

# acrovision

## casestudy

### Acrovision Solution Ensures Production Quality of Vehicle Parts

Trax JH Ltd based in Wales is a leading manufacturer of automobile wheel weights. These parts form a vital element in vehicle manufacture and the need for 100% accuracy in production is paramount for vehicle safety. To ensure all wheel weights are produced to exacting standards, Trax JH relies on Acrovision's vision system within its manufacturing process to prevent any product defects or quality failures.

To identify a potential solution for the existing production process, Trax JH contacted Acrovision, one of the UK's leading suppliers of Automatic Identification solutions. Having analysed the existing production issues, Acrovision suggested using Cognex vision to ensure complete part production accuracy. Using the latest in Cognex vision technology, Acrovision designed and installed the vision system on-site in conjunction with Trax JH.



Two Cognex In-Sight 7050 cameras operate on each of the two lines and are required to inspect the correct orientation and size of the part, of which there are approximately 30 variants. Placed initially in a bowl feeder, the wheel weights are automatically positioned on a conveyor, which are then 'flipped' onto their side before being presented to the camera to check for the correct orientation and size.

One of the In-Sight cameras is placed above the line and inspects the length and width of each part to check it falls within pre-determined parameters, therefore ensuring the same sized parts are all contained within a single batch ready to be shipped. The second In-Sight camera is positioned on the side of the conveyor to check the orientation of the part. This inspection process is vital to ensure that the adhesive tape applied at the next stage of production will be positioned correctly to ensure product quality. Once the adhesive tape is applied, the parts are collected in a box ready for dispatch. The reporting for each part inspection is collated and available for operators via Cognex's VisionView visualisation tool used for analysing and managing the production processes for ongoing quality control.

Paul Morrison, Application Engineer at Acrovision commented, "The inspection system at Trax JH uses the very latest in vision technology to ensure each part is 100% accurate prior to shipment. The Cognex vision system offers unrivalled reliability for the required inspection tasks, as well as being robust and cost-effective to integrate within a production facility."

Adam Watkin, Engineering & Quality Manager at Trax JH added, "The Cognex system has enabled Trax to offer its OEM customers, such as Jaguar and Land Rover, a robust manufacturing process to eliminate product failures. The Cognex system supplied by Acrovision has significantly increased process repeatability and decreased PPM failures from the two production lines."

