



### AGENDA ITEM EXECUTIVE SUMMARY

Agenda Item:	Resolution Authorizing the City Administrator to Purchase an Accu-Batch Brine Maker and two 6100-gallon storage tanks from Cargill Salt		
Presenter & Title:	Nate Landers, Superintendent of Streets, Fleets, and Facilities		
Date:	July 15, 2019		
<b>Please Check Appropriate Box:</b>			
<input type="checkbox"/>	Committee of the Whole Meeting	<input type="checkbox"/>	Special Committee of the Whole Meeting
<input checked="" type="checkbox"/>	City Council Meeting	<input type="checkbox"/>	Special City Council Meeting
<input type="checkbox"/>	Public Hearing	<input type="checkbox"/>	Other -
Associated Strategic Plan Goal/Objective: EMS-II			
Estimated Cost: \$50,000		Budgeted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Other Funding? <input type="checkbox"/> Yes <input type="checkbox"/> No
<i>If "Other Funding," please explain how the item will be funded:</i>			
<b>Executive Summary:</b>			
<p>The FY20 budget provides for the purchase of a brine maker for snow and ice control operations. The industry standard continues to place more emphasis on using liquids as an efficient and effective way to anti-ice and de-ice roads during the winter months. Three quotes were obtained from Henderson, Cargill Salt, and Voigt Smith, Inc. (VSI). VSI was the lowest quote, but was unable to meet machine specifications.</p> <p>The most responsible quote was Cargill Salt. The brine machine is capable up producing up to 2400 gallons of brine in an hour, has automatic salinity control, easy to move around, easy to clean out, can be upgraded with a truck fill station and is purchased through Sourcewell (formerly NJPA). The current storage capacity for brine is limited to the 1000-gallon tank on the truck and the 600 gallons the homemade machine can hold. Two storage tanks will allow staff to make and store brine solution and begin introduction of additives such as beet juice and amp.</p>			
<b>Attachments:</b> <i>(please list)</i>			
<ul style="list-style-type: none"> <li>• Resolution</li> <li>• Quotes and Specifications</li> </ul>			
<b>Voting Requirements:</b>			
<p><i>This motion requires 6 affirmative votes for passage.</i></p> <p><i>The Mayor may vote on three occasions: (a) when the vote of the aldermen or trustees has resulted in a tie; (b) when one half of the aldermen or trustees elected have voted in favor of an ordinance, resolution, or motion even though there is no tie votes; or (c) when a vote greater than a majority of the corporate authorities is required by state statute or local ordinance to adopt an ordinance, resolution, or motion.</i></p>			
<b>Recommendation / Suggested Action:</b> <i>(how item should be listed on agenda)</i>			
Recommend approval of Resolution authorizing the City Administrator to purchase an Accu-Batch Brine maker and two 6100-gallon storage tanks from Cargill salt at a cost of \$47,030.00			

**RESOLUTION NO. 2019-72**  
**RESOLUTION AUTHORIZING CITY ADMINISTRATOR**  
**to purchase an Accu-Batch brine maker and two 6100 gallon storage tanks from Cargill Salt**

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**BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GENEVA, KANE COUNTY, ILLINOIS**, as follows:

**SECTION 1:** That the City Administrator is hereby authorized to execute, on behalf of the City of Geneva, purchasing with Cargill Salt., in the form attached hereto, relating to the purchase of an Accu-Batch brine maker and two 6100 gallon storage tanks.

**SECTION 2:** This Resolution shall become effective from and after its passage as in accordance with law.

**PASSED** by the City Council of the City of Geneva, Kane County, Illinois, this 15th day of July, 2019

**AYES: \_\_ NAYS: \_\_ ABSENT: \_\_ ABSTAINING: \_\_ HOLDING OFFICE: \_\_**

Approved by me this 15th day of July, 2019.

