

**MANUFACTURING****GLASS RECYCLING**

COMPACT



LONG LIFE



HARSH DEBRIS

CONTINUOUS
AUTOMATION**HepcoMotion® GV3 Guide System Immune to Glass Dust Ingress**

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. The manufacturer required a linear guide system with ability to handle the aggressive, dust-laden environment.

CHALLENGE**GLASS DUST CAUSED FAILURE AFTER FAILURE**

The challenge was to 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). A critical factor was to provide reliability in a debris-filled environment.

- ✓ 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

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.

CHALLENGE SOLVED

RELIABILITY IN A DEBRIS-FILLED ENVIRONMENT

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.

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

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