

TOTAL SYSTEM RESPONSIBILITY: FROM SEA-BULK TO BULK-BAGS: A CASE HISTORY

A Warehouse Management Firm Faces Growing Pains, asks USS for Solution

A large warehouse management firm needed a total system solution to capture material and convey it into an overhead silo for bulk bag filling. They required a dependable pneumatic conveyor system that could run without unscheduled downtime and meet the high material transfer rate of 32,000PPH. The machine also needed to run automatically to save time and cost.

They asked US Systems to design and manufacture a large version of a small ultra-portable diesel-driven system they already own that was built by USS decades ago.



USS Vacuum/Pressure Conveyor transfers powder material to Bulk Bag Filling Station

US Systems listened to the customer and appreciated their positive experience with the system and explored alternative solutions.

Although US Systems builds diesel-driven systems, the energy costs and safety issues involved in the constant refueling of a diesel-driven system

made it an undesirable solution in this case, where the solution needed to be portable but not 'ultra-portable'.

US Systems' #1 goal is to carefully consider and balance our customers wants and needs.

Every project is unique and we scrutinize everything within the scope of the project. We knew that our system would achieve the reliability and material transfer rate the client required.

The unique problem there was two-fold: Design a system to keep energy costs down that could be ported elsewhere if needed. We came up with a cost-effective solution to help them save money and retain a valuable asset if their operations happen to move to another location."

After careful consideration of the unique design requirements, US Systems proposed a custom-engineered total system solution: An electric-powered, skid-mounted USS Venturi 30 pneumatic conveyor system including blower package and controls.

Careful calculations by US Systems engineers' met and exceeded the required transfer rate. Forty years of experience in pneumatic conveyor design and manufacturing ensured reliable operation. Considerate and thoughtful engineering led to an efficient electric-powered skid-mounted design for portability.



A lined shipping container is lifted for gravity flow.

Other design requirements resulted in the inclusion of NEMA 4 rainproof control panels that allow the operator the flexibility to run the conveyor in either Automatic or Manual modes.

USS Service Startup Assistance and Operator Training by a qualified startup technician got the material moving in a hurry.



Skid mounted version of the USS Pneumatic Conveyor + Blower Package

For information on how US Systems can solve your bulk handling problems call 1-888-281-2454 or visit totalsystemresponsibility.com