

# Alley Scraper BMP's

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## Best Management Practices for Automatic Alley Scraper Systems

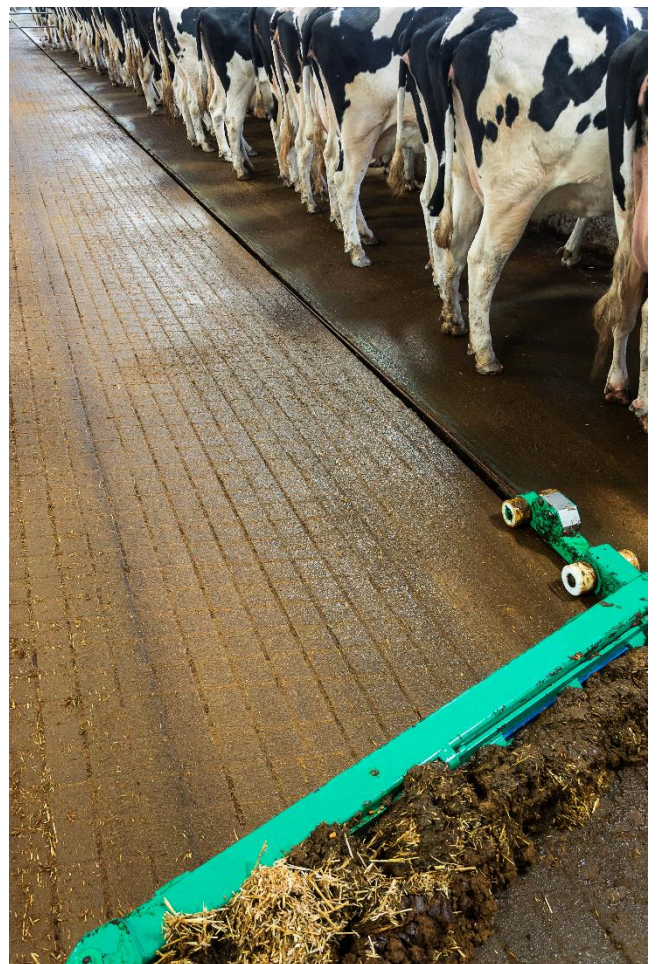
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Automated alley scraper systems have been successfully used on livestock farms for many years. Dairy alley scraper systems are in close contact with the animals and can use a cable, chain or rope in a groove or on top of the freestall alley.

### SCRAPER SYSTEM PARAMETERS TO CONSIDER

- Control panel load sensors-Several newer controls panels feature a progressive load sensor to monitor power used by the scraper system. These panels are beneficial to cows by:
  - Limited chances of creating extremely high cable tension or noticing an abnormal spike in power needed to run the scraper system. Both of these situations could reduce potential of significant animal injury if entangled in the scraper system
  - The key is manage the settings for proper sensitivity. Particular in dry conditions or days when stalls are bedded, the settings may be adjusted to the point where they provide limited animal protection



- Cable, rope or chain tension
  - The load sensing system will be more accurate with a properly adjusted scraper cable, rope or chain
  - Proper tension prevents scrapers from jumping around and potentially pinching tail against the curb
- Scraper wing tips
  - Recommendation is to leave 1" between wing and curb to prevent pinching of tails
  - Roller wing tip-this is an option to have a tip with a roller for offset alleys or customers who want to keep the blade tip touching the curb
- Scraper blade selection
  - V type blades have smooth surfaces near the stall beds, making it very difficult to snag a loose strand of hair.
  - Sharp edges, protruding bolts or pinch points should be addressed to reduce the risk of animal entanglement

## BARN ENVIRONMENT PARAMETERS TO CONSIDER

- Proper brisket board adjustment
  - Moving brisket board will allow cow to move ahead in stall-thus getting more of the animal onto the bed
  - Downside is increased chance of manure in the stall bed-which may lead to more frequent cleaning
- Proper air movement/fly control
  - Reducing the presence of flies will reduce the likelihood of a cow to swing her tail and leaving the tail in the alley
  - Methods can be more airflow or other fly abatement products (pour-ons, feeding a larvicide or similar)
- System timing
  - Can adjust scraper run times to align with milking, feeding or pushing up feed to reduce chance of a cow lying in the stall during scraping
  - Change feed pattern to align with scraper position in the pens

## CONCLUSION

Some small, simple adjustments can help reduce any risk of animal entanglement with the scraper system. Contact your local manure equipment representative for specific product inquiries.