

Road Salt Symposium 2019 Heavy Metal: Ice Breakers and Underbodies

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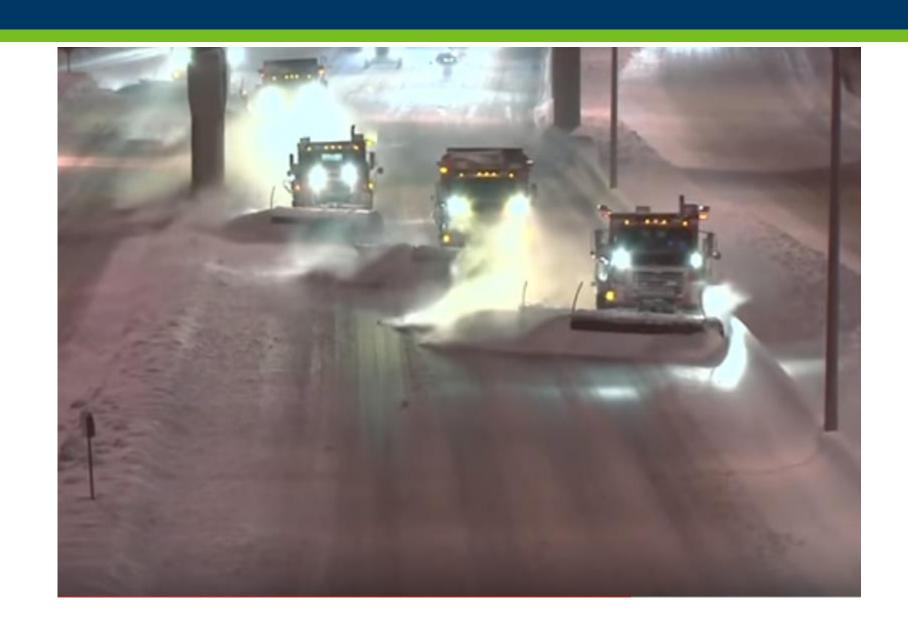


A lot more than Salt and Sand



Mechanical Snow Removal Tools

- Plow Trucks
- Motor graders
- Tow Plows
- Ice Breakers
- Snow Blowers
- From NASCAR...
 - Jet Driers ;-)



Step 1: "Keeping it thin"

- Plow during storm events as frequently as possible
- In windy situations our primary tool is scraping
- Reduces bare lane regain time required when storm ends
- Reduces chemical usage



Plows: Blades here, there and everywhere

- Standard Truck has at least 3 blades
 - Front plow
 - Underbody plow (the workhorse)
 - Wing
- Dual wing
- Tow Plow



Truck Build Options

Chassis (Select One)		
Single Axle - Class 33	\$	106,703
Tandem Axle with Engine Brake - Class 35	\$	130,998
Tandem Only Options	<u>Ψ</u>	150,550
Tow Plow		
Wing Plow (Select One)		
9ft RH Rear (single or tandem)	\$	11,164
9ft LH Rear (single or tandem)	\$	11,164
9ft Dual Rear (tandem option only)	\$	23,460
11ft RH Rear (tandem option only)	\$	12,175
	\$	
11ft LH Rear (tandem option only) 11ft Dual Rear (tandem option only)	\$	12,175 25,475
	- P	25,475
Underbody Plow (Standard on all trucks)		
Hydraulic Accessories		705
Single wing slurry pump valve section	\$	725
Singe wing dual auger sander	\$	2,140
Single wing Tow plow valve section (Tandem option only)	\$	10,810
Single wing slurry pump / Tow plow valve sections (Tandem option only)	\$	12,735
Dual wing (Tandem option only)	\$	4,815
Dual wing / slurry pump valve sections (Tandem option only)	\$	11,345
Dual wing / Tow plow valve sections (Tandem option only)	\$	13,055
Dual wing / slurry pump / Tow plow valve sections (Tandem option only)	\$	16,375
Sander (Select One)		
Falls 6" Dual Spinners	\$	5,983
Falls 9" Dual Spinners	\$	6,140
Falls 6" Split Auger/ Dual spinner	\$	10,470
Kline 9" Slurry Sander (District installation)	\$	16,910
Monroe Tailgate/Sander (District installation)	\$	11,655

