tons approx.)	1.8	2.9	4.2	4.2
Max. Continuous Brine Draw (GPM) Granulated Salt	30	30	40	40
Rock & Solar Salt	20	20	25	25
Quartz Rock for Filter Bed				
1/8" x 1/4" (ft³)	21	33	47	47
1/4" x 1/2" (ft³)	29	46	66	66
Lbs of Quartz Rock	5,000	7,800	11,300	11,300
Liquid Capacity (gal)	5,638	8,520	12,683	16,911

Elevation View



### Optional Thermal Retention System

Outside installations exposed to long periods of freezing temperatures below 30° F require exterior insulation for the lower six feet of the vessel to maintain functional brining operation and prevent expansion damage to internal pipes and other components.

For ultimate protection and maximum brining efficiency, additional Plasta-Therm™ heating elements sealed in the side wall bottom of the vessel, when combined with the exterior insulation will maintain brine temperatures at near 60° F. When sealed in FRP, Plasta-Therm elements are virtually damage-free.

**For more information on Plasta-Therm see our #1578 free color brochure.**

### Other Options

- Flow meter and gauges
- Access ladder with cage enclosure and/or roof turn
- Built-in sump for flushing sludge
- Brine holding and day tanks
- Drain nozzle
- Top mounted handrail
- Level control output signals to your PLC
- Salt level monitoring system
- Pumps

Chemical Process,  
Pump & Systems  
Specialists

**KGO Group Ltd.**

www.kgogroup.com

1200 Speers Rd., Unit 52, Oakville, Ontario L6L 2X4, Canada 🇨🇦

**Tel:** 905.847.1544 | **Fax:** 905.847.1699