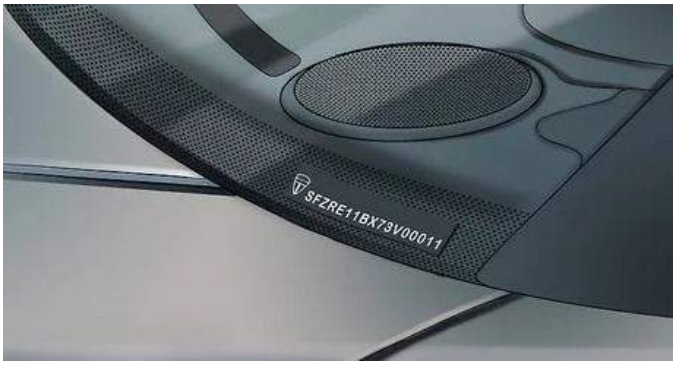
USE CASE

OCR INSPECTION OF VEHICLE IDENTIFICATION NUMBERS (VINs)



CLIENT/INDUSTRY BACKGROUND

The client is the industry leader, providing top-quality closure panel solutions to the automotive industry. To provide a complete turn-key solution, they offer a fully-integrated production system that supports our customers from product design, tool development, through mass production.

A VIN is composed of 17 characters (digits and capital letters) that act as a unique identifier for the vehicle

PROBLEMS

- Keeping track of each VIN manually is causing errors in recording it
- Inventory mismanagement due to errors in recorded data

PROBLEM IMPLICATIONS

- Each body has unique identification numbers. Errors in recording these number may result in huge inventory mismanagement

CURRENT PROCESS

The inspection is being carried out by operators manually.

- A VIN consists of 17 characters that makes the inspection time consuming and error-prone
- The repetitiveness of the process causes labor fatigue that increases the error rate

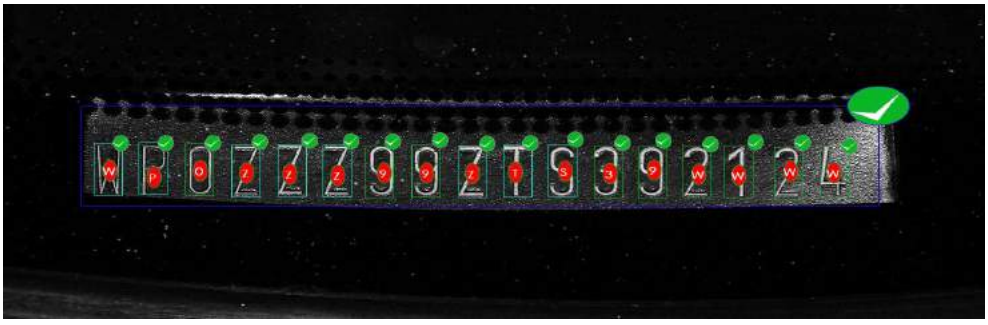
CLIENT REQUIREMENTS

To automate the process of OCR of Vehicle Identification Numbers (VINs) with the help of machine vision to achieve higher accuracies.

SOLUTION USING MACHINE VISION

A camera or set of cameras with appropriate illumination is set up to identify the defects on the workpiece. Images are captured and sent to the software (Qualitas EagleEye® Platform) cloud where the training is done using DL algorithms. Once the program is trained, real-time OCR takes place, based on which the results are sent to PLC to take action.

IMAGES

QEP(QUALITAS EAGLE-EYE® PLATFORM)ANNOTATED IMAGES


CONCLUSION

POC(Proof Of Concept) is conducted where the accuracy is found to be near 100 percent. With the help of this demonstration, it is estimated that the costs of quality and labor training can be significantly reduced.

http://www.qualitastech.com

Qualitas Technologies Pvt Ltd
53 Kempegowda Double Road, BEML Layout 5th Stage,
Raja Rajeshwari Nagar Bangalore 560098
INDIA