

Headquartered in New Delhi. The Client is one of the largest manufacturers of transmission gears and shafts in India. They provide various products such as Transmission Gears & Shafts, Starter Motor Components, Alternator Components, Precision Engineering Components to name a few. The company has been serving many automobile manufacturers as their principal component partner.

Solution:

Back Traceability Solution.

Problem / Pain Point:

The Client being a manufacture of various automobile parts, making real time inventory tracking a challenge. The client still uses a manual set up for various tasks leading to manual errors. In case a problem arises, back traceability is a challenge.

Objective of Project:

1. To provide real time updates by using Barcoding Technology for raw materials & finished goods in the factory.
2. To reduce the amount of manual work involved in the processes.
3. To enable Back Traceability for finished goods.

Solutions Proposed:

On completion of the GRN process thermal barcode printers will be provided, which will generate unique barcodes containing relevant information. The barcode will have to be placed manually on the material by the operator.

The operators would also be provided with Hand Held Terminal (HHT) for scanning the barcodes and the location. This information will automatically be updated on the Interloop in real time.

At the pickup stage, the operator must use the HHT on which the picklist will be generated.

Followed by this the operator should then scan the materials for picking and its respective location. This information will automatically be updated on the QodeApp in real time.

After this stage the materials are transferred to the WIP stage, where it goes through various processes such as Cutting, Shot Blasting, Phosphating, Forging. At each process, the operator needs to scan the bundle barcode & machine identity barcode through HHT in order to map them. The product then moves to the supermarket in the Simi finished form where the operator will have to scan both the bin barcode and the location barcode to map them both.

At the super market, the semi-finished product further goes through various processes such as CNC1, CNC2, DPM. The operator has to scan both the bin label and the machine in order to track them both.

Following this process, the product is sent for inspection after which it goes into carton box and dispatch stage.

In the carton box stage, Thermal printers will be provided which will print 1D barcodes containing details like Product Code, Product Description, Quantity, Batch Code, Date of Manufacture and a Unique Carton Serial Number which will be pasted on the primary carton box.

For the shipper box a 2D Datamatrix barcode will be printed with information such as Product Code, Product Description, Quantity, Batch Code, Date of Manufacture and a Unique Carton Serial Number thereby completing the process.

Benefits:

1. The barcoding technology, enables visibility and real-time tracking of material inventory thereby enhancing the operational efficiency of the process. This process also equips the client with back tacking capabilities.
2. Automation improves accuracy in material picking and significantly reduces the time spent on data capturing.
3. The process generates reports which in turn helps in taking data driven decisions.
4. Provides cost advantage and optimum utilisation of resources (manpower, materials, space) available.