

CASE STUDY

MEDICAL | AUTOMATED INSPECTION, TRACEABILITY, AND PACKAGING SOLUTION

A global medical technology company, focused on women's health and wellness solutions, needed to validate that finished glass transponder parts met 100% of defined performance criteria with traceability.

Orka Automation designed a multi-functional work cell to perform non-contact quality inspection, verify RFID read, and bulk package transponders in defined unit quantities, replacing a 100% manual process with a 100% automated process.



HIGHLIGHTS

Industry

Medical

Initial Process

Manual inspection for dimensional attributes and seal quality.

Automation Challenges

The small size and lite weight of individual pieces required a specialized approach to move pieces from inspection to packaging with no contact.

Inspection Technology

Vision

Automation Enhancements

RFID reader for traceability.
Packaging and labeling of finished parts.

CHALLENGE

A medical parts manufacturer needed to verify that glass transponders met defined dimensional attributes and verification of seal quality.

SOLUTION

Orka Automation designed a single in-line work cell that moved parts through inspection, traceability verification, and packaging operations at 5-seconds / part.

- Series of vision sensors verified transponders met OD, thickness, edge radius, and concentricity dimensional requirements, and verified seal quality.
- RFID reader captured part and batch information for traceability prior to packaging.
- Incorporating packaging and labeling into the same work cell maximized efficiencies and floor space.

OUTCOMES AND BENEFITS TO OUR CUSTOMER

- 100% inspected, traceable finished parts.
- 5-second / part cycle time enables 4,500-part count / shift objective.
- Automated work cell supplemented existing work force without adding head count.

[Component Engineering](#) has been designing, building, and integrating custom quality solutions for over 20 years. Partnered with enhanced quality inspection solutions and automation technologies from [Orka Automation](#), we help customers create high performance manufacturing environments that increase efficiency, reduce risk, and deliver quality results.