



CONTINUOUS
AUTOMATION



DEBRIS AND
WETNESS
RESISTANCE



DESIGN FLEXIBILITY



LONG LIFE

GLASS SEAMING AUTOMATION

Glass - Cutting and Seaming

Modular Solution for Hostile and Heavy-Duty Application

THE CHALLENGE:

AUTOMATING SEAMING IN A VARIABLE SIZE GLASS LINE

Glass processing is particularly demanding on linear motion components, with its abrasive environment and high production rates. Glass seaming is a common process where the sharp edges of cut raw glass are ground to a smooth finish. Seaming allows for safe handling and reduces chipping defects that can lead to breakages. This seaming machine has two pairs of grinding heads, each with one fixed head and the other moving automatically in and out to seek and find the parallel glass edge. To make the machine more compact, the grinding heads are mounted on tracks below the production line rather than from a gantry system over the top of the line.

CRITICAL FACTORS:

RELIABILITY IN A DEBRIS-FILLED ENVIRONMENT

Supply a linear motion system which can move the 500 kg (1100 lbs.) grinding heads back and forth to adjust for arbitrary widths of glass up to 6 meters.

The machine must adjust an average of six times per minute, 24/7, with a smooth and repeatable motion.

Since the guides are below the production line in a wet environment, they must also exhibit corrosion resistance.



Continuous Automation



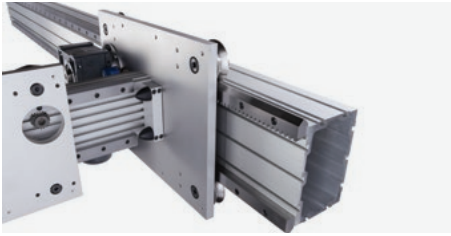
Debris and Wetness Resistance



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HDS2 Heavy Duty Slide with Rack and Pinion



Closeup of Guide Wheels, Rack and Pinion



Multi-Axis Actuator System

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.

- Highly reliable motion systems suited for harsh and extreme environments
- Heavy duty linear guides available pre-assembled to reduce design and installation time
- Self-cleaning vee guide wheels wipe away glass dust and debris
- Stainless steel linear guides and bearings available as standard option
- Rack-driven carriages incorporate automatic lubrication for pinion

"These [glass seaming] lines often run 24/7, and downtime outside of planned maintenance is critical."
- Senior Manager at Glass Equipment Manufacturing Company

SOLUTION:

DELIVER A SELF-CLEANING MOTION SYSTEM.

HepcoMotion® HDS2 from Bishop-Wisecarver provides a low-friction, accurate system ideally suited to providing smooth indexing under heavy loads and in harsh conditions. This equipment manufacturer used HDS2 systems with rack and pinion drives and a corrosion-resistant coating. The durable HDS2 ensures the speed, process flexibility, and precision requirements of the end user's seaming operations.

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

RESULTS:

PROBLEM SOLVED.

HDS2 provides a low friction and highly accurate system ideally suited to provide smooth indexing. This highly tough, heavy-duty system tackles the high duty cycles and aggressive conditions of professional glass processing environments.

"[W]e knew their solution would provide the required precision and be able to cope in such an aggressive and abrasive environment."
- Senior Manager at Glass Equipment Manufacturing Company

CONTACT US TO DISCUSS YOUR SPECIFIC GUIDED MOTION NEEDS

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