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
City Clerk



April 2, 2019

City of Geneva  
 1800 South Street  
 Geneva, IL 60134  
 Nate Landers – Street Superintendent  
 Phone: 630-232-1502  
 nlanders@geneva.il.us

RE: AccuBatch® brine maker

The AccuBatch® brine maker from Cargill Salt – Road Safety is a brine production system that allows for *brine to be manually produced with a temperature compensated conductivity meter for accurate salinity concentration in an entry level machine.* All AccuBatch® brine makers come with:

- Up to 2,400 gallons/hour production levels – *Produce as much or as little brine based on your needs*
- Automatic Salinity control – *System uses patent pending technology to ensure continuous, accurate concentration to +/- 0.2% of your desired salinity*
- Durable rugged design – *Marine grade fiberglass is corrosion resistant and an all-weather long-lasting housing for the control panel*
- Ease of Clean Out – *System is designed to make clean out simple and safe without intensive labor*



Item	Qty	Part#	Description	Each	Extended
1	1	110008945	<b>Accubatch® brine maker</b> Includes a factory installed stainless steel spill shield. Continuous, automatic salinity measurement & control.	\$29,000.00	\$29,000.00
				Freight:	\$480.00
				<b>Total:</b>	\$29,480.00

This quote does not constitute an order confirmation. The prices quoted in this letter are valid for a sixty (60) day timeframe.



**Additional Notes & Descriptions:**

- 1) This system is shipped directly to you and installation is as simple as plugging in the unit and hooking up the water and it is ready to begin brine production.
- 2) Taxes, if applicable, are not included in this quotation.
- 3) This unit is single phase electric (240V 30A Type L6-30 receptacle).
- 4) Please see attached installation checklist, technical specifications and literature for more details.
- 5) City of Geneva Sourcewell/NJPA Membership # 66310 or #32286
- 6) Cargill Sourcewell/NJPA Contract # 080114-CGI

**Terms and Conditions**

The terms and conditions and full limited warranty statement located at [www.accubrine.com](http://www.accubrine.com) shall constitute the sole terms and conditions governing any sale of an AccuBatch® brine maker entered into by the parties. No terms or conditions, other than those located at [www.accubrine.com](http://www.accubrine.com), whether contained in Buyer's purchase order or elsewhere, shall be binding on Seller unless agreed to in writing by Seller. Seller's failure to object to such other terms and conditions shall not be deemed a waiver of those located at [www.accubrine.com](http://www.accubrine.com).

**One Year Limited Brine Maker Warranty**

Cargill Salt – Road Safety warrants to customers who purchase new AccuBatch® brine makers from Cargill Salt – Road Safety's authorized distributors or from Cargill Salt – Road Safety ("original purchasers") that the AccuBatch® brine maker ("Brine Maker") will be free from defects in material and workmanship for a period of one (1) year beginning after the completion date of installation and customer training, and that Cargill Salt – Road Safety will repair and defect in material or workmanship, and repair or replace and defective part, subject to the terms and conditions, limitations, and exclusions set forth at [www.accubrine.com](http://www.accubrine.com).

Regards,

Roger Wilson  
 District Manager  
 Cargill Salt – Road Safety  
[roger\\_wilson@cargill.com](mailto:roger_wilson@cargill.com)  
 mobile: 920-889-3583  
 FAX: 952-249-4003

"Confidentiality Notice: This message is intended only for the named recipient and may contain confidential, proprietary or legally privileged information. Unauthorized individuals or entities are not permitted access to this information. Any dissemination, distribution, or copying of this information is strictly prohibited. If you have received this message in error, please advise sender by reply e-mail, and delete this message and any attachments. Thank you."



# HENDERSON

PRODUCTS, INC.

1085 SOUTH THIRD STREET  
 MANCHESTER, IA 52057-0040  
 PHONE: 563-927-2828

## SALES QUOTATION

DATE	PAGE
4/29/2019	1

CUSTOMER: City of Geneva, Illinois  
 CONTACT: Nate Landers  
 ADDRESS: 1800 South Street  
 City of Geneva, Illinois United Sta 60134-2547

QUOTE ID: 124996-7  
 QUOTE DATE: 4/29/2019  
 VALID UNTIL: 5/29/2019

PHONE: 630-232-1502

FAX:

EMAIL: nlanders@geneva.il.us

SOURCEWELL #: 66310

SALESPERSON: Dan Gilliland

PHONE:

FAX:

