

MULTI-TIER COOLING CONVEYOR SYSTEM SAVES SPACE AND INCREASES PET CHEW PRODUCTION RATES

THE CHALLENGE

A pet food manufacturer needed a space-conscious solution that could transport and effectively cool hot pet chews prior to reaching the packaging line.

THE TRITON SOLUTION

Triton Innovation, LLC. provided a space-efficient solution to support end-to-end pet chew production. 270° F pet chews were fed to an incline conveyor that raised them to the top level of a multi-tier cooling conveyor system for effective temperature reduction before reaching the packaging line. With space limitations being a major concern at the manufacturing site, the multi-tier cooling conveyor was an ideal solution. It utilized vertical space by dividing the conveying distance required to effectively cool the pet chews into five stacked segments. Each level had discharge points at the end that dropped pet chews to the conveyor level situated directly below. Once fully cooled, the bottom level conveyor fed pet chews to the packaging line. Both the incline conveyor and multi-tier cooling conveyor featured belting with 38% opening that enabled improved air flow for enhanced cooling and were enclosed by stainless steel hinged top covers with flanged inlets for exhaust system connections. To support the addition of cooling fan connections, side ports with removable plexiglass window covers were used. To accommodate a variety of methods and conditions, a VFD speed controller allowed operators to increase or decrease cooling times.

Triton's innovative cooling solution empowered this customer to increase production capacity within a small footprint and helped maintain their product's quality by avoiding condensation within packaging.

