

CASE STUDY

for the Factory Automation & Machinery market

Innovative Cable Management

for Glass Handling at QComp



Introduction

QComp is a leading robotics integrator with over 30 years of experience in automation technology. The company provides customized solutions for various industries, including glass handling, consumer goods, and food production.

This case study highlights a successful collaboration with BizLink to develop an advanced cable management solution for automated glass handling.



Challenge

> The Need for Innovation

The specific application required an automation solution where a robotic system picks glass sheets from a conveyor and stacks them onto customer-supplied racks. Several challenges arose:

> Large, heavy glass sheets:

These sheets can be as large as 72 x 96 inches and weigh several hundred pounds, making manual handling inefficient and hazardous.

> Limited space constraints:

The available space for cable management was restricted, as the robotic tools needed to operate from both above and below the glass sheets.

> Protection of cables and hoses:

The robot's connections had to be safeguarded against sharp glass edges to prevent wear and potential failures.

> High operational demands:

The system needed to run continuously, ensuring smooth and reliable robotic operation.



Solution Overview

To address these challenges, QComp implemented BizLink's custom-engineered cable management solutions, designed specifically for this application. Key features of the solution included:

> Space-efficient design:

Enabled glass handling from both above and below, increasing the flexibility of the robotic system.

> Integrated retraction mechanisms:

Maintained cable tension and minimized slack to prevent damage or interference by using the LSH Delta system.

> Preloaded configuration:

The cable management solution was delivered with pre-installed multi-conductor cables and pneumatic hoses, allowing for fast and easy on-site installation.

> Direct robot integration:

The LSH Delta system was tailored to fit the specific robotic model, ensuring seamless mounting and functionality.



Results & Benefits

The implementation of the BizLink LSH Delta solution yielded several measurable benefits:

1

Time efficiency:

The pre-configured solution significantly reduced installation time, minimizing system downtime.

2

Enhanced safety:

The robust outer shell and protective conduits safeguarded cables from sharp glass edges.

3

Increased productivity:

The cable management system supported uninterrupted robot operation, reducing manual intervention.

4

Improved maintenance:

The design allowed for easy access and replacement of components when needed.

5

Optimized total cost of ownership:

High-quality materials and precise integration reduced long-term operational costs.



Success Factors & Collaboration

A key factor in the project's success was close collaboration between QComp and BizLink. QComp follows a hands-on approach, working with strategic partners to develop innovative automation solutions. Continuous coordination during the design and testing phase was crucial in finding the optimal cable management solution for this application. An essential advantage was the availability of 3D models, which enabled QComp engineers to integrate the cable management solution into the system during the design phase, ensuring a seamless fit.



Customer Testimonials

Dave Nelson, QComp Design Engineer:

"Working with the BizLink team was great. They were very responsive and helpful."

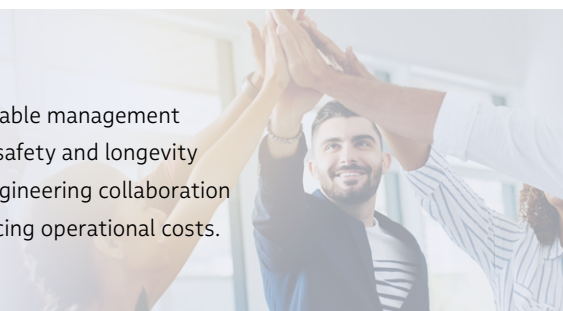
Chris Klich, QComp Manufacturing Manager:

"As a technician, we have struggled with cable/hose management between the robot and the tool. BizLink provided a versatile and easy-to-install solution. Their system offers excellent protection for cables and hoses in a demanding environment."



Conclusion

The partnership between QComp and BizLink resulted in a cutting-edge cable management solution that not only enhanced operational efficiency but also improved safety and longevity within the robotic automation process. This case study highlights how engineering collaboration can overcome complex challenges while optimizing productivity and reducing operational costs.



