

Multi barcode reading during goods receipt at Preh GmbH

Identification of multiple barcodes on SMD reels

Task

Efficient barcode reading at goods receipt

Every day, around 1,000 belt reels of SMD (surface mounted device) components are delivered to the Goods Receipt department of Preh GmbH, the global automotive expert. To date, the barcodes attached to these have been read manually using conventional barcode readers – a very costly process in terms of time and resources. To make barcode identification faster and more efficient, the codes should now be read automatically and then cross-checked with the SAP system. This is no simple task, when you consider that the correct code has to be identified from among up to 20 different barcodes on each individual reel. Not to mention the very narrow module widths, with extremely small spaces between the individual barcodes.

The solution? A camera-based identification system that reliably reads all of the closely-spaced barcodes and delivers them to the SAP system for subsequent processing.

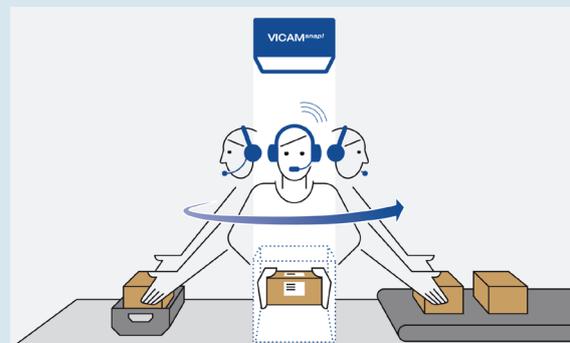


VICAM^{snap!} automatically reads multiple barcodes, stores the images, and improves efficiency during goods receipt.

Implementation

Camera-based multi-code reader at the manual workstation

Preh GmbH is now implementing the multi-code reading system VICAM^{snap!} from VITRONIC to capture the barcodes. The camera-based multi-code reader is installed above a manual workstation. The operator manually moves the objects through the reading field, and all barcodes, even damaged codes, are then captured with a successful read rate of up to 99%. Alternatively, the reader could also be installed over a conveyor belt or roller track.



In addition to barcodes, VICAM^{snap!} also identifies 2D codes (DataMatrix, PDF417) and plain text. The captured data is transferred to the connected processing system together with an image of the object. There, the data can be used for incoming goods inspection or for data synchronization with the ERP system or MES (manufacturing execution system).

Benefit

More efficiency and productivity at goods receipt

With VICAM^{snap!}, the speed of data capture and read rates are significantly improved compared to manual capture with barcode readers. The system also eliminates errors such as skipped barcodes and the subsequent corrections required when these occur. This enhances both the productivity of individual operators and the efficiency of the entire Goods Receipt department. Archiving of the image data enables greater traceability throughout the incoming goods process.

Technical Data

Solution	VICAM ^{snap!} High-performance-matrix camera	Illumination	Ergonomic LED-illumination with white light
Throughput/transport speed:	1,000 objects per day	Hardware/interface	FTP or TCP / IP to SAP
Resolution:	5 megapixels, 10 images/second		