



AUTOMATION- CUTTING & SEAMING

GLASS SEAMING AUTOMATION



CONTINUOUS
AUTOMATION



DEBRIS & WETNESS
RESISTANCE



DESIGN
FLEXIBILITY



LONG LIFE

Modular Solution for Hostile and Heavy-Duty Application

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.

CHALLENGE

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.



FIGURE 1: HDS2 Heavy Duty Slide with rack and pinion



FIGURE 2: Close up of guide wheels, rack and pinion

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.

CHALLENGE SOLVED

HEAVY DUTY SYSTEM IS PRECISE AND DURABLE

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 MFG. COMPANY

THE BISHOP-WISECARVER ADVANTAGE

STARTS 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