SAVE SALT
SAVE MONEY
SAVE TIME

WITH GROUND-SPEED CONTROL

When winter strikes, having snow and ice removal equipment with ground-speed control that functions efficiently and effectively is critical to conserving resources and keeping roadways safe.

MUNCIE®

CHOOSING A SYSTEM

The Answer to Winter's Challenge

As a snowplow clears roadways, it utilizes an electronic spreader system to adjust the salt output proportionately with what is called ground-speed control. In a nutshell, this means that while the truck is moving the system electronically measures the speed of the truck and then automatically adjusts the salt output proportionately to the given speed. When the truck stops, the salt stops, which is critical to saving salt, money and time.

Clearing roadways and distributing salt may sound simple, but in all reality, it's more complex and involves a number of factors. This is why each winter, municipalities, counties, private contractors and state departments find themselves facing the same challenge: keeping roadways safe, while conserving salt and staying within budget.

Many fleets to this day continue to use what are called manual spreader valves. And while manual spreader valves do have the ability to control salt spread onto roadways, they aren't as effective or efficient as their electronic counterparts. For example, with manual spreader valves salt continues to be distributed even when the truck has come to a complete stop. This is due to the lack of automation of manual spreader valves and thus, results in salt distribution that is ill-proportionate. To put it simply, salt is continually wasted.

Ground-speed Control
=
Proportionate Salt Distribution

Consistent and proportionate salt distribution is not only possible, but standard with electronic systems. With manual spreader valves, this is virtually impossible however. Why? The operator has to manually make these adjustments to the system in order to distribute the salt proportionately to the speed of the truck. An operator's only reference then is what they are able to see in the mirror as they are driving, which is not only ineffective but potentially dangerous as the operator's focus is divided.

Save Salt, Save Money, Save Time

Those in the snow and ice market know all too well that salt is expensive. For this reason, having a spreader control system that effectively and efficiently distributes salt – along with finding the balance between functionality and cost – is critical.

Contrary to manual spreader valves, electronic spreader control systems ensure that when the truck stops, the salt stops – which means that unlike with manual spreader valves there won't be piles of wasted salt sitting at intersections or overspreading.

Looking at typical salt application rates, per lane mile requires roughly 250 lbs. to 500 lbs. of salt with a price tag of roughly $70 to $100 for two to four miles of coverage. Taking into account overspreading and waste, it's easy to see how the cost can very quickly become even more significant with manual spreader valves.

Typical Salt Application Rates

There are systems that not only serve as a cost-effective solution, but that are also efficient and effective while remaining basic – such as the MESP 300 Series. In this way, users are not required to get the complex, top-of-the-line system in order to find a solution that offers a balance between functionality and cost.

As the system automatically adjusts the salt output proportionately, the operator saves time by not having to continually check and adjust the salt output manually.

PROMOTE SAFETY

Remote Units and Automation

Electronic Spreader Systems

Beyond saving salt, money and time for users, electronic spreader systems promote safety. This is accomplished through the use of remote units located outside of the cab in addition to automated application.

Having the unit located outside of the vehicle prevents oil spills within the cab that would otherwise expose the operator to high-pressure fluids. These fluids have the potential to greatly harm the operator.

Manual Spreader Valves

Manual spreader valves are still in use today and located directly within the cab, right next to the operator. Should an oil spill happen and the operator become exposed to these high-pressure fluids, the consequences could be severe if not life-threatening.

Due to a lack of automation, manual spreader valves also require the operator to manually adjust the salt output, hindering the operator from solely focusing on driving.

WHAT IS THE MESP?

A System Balancing Cost and Functionality

MESP stands for Muncie electronic spreader package, which is fitting as the system electronically controls the salt spread onto roadways. The Muncie Power Snow & Ice Division's system consists of an electronic controller, wiring harness, weather resistant enclosure and cartridge valve manifold as it not only controls the salt spread, but adjusts it proportionately to the speed of the truck through automated, ground-speed control.

Series Options

Within the MESP 300 Series, users have the option between the MESP 3016/3017 and MESP 3020. Both of these options feature ground-speed control – saving salt, money and time; however, with the MESP 3020 users obtain ground-speed control with an integrated hoist circuit. The MESP 3016/3017 and MESP 3020 showcase many similar features including their ability to be used in new and retrofit installations along with being easy to install, setup and operate.

MESP 3016/3017 SPECIFICATIONS

- Optional, adjustable floor mounting system
- Maximum operator convenience – automatic and manual mode
- System ability to control a spinner and auger/conveyor setup

MAX FLOW RATE	40 GPM (151.4 LPM)
ADJUSTABLE RELIEF	3,000 PSI MAX (207 BAR)

MESP 3020

- Compatible with all spreaders (V-box, tailgate spreaders, etc.)
- Auto and manual operations
- Functionality includes hoist, spinner and auger/conveyor for Class 5 trucks

MAX FLOW RATE	20 GPM (75.7 LPM)
ADJUSTABLE RELIEF	3,000 PSI MAX (207 BAR)
ADJUSTABLE SPREADER RELIEF	1,500 PSI (103 BAR)

COMPATIBLE APPLICATIONS

MESP 3016/3017 Series Applications

The MESP 3016/3017 Series is compatible with all spreader setups including tailgate, drop-in V-boxes, V-body, roll gates and muni bodies. The controller has the ability to proportionally control the speed of the spinner motor and auger motor.

Typical snow and ice applications utilizing an electronic spreader system like the MESP 3016/3017 include snowplows via heavy-duty pickups to large Class 8 trucks. These units can also be applied to other motor applications for agriculture like manure spreader applications.

MESP 3020 Series Applications

The MESP 3020 Series is designed for Class 5 pickup trucks that are equipped with cylinders of minimal volume. Typically, these trucks are equipped with a hydraulically-controlled hoist and spreader, but the plow is electrically controlled utilizing a DC power pack.

SNOW & ICE DIVISION

Muncie Power Products' Snow & Ice Division was created in 2004, expanding the company's product offering to meet application needs within the snow and ice market. Offering a wide range of hydraulic control solutions compatible with heavy-duty pickups with basic operations to large Class 8 trucks with numerous control functions, Muncie Power Products' Snow & Ice Division has options to meet application needs regardless of complexity.

Beyond electronic spreader packages like the MESP 300 Series, the division's product offering includes Muncie Power's hydraulic components including power take-offs, pumps, valves, cylinders and more. Each of these products are backed by the division's product support, which includes helping with your specific application to assisting with questions such as operational adjustments and troubleshooting.

Watch this video to learn more about the division's full product offering.

800-367-7867
munciepower.com/snow

Muncie® Power Products