

UNIQUE VERTICAL RECIPROCATING CONVEYOR BAKES IN EFFICIENCY FOR UTZ

Case Study

Vertical Transportation Offers Reliability, Flexibility With Reduced Footprint and Maintenance



Please note: “Honeywell Intelligrated USS” within this case study refers to USS. Intelligrated, which was purchased by Honeywell in 2016, acquired USS in 2016.

UTZ looked to improve operational efficiency at its chip manufacturing facility in Hanover, Pennsylvania. They turned to Honeywell Intelligrated USS for a vertical reciprocating conveyor (VRC) system that offered a small footprint and reliable handling of a variety of carton sizes ranging from 9–42 inches to feed downstream processes.

Best-fit Solution Checks All the Boxes

Honeywell Intelligrated USS collaborated with UTZ and the systems integrator to supply a unique VRC solution consisting of eight units, able to fit small areas and avoid existing structural columns. Each unit conveys cartons of chips from a 36-inch elevation to a discharge height of 19.5 feet. A two-zone, zero-pressure accumulation conveyor shelf enables a Z-style configuration, meaning products of varying sizes enter, accumulate and exit on opposite sides of the conveyor modules. This optimizes the system duty cycle, transporting one or two packages per cycle, depending on product length, to boost throughput and minimize stress on system components.

Set for Long-term Success

Motors are mounted near the bottom of each VRC unit to eliminate the need for any overhead maintenance activities, improving ergonomics and safety. The standard lightweight windows allow for product visibility and reduce the obstructive nature of each 20-foot tall VRC within the facility. The system allows UTZ to reliably handle all carton sizes in a small footprint, providing a steady stream of product to fuel downstream processes and seamlessly integrate with auxiliary systems.