

SUCCESS STORY

Fehrer optimises manufacturing with Visual Inspection AI



Proof of concept confirms how new technology can detect defects quickly and drive continual process improvements



A strategic AI solution built in three months



Data becomes a factor of production in manufacturing



Product quality optimised

THE CHALLENGE

Adopt Visual Inspection AI to raise component quality

- Fehrer asked GFT to help it assess the potential of AI to spot manufacturing defects and anomalies quickly and accurately.
- The strategic aim of the project is to partially automate the quality inspection process of parts to improve defect detection rates, raise overall quality and generate a cycle of continual improvement through quality metrics.

THE ENGAGEMENT

A highly scalable solution that tightens control

- The company wished to prove that an AI-powered quality inspection process could deliver on its promise to improve both manufacturing quality and efficiency. A successful solution would also harness the power of data to reduce/eliminate false positives as well as false negatives, that is defective products being delivered to customers.
- To accelerate progress, full use was made of Google Cloud Platform tooling, including VAI and Vertex AI. This meant that the project adopted best practice from the outset and could be easily scaled and redeployed across the company as a strategic AI solution. The solution made full use of existing cameras on the production line as part of an Edge deployment at the Fehrer data centre.

THE BENEFIT

Product quality improved, manufacturing efficiency increased

- The partners worked as a joint team to build a culture of trust and total transparency and deliver a proof-of-concept in just three months. The solution was welcomed, assessed and approved by all stakeholders
- Visual Inspection AI marks a new way of working for Fehrer. With its new solution, experts can focus on other tasks. The partners are scaling the solution horizontally and evaluating new deployments, including root cause identification, anomaly detection and predictive maintenance