EMAIL: DGilliland@DouglasDynamics.co

QUANTITY	DESCRIPTION	LIST PRICE EACH	EXT. LIST PRICE
1	QUOTE 124996-7: Pro Advantage - SourceWell Contract # 080818 CONFIGURATION 1-1: Brine Xtreme  10% Discount: Dealer Cost: DESCRIPTION: BRINEX Advantage Advantage Manual Flip Cover/Extension Fixed Outdoor Installation <b>BRINE MAKING SYSTEM</b> Salt Brine Maker Style: <b>Advantage</b> Hopper Options: <b>Advantage Manual Flip Cover/Extension</b> Installation Type: <b>Fixed Outdoor Installation</b> <b>SALINITY CONTROL</b> Salinity Control Type: <b>Pro controls, No truck fill</b> Salinity Control Mounting: <b>Remote mounted controls away            from Brine Maker</b> Salinity Control Pump Flow rates: <b>100 GPM</b> System output direction: <b>Right hand output</b> Voltage: <b>208/220 Volt/ 1 phase</b> <b>SALINITY CONTROL OPTIONS</b> Beacon Light: <b>No low salt warning light</b> Storage Tank Level Monitor: <b>No Storage Tank Level Monitor</b> Waterline Air Purge: <b>Yes, waterline air purge</b> Cellular Gateway: <b>Cellular Gateway (1 year free access            included)</b>  End Customer: City of Geneva, IL	\$43,853.00 (\$4,385.30) \$39,467.70  \$18,006.00 \$1,278.00  \$21,014.00 \$1,082.00  \$555.00 \$1,918.00	\$43,853.00 (\$4,385.30) \$39,467.70  \$18,006.00 \$1,278.00  \$21,014.00 \$1,082.00  \$555.00 \$1,918.00

Quote Total: \$43,853.00  
 10% Discount: (\$4,385.30)  
 0% Sales Tax: \$0.00  
 Total Dealer Cost: \$39,467.70

**Landers, Nate**

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**From:** Adam Hansen <adam@vsinnovation.com>  
**Sent:** Tuesday, February 26, 2019 4:11 PM  
**To:** Landers, Nate  
**Subject:** ● Brine Maker

Good afternoon,

Here is the info on the 1800 Brine Maker that we have in stock.

Regular Price: \$17,500  
10% Late Season Discount: \$15,750

Optional accessories:  
Dual Pump upgrade: \$3,500  
Digital Flow Meter upgrade: \$2,200  
Air Purge upgrade: \$250  
Manifold System: \$600

Height: 100"  
Length: 168"  
Width: 98"  
Weight: 2,495lbs

Contact for your Envirotech rep, Mark Bloom - cell: 309-259-9163

I am still looking to see if someone in your area has an 1800 gallon brine maker that you can look at.

Thanks!

-Adam

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***Voigt-Smith Innovation***

**Adam Hansen**  
**Sales Associate / Shipping Coordinator**  
**150 East Sharon Street - Le Center, MN 56057**  
**Office: 507-252-3033**  
**Cell: 507-327-0917**  
**[adam@vsinnovation.com](mailto:adam@vsinnovation.com)**  
**[www.vsinnovation.com](http://www.vsinnovation.com)**

## **Technical Specifications - AccuBatch™ brine maker**

### **1.0 Salt Hopper**

- 1.1 The entire salt hopper and salt hopper structure shall be made of structurally sound fiberglass.
- 1.2 The salt hopper shall have a nominal capacity of 1.6 cubic yards
- 1.3 The salt hopper has a nominal weight capacity of 3000 pounds
- 1.4 The salt hopper shall have the following nominal inner dimensions: 26.5 inches wide and 94.5 inches long and 33.25 inches high.
- 1.5 The height of the bottom of the butterfly cleanout valve is 31 inches off of the ground.
- 1.6 The salt hopper shall be constructed of fiberglass and coated with an inner UV resistant white gel coat and a highly-visible yellow outer gel coat.
- 1.7 Overall nominal thickness of the salt hopper shall be 0.75 inches.
- 1.8 All fittings and valves shall be fiberglass reinforced molded polypropylene
- 1.9 The fill nozzles are capable of providing fresh water or recirculated brine water to the system depending on the position of the valves in the system.
- 1.10 The hopper shall have a 13 degree sloped bottom leading toward a circular 6" diameter discharge port fitted with a manually operated 6" diameter butterfly valve consisting of cast iron body, EPDM seat, 316 stainless steel disc and stem.
- 1.11 All clamps and other necessary hardware shall be stainless steel
- 1.12 There shall be a quick disconnect fitting for the hose connecting the discharge side of the pump to the salt hopper.
- 1.13 The salt hopper will be fitted with removable 304 stainless steel screens to minimize the amount of salt or other debris to be washed into the brine tank through the two overflow weirs.
- 1.14 The salt hopper will be permanently fitted with Two stainless steel rectangular overflow weirs having measurements of Width 20" x Height 4.5" x Depth 12"

### **2. Brine Tank**

- 2.1 The entire brine tank and brine tank structure shall be made of structurally sound fiberglass.
- 2.2 The brine tank shall have a nominal capacity of 800 gallons
- 2.3 The brine tank shall have the following nominal inner dimensions: 46.5 inches wide by 94.5 inches long by 46.5 inches high.
- 2.4 Overall nominal thickness of the brine tank shall be 0.75 inches

