



## SUSTAINABLE ROAD SALTING PRACTICES

# PRE-WETTING

Pre-wetting is the process of adding a salt-water mixture (called brine) to dry rock salt.

## BENEFITS

- Pre-wet salt is “activated,” meaning it works immediately to stop ice from forming when it hits the pavement.
- Pre-wetting helps salt to stay in place on the pavement where it is needed rather than bouncing off and into soils, vegetation, and nearby water bodies.
- Since pre-wet salt stays in place better, less salt can be distributed, saving costs, the environment, and infrastructure.

## CONSIDERATIONS

- Salt can be pre-wet in a pile or “at the spinner.” A spinner is a device underneath plow trucks that spins to distribute salt. “Pre-wetting at the spinner” means the brine or proprietary liquid is added to the dry salt just before that salt hits the pavement.
- Brine systems need to be covered and some components need to be operated indoors (e.g., the control panel).
- Staff time is required to make brine.

## CHALLENGES

- Pre-wetting must be done with a brine solution or proprietary deicer and not with water. This prevents freeze up in the lines and nozzles that distribute the liquid onto the dry salt.
- There are costs associated with pre-wetting in addition to a dry salt distribution system. This may not be affordable for communities or businesses.

## COSTS

Costs vary widely. Brine making systems can range from \$5,000 to \$100,000 or more, depending on features such as automation, speed, and capacity. Proprietary liquid costs vary based on the product. In addition, there are costs for storage containers and specialized equipment to deliver the liquid to the dry salt. These costs will be per truck if pre-wetting at the spinner.

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## COMPANIES

Companies that market brine making systems and brine storage and distribution supplies include:

- [Camion](#) (e.g., [Brine Master®](#))
- [Deicing Depot](#) (e.g., [1250 gallon brine maker](#))
- [GVM](#) (e.g., [EZ Brine Systems](#))
- [Henderson](#) (e.g., [BrineXtreme Infinity](#))
- [Hilltip](#) (e.g., [BrineMixx™ Brine Maker](#))
- [RoadBrine.com](#) (e.g., [Mobile Brine Maker 300 Gallon](#))
- [Varitech](#) (e.g., [Brine Boss](#))

\*Companies listed may offer additional products not included here. In addition, other companies not included in the table may carry similar products. Listing does not constitute endorsement on the part of the University of Vermont, Lake Champlain Sea Grant, or NOAA. Information is provided for educational purposes only.

## LOCATIONS

The following communities in Vermont are pre-wetting salt:

- Hyde Park
- Johnson
- Milton
- Morristown
- Rutland
- Williston
- Winooski

Does your community or business pre-wet dry rock salt at the spinner or on the pile and operate within the Lake Champlain Basin of New York or in Vermont? Let us know and we can list your community or business here too!

## LEARN

Learn how [Hyde Park, VT, makes brine and pre-wets dry rock salt in this video.](#)

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