



CASE STUDY

Compact High-Speed Weighing Automation System

Situation

A leading manufacturer in smart building technology was facing increasing production demands for a critical component assembly operation. The customer relied on an aging automated weighing system built by a company that was no longer in business, making support and scalability difficult as volumes continued to rise.

The customer needed a new automated solution capable of meeting an extremely tight weighing tolerance of ± 0.0008 grams while maintaining a rapid 2.5-second cycle time. In addition, limited floor space within the facility created a significant challenge, requiring the new system to fit into the smallest footprint possible without sacrificing performance.

QSI Solution

QSI Automation was referred to the customer through an independent automation consultant specializing in connecting manufacturers with automation integrators across North America.

To meet the demanding application requirements, QSI designed and built a high-speed weighing system utilizing a flex feed system with guided vision pick capability, dual digital scales, and two FANUC SCARA robots. The system was engineered to deliver highly accurate weighing performance while sustaining the aggressive cycle time needed to support increased production volumes.

Given the customer's space constraints, QSI focused heavily on compact machine design, creating a solution that maximized throughput and precision within a minimal footprint.

Results

QSI successfully delivered a compact, high-performance automation system capable of meeting the customer's strict operational requirements while supporting future production growth.

- Achieved ± 0.0008 gram weighing tolerance
- Maintained a 2.5-second cycle time
- Compact footprint designed specifically for limited floor space
- Replaced unsupported legacy automation with a scalable modern solution
- Improved production readiness for increasing product demand

QSI Automation crafts custom automation and manufacturing solutions, including plastics machinery, vibratory feeders, mold design & build and custom machining. Contact us for information about our solutions.

✉ sales@qsiautomation.com

☎ 260.693.1500

