Snow and Ice Removal in a Rocky Mountain Municipality



Stucchi's Snow and Ice Removal Solutions

OVERVIEW:

MAINTENANCE OF SNOW PLOWS IN HIGH SALT ENVIRONMENT

A major municipality in the Rocky Mountain region with a fleet of 62 plows was spending anywhere from \$20,000 to \$30,000 annually repairing the multi-coupling plates and hydraulic quick couplings on the front and rear of the trucks. The fleet manager wanted to spend taxpayer money more wisely and was looking for a solution. Stucchi got involved initially only with multi-plates on the rear for the salt spreaders, while another plate manufacturer supplied the multi-plates for the front. Stucchi addressed the challenges with stainless steel plates, and eventually all plates on all 62 trucks were replaced with Stucchi multi-plates, which eliminated the maintenance issues and saved repair costs.



LOCKING UP OF MULTI-PLATES CAPS AND DAMAGE TO COUPLINGS

Due to the large amount of salt used in this region to combat snow and ice accumulation, the plates in the front from another hydraulic supplier would lock up with corrosion during the change in seasons, and the couplings would leak upon quick disconnect and become damaged due to pressure energizing the O-rings. Costly challenges included:

- Multi-coupling plates locking in place during the off-season
- Couplers leaking fluid on disconnection
- Damage to couplers and O-rings from pressure in competitor's couplings

Stucchi's couplings prevent leaking on disconnection, although prior to our adaptation to stainless steel, the cap on the multi-plates would lock in place when disconnecting due to the exorbitant amount of salt used in this region.





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SOLUTION:

STAINLESS STEEL PLATES AND INTEGRATED FLAT FACE COUPLERS

Stucchi addressed this issue by adapting all multi-coupling plates to stainless steel with our integrated flat face couplers, designed to easily connect and disconnect under residual pressure with no fluid spillage.

The Stucchi Solution:

- DP multi-coupling plate with stainless steel components
- FAP flat face quick couplings to connect under pressure with no leakage or damage

By making sure all components are greased and lubed when servicing and using our stainless steel components and couplings, the challenges to disconnect, damage to couplings, and leakage were eliminated.

RESULTS:

MAINTENANCE AND REPAIRS ELIMINATED AND COST SAVINGS

This municipality was focused on long-term solutions to best utilize taxpayer money and city resources. Since adapting all multi-coupling plates on the front for the plow, and the rear for the spreaders, with stainless steel plates and integrated flat face couplings, they have had zero issues.

An estimated \$20,000 to \$30,000 per year was saved on repairs and maintenance to the hydraulic quick couplings and connections for this municipality with snow and ice removal.

BENEFITS:

This Rocky Mountain municipality was thrilled to experience:

- No locking up of multi-coupling plates
- No fluid spillage on quick connect or disconnect
- No damage to couplers due to pressure
- Improved preventive maintenance schedules
- Less unscheduled downtime
- Significant cost savings





