**APPLICATION** Snow Removal Equipment

# Penetrating Lubricant Prevents Rust & Corrosion in Snow Removal Equipment



Town of Marlborough, N.Y.

#### **Customer Profile**

Settled by Europeans in the 1690s, the scenic town of Marlborough, N.Y., is located on the banks of the historic Hudson River. Marlborough covers more than 26.5 square miles of hills and is the heart of the state's apple agribusiness industry.

#### Application

The Town of Marlborough's Highway Department is responsible for 120 miles of road, and winter snow removal is a major part of the annual budget with 15 full-size vehicles and a small fleet of light-duty trucks dedicated to treating and plowing road surfaces. They use removable salt spreaders that are sized to the individual vehicles. At the end of the snow season in April or May, the spreader units are removed and placed into storage, and the trucks are available for other purposes during the rest of the year.

# Challenge

To activate the melting process, Marlborough sprays brine on the salt while it is being spread. Because they are located near several creeks and the Hudson river, the town's ability to wash down their equipment is limited, making rust and corrosion a significant problem. Putting the spreaders back into snow removal service each fall took them several weeks. The salt chains on the spreaders rusted while in storage and needed to be "broken" back into action. The town was experiencing one chain failure every two years at a cost of \$4,500 per repair.

# CHALLENGE

Protect outdoor equipment from rust and corrosion

# SOLUTION

Wirelife<sup>®</sup> Monolec<sup>®</sup> Penetrating Lubricant (2001)

# RESULTS

- Provided protective, long-lasting coating for salt spreaders
- Saved \$4,500 per year in chain and hydraulic connector replacements
- Significantly reduced time and labor requirements for putting equipment in service each year

# Results

At the end of the first season of using the Wirelife Monolec product, Marlborough cleaned and oiled the chains and dipped all the hydraulic connectors in the lubricant. In the fall, they were very amazed that each unit was still coated.

"They all started right up with no noise at all," according to the customer. They only replaced one corroded hydraulic connector. Four years later, they have yet to replace a chain due to corrosion, and they rarely replace any of their hydraulic connectors. "When you add the average cost of new chains and hydraulic connectors, we save almost \$4,500 per year."

The process of putting the salt spreaders back into service each

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Corrosion was also the enemy of their hydraulic connectors. A typical salt spreader has six or eight quick connects that range from ¾" to 1". In 2015 the town planned to replace a minimum of one of those connectors per unit per year. At \$150 each (parts & labor), placing the units back in-service cost Marlborough \$2,250 per year in hydraulics.

# **LE Solution**

Drew O'Connor, LE lubrication consultant, recommended Wirelife<sup>®</sup> Monolec<sup>®</sup> Penetrating Lubricant (2001) in 2015. The product immediately performed better than anything else they had used previously. They purchased the product in 5-gallon pails\* and used an electric paint sprayer to apply it; this method created a fine mist that had excellent metal adherence (photo of sprayer below right; video available).



# Results (cont.)

fall is now a two-person job and takes less than two days instead of several weeks. Marlborough personnel have rigged a portable hydraulic unit to power the spreaders while still on the rack, and they can pre-treat the units with Wirelife Monolec 2001 before lifting them into the truck beds.

The success of Marlborough has inspired nearly 30 other communities in Northeastern United States to perform their maintenance in a similar fashion.

\*Also available in aerosol cans and 55-gallon drums.

Thank you to Drew O'Connor, LE consultant (pictured), and the Town of Marlborough, N.Y., Highway Department, for providing the information used in this report.



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