Front Plow (Select One)	
12ft Power Reversible - Falls PR1243E1	\$ 9,085
12ft Power Reversible - Falls PR1243E1 / Stainless steel mold board	\$ 10,020
12ft Rev RH High Discharge - Falls ROX12	\$ 10,210
12ft Rev RH High Discharge - Falls ROX12 / Stainless steel mold board	\$ 11,565
12ft Rev LH High Discharge - Falls ROX12	\$ 10,210
12ft Rev LH High Discharge - Falls ROX12 / Stainless steel mold board	\$ 11,565
12ft Rev High Discharge - Falls XPR12	\$ 10,210
12ft Rev High Discharge - Falls XPR12 / Stainless steel mold board	\$ 11,565
12ft Rev RH Plow (closed end) - Falls FX312RE1	\$ 9,540
12ft Rev RH Plow (closed end) - Falls FX312RE1 / 411H (7ga.) mold board	\$ 10,940
12ft Rev LH Plow (closed end) - Falls FX312RE1	\$ 10,420
12ft Rev LH Plow (closed end) - Falls FX312RE1 / 411H (7ga.) mold board	\$ 11,815
12ft Rev RH Plow (open end) - Falls FX312RE1	\$ 9,540
12ft Rev RH Plow (open end) - Falls FX312RE1 / 411H (7ga.) mold board	\$ 10,940
12ft Rev LH Plow (open end) - Falls FX312RE1	\$ 10,420
12ft Rev LH Plow (open end) - Falls FX312RE1 / 411H (7ga.) mold board	\$ 11,815
12ft Rev RH Plow (closed end) - Falls FX412	\$ 9,540
12ft Rev RH Plow (closed end) - Falls FX412 / Stainless steel mold board	\$ 12,185
12ft Rev LH Plow (closed end) - Falls FX412	\$ 9,540
12ft Rev LH Plow (closed end) - Falls FX412 / Stainless steel mold board	\$ 12,185
12ft Rev RH Plow (open end) - Falls FX412	\$ 9,540
12ft Rev RH Plow (open end) - Falls FX412 / Stainless steel mold board	\$ 12,185
12ft Rev LH Plow (open end) - Falls FX412	\$ 9,540
12ft Rev LH Plow (open end) - Falls FX412 / Stainless steel mold board	\$ 12,185
12ft Rev Polly Plow - (FRINK) EVEREST RAC 3351	\$ 19,810
12ft Rev Polly Plow - HENDERSON RSP-FLEX-12	\$ 14,890

Cutting Edges

- Carbide Steel
- Rubber (w/ carbide inserts)
- Rubber (w/ ceramic inserts)
- Specialty blades
- Scarifying blades
 - use with caution!



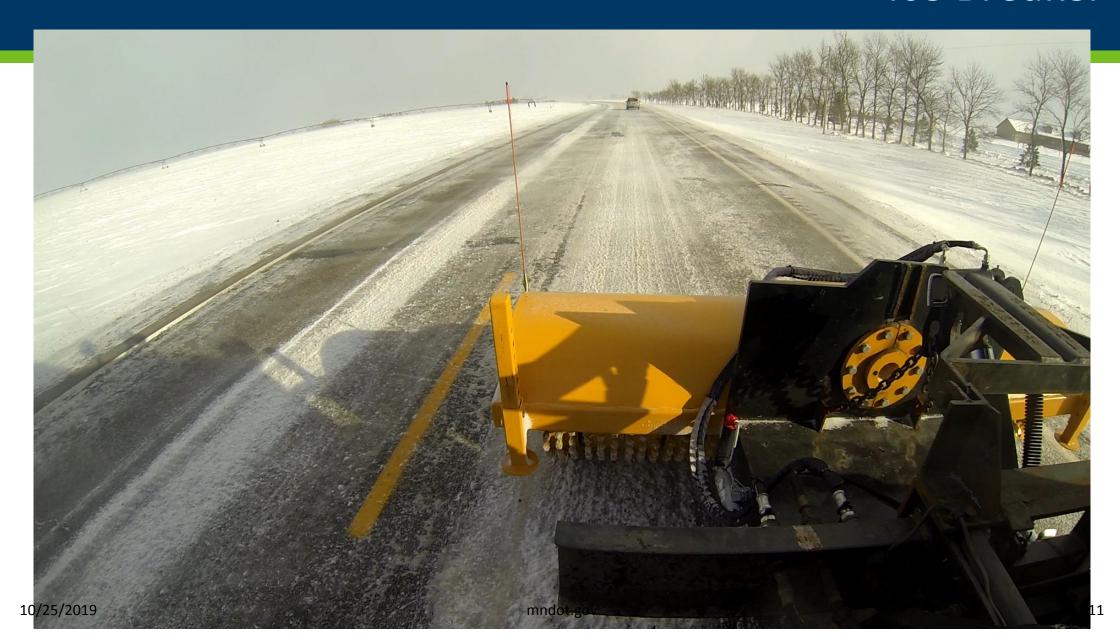
MnDOT's Newest Heavy Metal tool – The Ice Breaker



Ice Breaker



Ice Breaker



Ice Breaker

- A rolling drum with 1,400+ points
- Normally recommended for > 1" compaction/ice
- Using on compaction as thin as ¼"
- No damage (some scuffing)
- Takes place of front plow
- Up to 25-30 mph



Jumpstart Treatment



Keeping the snow off the road

- Greatly expanding use of snow fence
 - Corn rows / round bales
 - Living snow fence
 - Structural snow fence





Thank you

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