

# GLASS RECYCLING

Glass - Cutting and Recycling
HepcoMotion® GV3 Guide System Immune to Glass Dust Ingress

## THE CHALLENGE:

## **GLASS DUST CAUSED FAILURE AFTER FAILURE**

This machine processes glass prior to the recycling of large electronics, cutting it away from unrecyclable components and hazardous materials. It uses diamond blades to accurately cut the glass, which can be 15 mm thick, along a variety of programmable paths.

Sub-5 micron glass dust was playing havoc on the ball race linear bearings. Dust was infiltrating the travel table bearings and transport assembly which caused a build-up of glass and, ultimately, premature failure.

# **CRITICAL FACTORS:**

## RELIABILITY IN A DEBRIS-FILLED ENVIRONMENT

Provide a linear bearing assembly that is extremely resistant to glass dust, thus minimizing downtime and maintenance. The system must also be fast and durable enough to process an average of 200 electronic devices per hour, each weighing up to 60 kg (132 lbs).



Debris Resistance



Long Life



Compact Design



Continuous Automation





**GV3 Wheel Plate Assembly and Track** 



Cutaway of GV3 Wheel with Double Row Bearings



Wide Plate with Parallel GV3 Guides

# THE BISHOP-WISECARVER ADVANTAGE

#### START WITH SMOOTH, SELF-CLEANING GUIDE WHEELS.

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

- GV3 linear guide system is built to last, even in hostile conditions
- Self-cleaning vee technology wipes away debris
- · Longer system life thanks to high-quality components
- Adjustable guide wheels make system installation and maintenance easy
- GV3 capable of speeds up to 8 m/s

# **SOLUTION:**

#### **DELIVER A SELF-CLEANING MOTION SYSTEM.**

The manufacturer installed a HepcoMotion® GV3 linear guide system because of its ability to handle the aggressive, dust-laden environment. Because of its low profile, the vee linear guide could replace the profile rail systems without a complete redesign of the machine.

The rugged all-steel construction of the GV3 linear guide makes it ideal for the heavy loads from the operation. The wiping action of the vee guide wheels expels the fine glass dust from the track, preventing it from compromising bearing performance.

Bishop-Wisecarver is proud to be the exclusive distributor of HepcoMotion products since 1984.

# **RESULTS:**

#### PROBLEM SOLVED.

After one and a half years in use, only one of 48 bearing assemblies in use needed replacing, and only because a foreign object was inadvertently left on the machine. Without a doubt, the longevity, performance, and ease of maintenance of the GV3 system increased the production efficiency of the glass cutting operation.



We take pride in being an exceptional service provider and a trusted business partner. Our goal is to give you more than innovative products- we want to work with you to find the best motion product for your exact application needs.

**CONTACT US TO DISCUSS YOUR SPECIFIC GUIDED MOTION NEEDS**