- 2.5 All fittings and valves shall be fiberglass reinforced molded polypropylene. The brine tank shall have the following nominal outer dimensions, including all fittings and/or mounts: 60 inches wide by 113.5 inches long by 49.5 inches high
- 2.6 The Brine tank outlet shall be fitted with a 2" port with a manually operated shut off valve. The valve has a 2" male QDC lever lock connection.
- 2.7 The brine tank shall be constructed of fiberglass and coated with an inner UV resistant white gel coat and a highly-visible yellow outer gel coat.
- 2.8 The floor of the brine tank shall have a 5 degree slope from opposite side of the discharge port toward the discharge port

### **3. Motor/pump/valve stack assembly**

- 3.1 The components on the motor/pump/valve stack assembly will be a motor, pump, conductivity analyzer sensor, a check valve and a three-way manual valve.
- 3.2 The motor shall be a 3hp, 240V, 3450 rpm; FLA 13; 1 PH TEFC
- 3.3 The pump shall be rated at a nominal 100 gpm with a 2" inlet and outlet with stainless steel impeller and housing.
- 3.4 There shall be a salinity probe mounted and housed on the discharge side of the pump. The probe will be wired to the salinity analyzer control box with 15 ft of usable shielded cable.
- 3.5 There shall be a manual 3-way valve mounted on the downstream side of the conductivity probe housing. The valve will control whether the water/brine solution being discharged from the pump will be sent to the salt hopper (recirculation-production mode) or to a customer supplied brine storage device, such as a tank or truck
- 3.6 There shall be a 3" check valve mounted on the pump assembly to eliminate any backflow of water and salt from the salt hopper or from a storage tank/truck through the pump.
- 3.7 There shall be a 2" male quick disconnect fitting on the "storage" side of the 3-way valve that the customer can connect to in order to take the finished product from the AccuBatch™ system to a customer supplied storage device
- 3.8 The motor/pump/valve stack assembly will be attached to a stationary mount located on the side of the Brine Tank.

#### **4. Control Panel**

- 4.1 The control panel back plate shall be UL listed.
- 4.2 The control panel can be mounted outdoors as penetrations in the control panel will comply with IP-66, or greater.
- 4.3 The control panel shall be fitted with the following: Start, Stop, E-stop, Reset push button, Hand-Off-Auto motor control, four LED voltage fault indicators, LED stack light.
- 4.4 The control panel for the conductivity analyzer shall consist of touch screen controls rated at IP-66 and will be mounted to the side of the main control panel.
- 4.5 The main power will be supplied to the control panel by a 15 ft power cord with 240 VAC, 30A, 1PH male cord cap.
- 4.6 The entire system shall have a power requirement of 240V, 30A, 60hz, single phase AC.
- 4.7 The control panel enclosure shall be made of fiberglass reinforced polyester.
- 4.8 The total full load amperage shall be 18.4 Amperes.
- 4.9 The short circuit current rating shall be 5000 Amperes RMS.

#### **5. Optional Accessories**

- 5.1 To minimize salt spillage during the loading process, a 304 stainless steel spill deflector can be purchased as an optional accessory if the customer so desires. If purchased at the time of original machine purchase the spill deflector will be mounted on the Salt Tank at the factory.
  - 5.1.1 If the customer purchases the spill deflector after the initial Accubatch purchase, the spill deflector will be shipped to the customer in three pieces. Two pieces will mount on each end of the Salt Hopper and one piece will mount along the long side of the Salt Hopper, directly adjacent to the Brine Tank. Assembly instruction will be included as will all required mounting hardware(bolts, nuts and washers).
  - 5.1.2 The dimensions of the Salt Hopper including the optional spill deflector is 109" L x 35" D x 81" H.
- 5.2 All parts listed on supplied parts list can be purchased as needed. Contact your local Cargill Deicing Technology Sales Representative.

#### **6. Documentation**

**Cargill Deicing Technology**  
24950 Country Club Blvd.  
Suite 450  
North Olmsted, OH 44070  
1-866-900-7258

6.1 Each machine will be supplied with a CD containing electronic files of the following: Operators Manual, Parts List, Warranty Terms, Warranty Claim Form, Warranty Claim Instructions, Warranty Registration Form, RMA Form, and Conductivity Analyzer Instruction Manual