

FOOD & AGRICULTURE - CUTTING

MELON CUTTING AUTOMATION



HIGH SPEED



LONG LIFE



CONTINUOUS
AUTOMATION



FOOD
DEBRIS

Guide Wheels and Track for Food Grade and Washdown Environments

Automated melon cutting machines make the process of halving melons easier, faster, and safer than manually slicing the fruit. They allow freshly-harvested melons to be more conveniently handled and packaged.

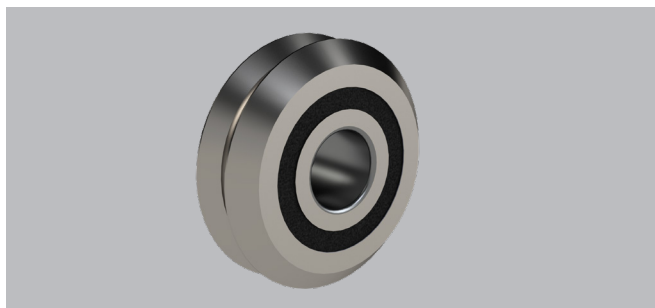
CHALLENGE

BOOSTING THROUGHPUT AND RELIABILITY IN A DEBRIS-FILLED ENVIRONMENT

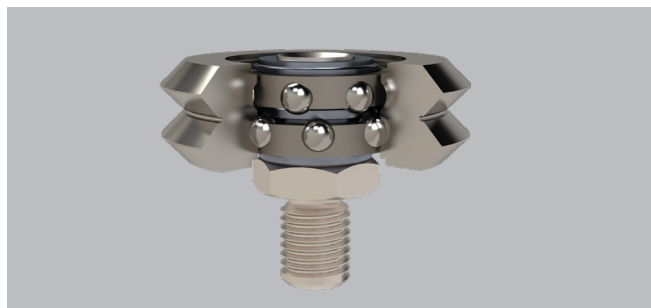
Our customer required a solution to streamline and automate their melon cutting, and opted to use a reciprocating guillotine. The blade had to travel linearly a total of 180,000 inches per day in high-cycle operation. Any components used to guide this motion must be food grade, non-corroding, and suitable for a washdown environment.

Any interruption for unplanned maintenance would be costly, so the motion solution needed to be built to last. The customer needed to trust the rated machine life, so any maintenance could be scheduled ahead of time.

Additionally, there could be no reduction in performance due to a buildup of moisture or food debris between washdown cycles. This includes having smooth-running linear guides to eliminate power consumption issues of the driving motor due to misalignment or blockage.



Washdown Series Guide Wheel



Cutaway of DualVee Bearing with Mounting Stud

SOLUTION

DELIVER A SELF-CLEANING MOTION SYSTEM

Bishop-Wisecarver DualVee® washdown series guide wheels and track provided the means to guide the reciprocating blade in the high debris environments. The 90° angled running surfaces of DualVee Motion Technology® create a wiping action that clears debris during operation. Washdown wheels feature stainless steel components, H1 food-grade grease, and a double seal that protects against debris and high-pressure liquids.

CHALLENGE SOLVED

FOOD GRADE COMPONENTS DOES THE JOB

Bishop-Wisecarver DualVee® wheels and track provided a long-lasting, self-cleaning solution. The unique washdown seal system retains the bearing grease during high-pressure cleaning, ensuring the bearings stay lubricated for life.

THE BISHOP-WISECARVER ADVANTAGE

START WITH SMOOTH, SELF-CLEANING GUIDE WHEELS

When it comes to debris-filled environments, Bishop-Wisecarver has systems and products that will hold up to the most extreme and debris-filled situations.

- ✓ Self-cleaning DualVee® guide wheels provide smooth, low-friction motion while wiping away food debris and liquids
- ✓ Washdown wheel option includes patented double-seal to retain grease and resist high-pressure spray
- ✓ Stainless steel wheels and track for enhanced corrosion resistance
- ✓ Precision ground track and sealed bearings for long system life and low maintenance
- ✓ Studded wheel options for easy wheel plate mounting