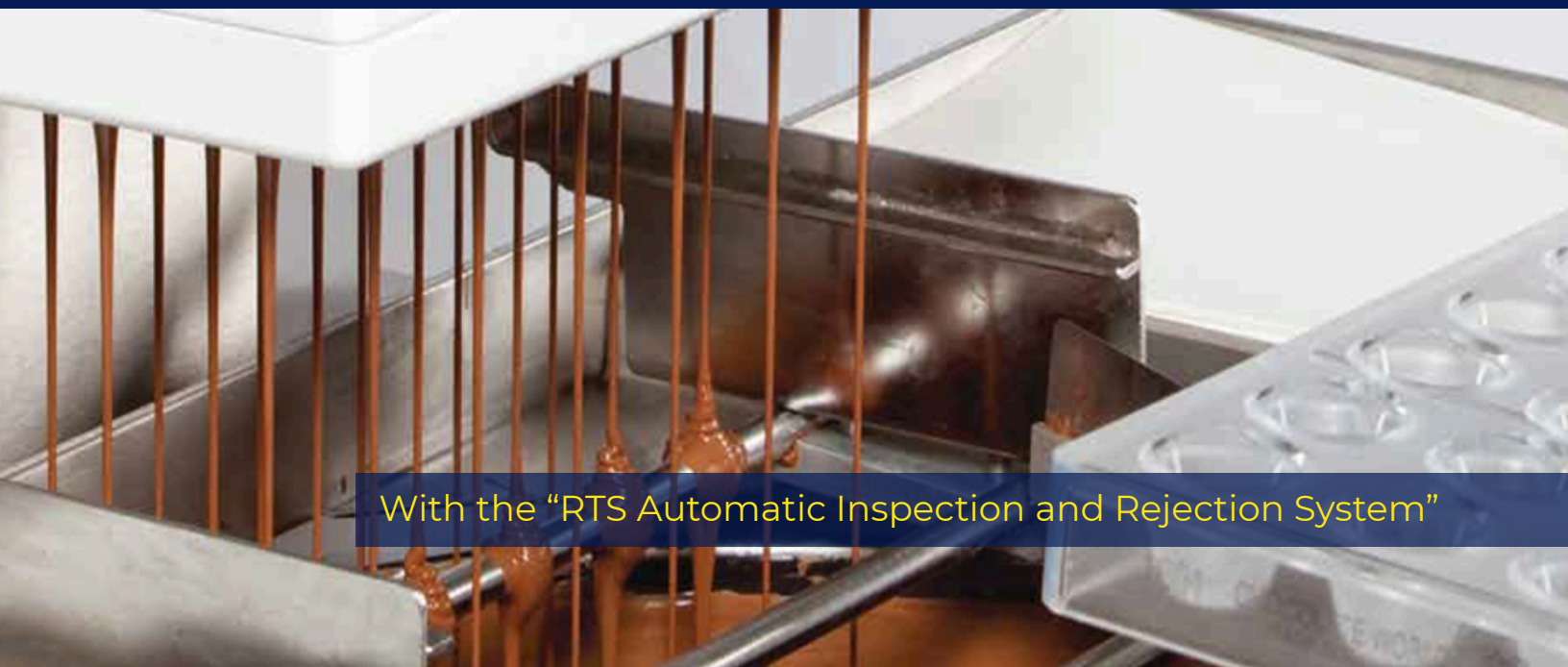


Boosting Customer Satisfaction at World Class Chocolate Company



With the “RTS Automatic Inspection and Rejection System”

Automating the detection and removal of defective wafer chocolates bars.

One of the world’s largest chocolate manufacturers, headquartered in Europe, sought to automate the detection and removal of defective solid bars in its top-selling wafer crisp product. Prior to engaging **RTS**, the company lacked a consistent method to inspect the **internal structure** of bars before chocolate enrobing, only catching defects based on **external cosmetic appearance**.

The Quality Assurance team needed a **guaranteed, turnkey solution** to eliminate 100% of defective bars, uphold brand standards, and reduce customer complaints. After several unsuccessful attempts using in-house and third-party systems, **RTS** was chosen to **design and implement a world-class, engineered automation solution**, delivering precision, speed, and reliability at scale.

The Challenge

RTS was tasked with delivering a fully automated solution that could:

1. **Inspect the internal structure** of each bar before chocolate enrobing
2. **Allow operator-defined thresholds** for defect acceptance
3. **Track bars in real time** across the production line
4. **Execute high-speed pick-and-place rejection** with precision

Additional technical hurdles included:

- **High-Speed Performance:** Rejection cycles had to be completed in under one second using advanced servo systems.
- **Product Variability:** The system had to adapt to bars of different sizes and weights.
- **Advanced Sensing & Control:** Integration of high-speed vision cameras, tracking sensors, and synchronized servo/pneumatic components.
- **Sanitary Design:** Hygienic tooling was essential for both the pickup mechanism and cleaning processes.



RTS Automatic Chocolate Bar Inspection and Rejection System

RTS designed and delivered a turnkey, high-speed **vision inspection and robot rejection system** for solid chocolate bars, capable of handling various types and sizes at full production speed.

Using a modular, scalable Allen-Bradley ControlLogix platform and **multi-camera Cognex vision**, the system performs **100% product inspection** for internal defects prior to final chocolate application.

Once cooled and de-molded, any non-compliant bars are automatically removed using a custom pick-and-place robot onto a dedicated reject line.

RTS brings **complete, scalable automation solutions** that deliver real results, from concept to commissioning.



CONTACT US

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Key Benefits

- **Zero Defects Delivered:** Rejected defective bars before packaging, significantly reducing customer complaints and improving satisfaction.
- **Automated Quality Control:** Defect tolerance levels are adjustable in real time by quality personnel, streamlining inspection and increasing accuracy.
- **Improved Labor Efficiency:** Eliminated manual inspection and rework, allowing operators to focus on production uptime and performance.
- **Actionable Insights:** System-generated CAPA data pinpointed defect sources by feeder machine, helping teams implement corrective action and boost throughput.



+30 Years of experience



Over **500** satisfied clients



More than **3,000** projects executed

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