



Material Handling Equipment Drives Agribusiness Industry Success



Automated Conditioning Systems Helps Meet Rising Demand More Safely and Quickly

Food demand is rising across the country with no end in sight, putting added pressure on the U.S. food supply chain. For fertilizer manufacturers, their role has never been more important as farmers work to produce more food, and more quickly.

But fertilizer production is not without challenges. For one customer, the manual conditioning process to “de-lump” solidified fertilizer material was inefficient and posed safety risks to employees. As demand increased, the situation worsened causing production bottlenecks across its four national fertilizer plants.

They turned to Material Transfer for help.

Designing Customized Advanced Conditioning Systems

Material Transfer’s product visionaries went straight to work to evaluate the conditioning process. Topping the list of challenges was product moisture the material retained when solidified. Because the material was wet, it was much more difficult to condition manually for three primary reasons:

- **Moisture makes the product much heavier.**
As demand increased, the physical stress on employees created safety risks and opportunities for operator injuries.
- **Material composition made it tough to achieve the right product consistency.**
This slowed the conditioning process and caused delays in getting material into production.
- **Once in production, product consistency varied, causing production bottlenecks.**
This disrupted the process and put delivery dates at risk.





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Equipped with this knowledge, our customization experts built four custom Material Master® Bulk Bag Conditioning Systems. These robust advanced conditioning systems incorporated several key features that included:

- **Heavy-duty steel construction.** The system was built to handle the heavy weight of the materials.
- **Customized pivoting conditioning arm.** The frame design allowed for automated bag rotation to achieve desired product consistencies. This eliminated delays in both the conditioning and production processes.
- **NEMA 4 electrical control panel.** System controls enable custom recipes to be programmed for each unique fertilizer ingredient. This facilitated quicker set-up and cycle times.

Keeping Up With Ongoing Demand

With a combination of innovative design and automation integration, the Conditioning Systems equipped the customer to safely keep up with rising demand. This affirmed Material Transfer's position as a trusted partner in their supply chain.



Enhance

Employee Safety + Morale



Eliminate

Production Bottlenecks



Ensure

Proper Consistency

The customer is extremely satisfied with the automated conditioning system's ability to improve employee safety and increase production efficiency. All while ensuring the on-time delivery of consistently high-quality products.

With things continuing to ramp up in the agricultural sector, learn how we can help you find the better way on your production floor!



**MATERIAL
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Inspiring a Better Way