BRINE PRODUCTION SYSTEM

BPS SERIES



GVM's **Brine Production Systems** (BPS) 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 Production System lowers 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 Brine Production System 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.

- Can cut salt usage by 33% or more
- 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
- ■90 x 60 in. wide top opening
- 1500 gallon tank, 142 x 71 x 55 in.
- 5 yd³ salt capacity
- 3 hp single speed 230V pump, up to 180 gpm











BRINE PRODUCTION SYSTEM

		BPS-1500
Tank Specifications	Dimensions	142 x 71 x 58 in. (L x W x H)
	Tank Capacity	1500 US gal. liquid /5 yd³ 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	90 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 forklift openings for easy movement when tank is empty
	Hopper Height	63 in. (160.0 cm)
	Hopper Top Opening	90 x 50 in. (292.1 x 127.0 cm) (L x W)
Pump/Motor Specification	Suction	2 in. (5.08 cm)
	Discharge	2 in. (5.08 cm)
	Power	3 hp single speed
	Voltage	230V single phase, 60 Hz
	Flow Rate	Up to 180 gpm
	Pump Housing	304 Stainless Steel Weather Resistant Housing, Vented For Air Circulation. Dimensions: 17 x 14 x 14.5 (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 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 bolts Mechanical seal with a stainless steel, carbon, and neoprene rotat- ing element on motor shaft All serviceable controls and components located under a remov- able 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	AIO-11112 control box with water-tight latching door. Includes hand on/off/auto switch, power light, terminal ports for easy connection, pump relay, timer, and sensorex salinity monitor visible through clear front panel
	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		Brine concentration chart
Y-Strainer		Y-strainer with 30 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











