Brine Manufacturing

Automated Batch System (ABS)

GVM's Brine Manufacturing ABS's are designed to convert dry rock salt into liquid for pre-wetting or anti-icing roadways. The use of salt brine lowers the freezing point of snow and ice and is popular and cost effective solution for managing roadways. GVM's Brine Manufacturing Systems lower operation costs by using readily available materials; granular salt and tap water. They are capable of producing up to 5,000 gallons of brine per hour, depending on the water source. The systems are also designed to be rolled over for easy clean-out.

- Stainless steel tank divider separates manufactured brine for pumping to storage tanks or truck mounted tanks
- Hot dip galvanized structural steel frame meets ASTM specification A-123 for corrosion protection
- 115 in. wide top opening
- Includes a Misco Digital Refractometer to measure saturation percentage of salt brine

ABS-800 Brine System

Ideal for landscapers, small municipalities, and contractors, the ABS-800 is GVM's most economical system available.

- 800 gallon capacity tank, 144 x 43 x 58 in.
- 2.5 cu yd salt capacity
- Single speed pump, 110 GPM
- Portable for use at multiple locations

ABS-1500 Brine System

The ABS-1500 allows users to pump manufactured brine from the brine maker to a storage tank as well as use the storage tank as a fill station to fill truck mounted tanks without adjusting or moving hoses. The system also allows users to load and unload truck mounted pre-wet tanks and large anti-icing tanks.

- 1500 gallon tank, 151 x 53 x 63 in.
- 5 cu yd salt capacity
- 2 speed pump for high and low operation speeds, 40 - 130 GPM

GVM

Built to Last

BRINE MANUFACTURING

		ABS-800	ABS-1500
Tank Specifications	Dimensions	144 x 43 x 58 in. (365.8 x 109.2 x 147.3 cm) (L x W x H)	151 x 53 x 63 in. (383.5 x 134.6 x 160.0 cm) (L x W x H)
	Tank Capacity	800 US gal. liquid /2.55 cu. yd. of salt	1500 US gal. liquid /5 cu. yd. of salt
	Tank Construction	UV resistant heavyweight, one-piece, rotationally molded polyethylene with a stainless steel divider wall to separate the granular/tap water mixing side of the tank from the mixed brine containment/pumping side of the tank.	
	Tank Opening	115 in. wide, accommodates front-end loader bucket	
	Tank Support Frame	Fabricated structural steel, hot dip galvanized to ASTM specification A-123 for corrosion protection. 2 in. tube steel and 6 in. channel and includes eyelets to accommodate a chain used for "rollover" cleaning, and forklift openings for easy movement when tank is empty	
	Hopper Height	43 in. (61.0 cm)	63 in. (160.0 cm)
	Hopper Top Opening	84 x 50 in. (213.4 x 127.0 cm) (L x W)	115 x 50 in. (292.1 x 127.0 cm) (L x W)
Pump/Motor Specifications	Suction	2 in. (5.08 cm)	
	Discharge	2 in. (5.08 cm)	
	Power	2 hp	Dual horsepower for 2 speed operation
	Voltage	115V	230V single phase, 60 Hz
	Flow Rate	110 GPM	Varies with plumbing configuration, Low speed: 40 GPM @ 20 ft, high speed: 130 GPM @ 50 ft
	Pump Housing	42 x 30 x 31 in. (106.7 x 76.2 x 78.7 cm) (L x W x H), enclosed pump station for transfer of salt brine, housed in a UV stabilized polyethylene hinged, lockable enclosure, assembled with quick cam couplers and valves for tank suction/discharge	Rotationally molded polyethylene, UV stabilized; weather resistant housing, vented for air circulation Dimensions: 11 x 22 x 12 in. (27.9 x 55.9 x 30.5 cm) (L x W x H)
	Assembly	—	• Glass-reinforced, thermoplastic construction for corrosion and weather resistance • Pump body and seal plate joined by stainless steel studs molded into pump body, neoprene o-ring seal • Pump allows removal of motor and all moving pump parts without disturbing piping • Injection molded polycarbonate, closed design impeller is non-overloading • Impeller is brass threaded and hub molded in for attachment to motor shaft with integral dielectric shaft sleeve • Diffuser has a bronze wear ring and o-ring seal in suction port of pump with a finger opening drain plug for removal of trapped fluids • Pump motor is attached seal plate with stainless steel cap screws • Mechanical seal with a stainless steel, carbon, and neoprene rotating element on motor shaft • Ceramic stationary element with rubber cup mounting • Cool-carb seal has a mechanical drip-proof design • Motor is an open-drip proof and capacitor start/induction run design, has threaded 303-grade stainless steel shaft extension • All serviceable controls and components located under a removable canopy for protection against weather and dirt. • Sealed ball bearings at both shaft and control ends • Continuous duty motor has a thermal overload protector and automatic reset • External bonding lug shell is provided
	Electrical Controls	—	NEMA 4X control box with SS hinge cover & latching screws, hand/off/auto switch for pump on/off control, high speed/low speed selector switch, green "power" light on when pump is running, GFI for protection, terminal strip for easy power connection, relay for float switch operation to control pump, automatic on/off function
	Base	—	Mounted on a non-corrosive base with bolt lugs to allow the motor vent opening to be elevated at least 3.5 in. above the mounting surface.
Included Hoses		(2) 2 x 240 in. (5.08 x 609.6 cm) flexible PVC with camlock quick coupler	
		1 x 240 in. (2.54 x 609.6 cm) chemical resistant rubber hose with poly valve and camlock quick coupler	
Test Equipment		Misco Digital Refractometer for determining brine concentration	
		250 mL plastic cylinder to hold test sample	
		Brine concentration chart	
Y-Strainer		Y-strainer with 12 mesh screen prevents brine solution solids from entering the pumping station, producing cleaner brine that will lead to fewer mechanical problems	
Sample Port		Included at pump discharge for testing brine concentration	

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