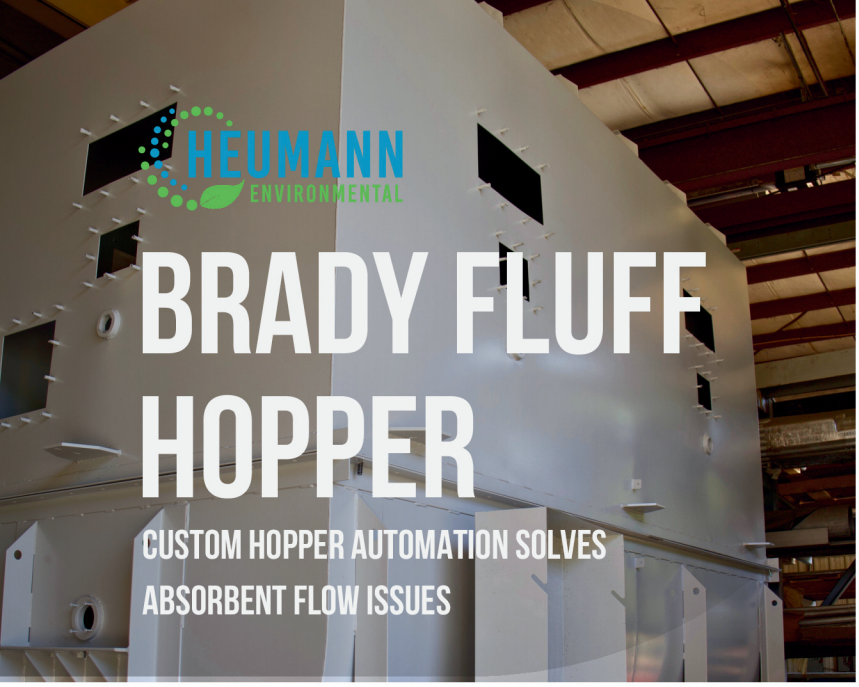

HEUMANN ENVIRONMENTAL

BRADY FLUFF HOPPER

CUSTOM HOPPER AUTOMATION SOLVES ABSORBENT FLOW ISSUES

COMPANY OVERVIEW

Brady Corporation is a leading manufacturer of labeling solutions for commercial and industrial use. They also produce the absorbent and containment products for managing spills, from factory floors to environmental cleanups.

CHALLENGE

Facing rising inefficiencies in handling 'fluff', the material used in their absorbent pads, Brady approached us for an eductor to improve material flow. As we dug deeper into their process, our review uncovered broader issues, leading to a system-wide endeavor to enhance performance and resolve manufacturing pain points.

SPECIFIC ISSUES

- **Manually Intensive Material Handling**

  The existing handling method relied on intensive force and 2-3 team members per shift to agitate the fluff and prevent settling, resulting in significant operating costs.

- **Storage Challenges**

  Without constant agitation, over time, the fluff compacted under its own weight, restricting flow and disrupting consistent feed rates.

SOLUTION

OBJECTIVE

Develop a custom hopper system to store and convey fluff with less manual effort, by keeping it agitated to prevent settling—all while fitting within the existing fluff storage system footprint.

STEPS ALONG THE WAY

- Developed two styles of agitator arms and adjusted their placement.
- Redesigned outlet piping and added pulse gas nozzles to break up clumps and blockages.
- Introduced a larger gear chain and sprocket to deliver higher torque to the agitator assembly.
- Performed multiple rounds of in-house testing to validate and fine-tune the final design.

CONCLUSION

What began as a simple eductor request became an all-out R&D effort to engineer a custom hopper and agitation system for one of the most challenging materials imaginable. After extensive testing and refinement, we transformed Brady's fluff handling, eliminating settling and improving flow to turn a long-standing challenge into a streamlined, efficient system. Instead of requiring 2–3 people per shift to move fluff, Brady now does it at the push of a button.

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