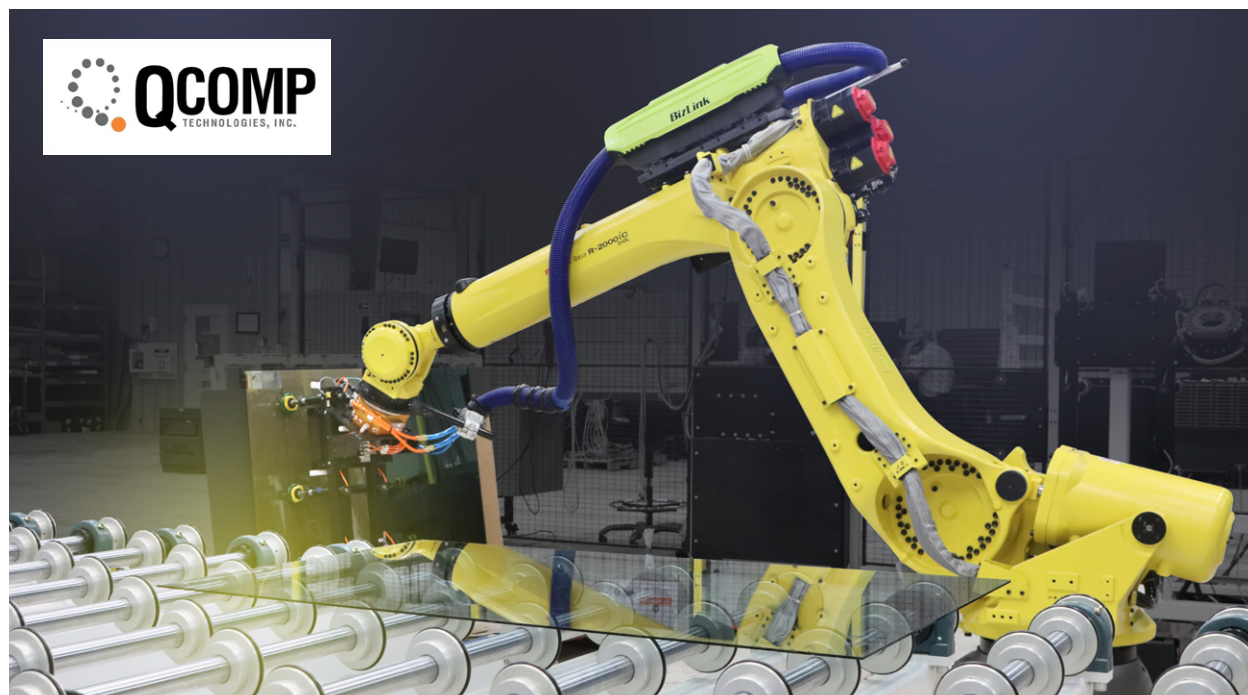


About QComp

QComp is an award-winning automation solutions provider with over 30 years of experience. The company specializes in custom robotics and automation solutions for various industries and is known for its high innovation standards, strategic partnerships, and comprehensive support services.

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About BizLink

Founded in 1996 and headquartered in Silicon Valley, USA, BizLink is dedicated to making transformative connections that bring visionary ideas to life.

We specialize in providing essential components such as wire harnesses, connectors, and cables to a broad spectrum of industries including IT Infrastructure, Client Peripherals, Optical Fiber Communications, Telecom & Networking, Electrical Appliances, Medical Equipment, Factory Automation & Machinery, Semiconductor Technology, Healthcare, Motor Vehicles, Mobility, Marine, Industrial, and Solar Energy.

Our global presence, with flexible production resources and R&D teams across America, Europe, and Asia, allows us to proactively drive innovation and enable future possibilities.

At BizLink, our customer-centric approach and commitment to relentless advancement empower us to deliver zero-distance service and continual performance optimization, making a positive and meaningful impact worldwide. We turn possibilities into reality; furthermore, we connect possibilities to world-changing visions.

Technical changes excepted.

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