

CASE STUDY

DIE CAST | HIGH SPEED INSPECT, SORT, PACKAGE

A large Midwest Die Cast customer needed to improve efficiencies to deliver 100% inspected right and left-handed parts more quickly to meet increased end-customer demand. We delivered a solution that included inspection, disposition, and packaging of good parts in 2.5 seconds per part.

HIGHLIGHTS

Industry

Automotive

Initial Process

Manual Inspection,
Disposition, and Packaging

Automation Challenges

Right and left-hand parts;
dimensional and surface
defect inspection; quarantine
of rejected parts;
streamlining of packaging
and shipment of approved
finished parts

Inspection Technology

Vision

Automation Enhancements

Conveyance; Packaging,
Taping, Labeling

CHALLENGE

A large Midwest manufacturer of die-cast components was challenged to expedite inspection and delivery of 100% inspected die-cast parts while maintaining profitability. Their previous process was manually labor intensive, time consuming, and subject to human error. Right and left-handed parts required inspection for end-customer defined dimensional and surface defect standards.

SOLUTION

Component Engineering leveraged vision inspection to ensure parts met dimensional and surface standards. In addition, automation enhancements, including conveyance, packaging, and labeling were added through Orka Automation partnerships. The final solution inspected, sorted, and packaged right and left-hand parts in less than 2.5 seconds per part.

OUTCOMES AND BENEFITS TO OUR CUSTOMER

- Improved Efficiencies – Inspection + Disposition + Pack and Ship
- 100% Inspected Parts + Data Collection and Reporting
- Optimized Workforce – Workers reallocated to more strategic tasks and tasks not easily automated

[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.