

AIDC for Industry

Decoding dot peen 2D Codes on brake components

Work-in-progress tracking

A manufacturer of anti-lock breaks wanted to mark each component in the system with a 2D code and track it throughout the manufacturing process. Since they selected dot peen as the method to apply the symbol, they needed a reader with ability to read low contrast dot peen codes in an industrial environment.

They selected 2D barcode reader because it easily read the codes at a variety of speeds without the need for exterior lighting and other accessories.

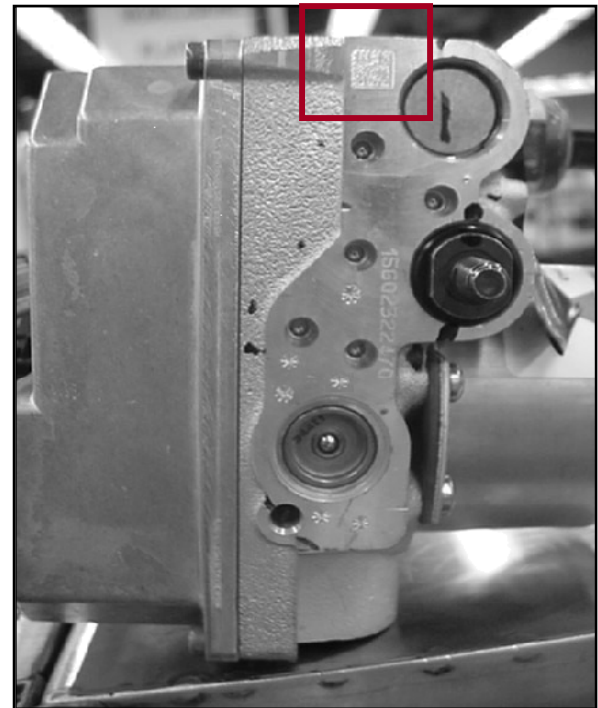


The symbol

Code Types: 10 mil Data Matrix
Dot peen on metal substrates

Application:

The Data Matrix codes are permanently applied by the percussive method of dot peen. This type of application relies on changes in depth to create the light and dark areas rather than changes in color.



The installation



The 2D barcode reader smart cameras were installed at several stations through the facility. At each stage in the manufacturing process, 2D barcode reader reads the Data Matrix code and the data is sent to the host to verify that the component passed the previous steps before proceeding to the next station.

2D barcode reader's IP settings database was employed to compensate for the changes in ambient lighting and fluctuation in symbol contrast and quality.

Why 2D Barcode Readers



2D barcode readers provide the following features:

- IP settings database
- Ethernet connectivity
- Easy setup
- Integrated lighting

The bottom line

Since 2D barcode reader could read all of the symbols at normal production line speeds with out no reads, the manufacturer was able to track all of the break components without slowing down production.

Tracking each part allowed the manufacturer to manage repairs and recalls more efficiently. The ability to identify and recall only those specific vehicles with a faulty part will greatly reduce the impact of a recall.



More information

- If you would like further information about the 2D barcode readers and verifiers we recommend you check out the product specifications or additional applications demonstrating its capabilities
- If you have questions regarding this topic, send us an e-mail to training@microscan.com