

# MANUFACTURING SOLUTIONS

ACCURATE, END-TO-END IDENTIFICATION



MANUFACTURING



# Accurate, End-to-End Identification

On the manufacturing shop-floor, the SATO Manufacturing Solution helps identify and keep track of raw materials, sub-assemblies and finished products all through the manufacturing process. It enables the manufacturer to have real-time visibility of processes and therefore efficient production control, while constantly improving quality and efficiency of the manufacturing process itself. The SATO printing solutions' various communication interfaces means its printers and devices can be easily integrated into manufacturing information systems, including wirelessly via secure IEEE 802.11-standard wireless communication.

## Where in the Manufacturing Process Can You Benefit From The SATO Solution?

### PICKING

In manufacturing operations, a work order from the factory floor will require picking and retrieving of materials or parts from inventory. The operator will scan the location label to ensure the right item from the right location is picked.

Reusable totes and containers used for picking and material handling operations can be identified with barcode or RFID labels to enable automatic tracking. Inventory labels can be printed on-demand to replace damaged labels or to indicate significant movement in quantity.

The operators sometimes get to the inventory location using forklift trucks with SATO mobile wireless printers mounted to their trucks. They can just as well use mobile or cart-mounted printers to print labels on demand.

### UNIQUE PRODUCT IDENTIFICATION

Products are identified by their model numbers or serial numbers, specific information about this type of product as well as their suitability for region and targeted application. Product identification labels will contain information such as model numbers and variable data contained in barcodes or RFID data.

Labelling solution for product identification includes: barcode or serialized labels, UL and CSA approved labels, regulatory labelling, safety labels and warranty, among others.

### RAW MATERIALS RECEIVING

If the incoming shipments are not appropriately labelled, receiving labels are generated to identify the materials. Received materials may be assigned to a put-away location, item default location, or issued directly to the shop floor; receiving labels can be printed, at the receiving dock, using a SATO mobile printer mounted on a lift truck or worn at the waist or on shoulder strap.

The remote printing capabilities of the SATO printers save time, since there is no need to collect labels from a central location.

### RECEIVING AREA

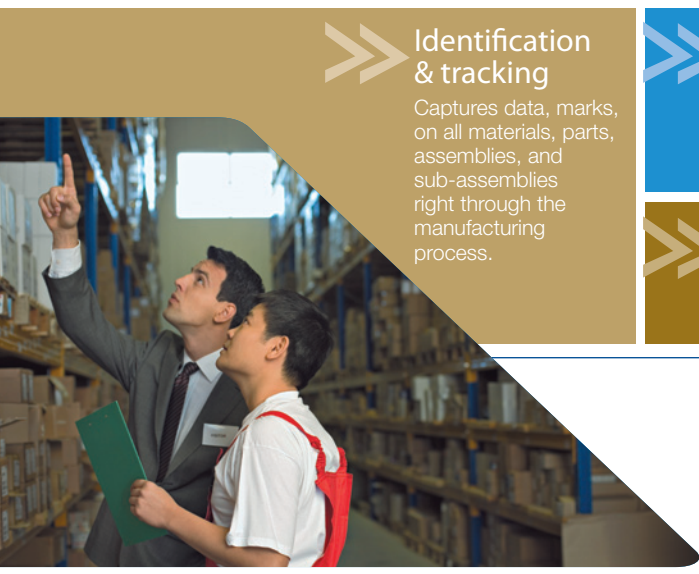
### WAREHOUSE

### MANUFACTURING FLOOR

### WORK-IN-PROCESS MANAGEMENT

Work-in-process labels aim to uniquely identify each unit of inventory at the different stages of production. This enables users to track and trace, by parts and ingredients used in the manufacturing process - indicating what was consumed in an assembly, or was set aside due to a defect or other issue. As parts become assemblies, additional barcode or RFID labels can be added to identify and track the assembly by its new part number.

# Benefits of Manufacturing Solution



## Identification & tracking

Captures data, marks, on all materials, parts, assemblies, and sub-assemblies right through the manufacturing process.

## Traceability

Identification enables tracking, which enables traceability, and helps to provide real-time access to critical data throughout the process.

## Meets All Your Compliance Labelling Requirements & Standards

## RFID Ready Printing Solution

Empowers you to manage barcode requirements today, while supporting expanding rfid requirements without needing to change the entire infrastructure.

### MATERIAL INVENTORY CONTROL

For any manufacturer, timely inventory status is critical for accurate planning and timely execution. Materials staff can transfer, issue, count and adjust inventories based on information in real time thanks to data stored on barcode labels or RFID tags used to identify materials. It eliminates paperwork and manual data entry. The location site where materials are stored can be identified with labels indicating location codes.

Barcode and RFID technologies improve accuracy as the raw materials data helps identify the right materials are stored at the right location, and sent to the right production order.



### SHIPPING

The manufacturers require finished goods to be appropriately labelled to reach their next destination. Barcodes or RFID tags are read to confirm the correct item was picked and to record the transfer to the shipping department.

In the shipping department, once the order is confirmed, the SATO printing solution ensures the right inventory has been picked, and matches order request. Shipping labels, which may sometimes need to comply with customer, or carrier-specific compliance formats, are printed and applied to the packaging. If a few labelled packages are combined on a pallet, a larger, master label is often required for the pallet.

### OUTGOING AREA

### QUALITY ASSURANCE

The SATO Manufacturing Solution enables users ensure their product meets quality expectations by accurately identifying products, lot numbers, inspectors, inspection results and more.

## Applications

### Materials Management

To enable the identification and tracking of materials received from suppliers right through to the end of the manufacturing process.

### Small Item Marking

Small items pose a challenge to identify and keep track of. They require high-resolution thermal printers or very accurate automatic applicators, so they can be labelled correctly without significantly slowing production speed.

### Work-In-Process Tracking

Accurate, automatic tracking, and also helps to efficiently manage the operations the work-in-process goes through.

### Quality Control

Enables identification of a phase of production, determination of its quality, as well as identification of the employees responsible for the different stages of production.

### Product Identification

Enables manufacturers to meet their Unique Identification (UID) compliance requirements, identifying parts and products.

## SATO Manufacturing Solution For Various Industries

- Aerospace
- Automotive & Industrial Machinery
- Chemicals
- Computers & Electronics
- Consumer Packaged Goods
- Metal
- Pharmaceuticals
- Textiles





The SATO Manufacturing Solution has all the components to meet your identification, data collection and labelling needs. It enables end-to-end identification and tracking of materials, parts and products throughout the manufacturing process.

#### Labelling Solutions

General labels in industry-compliant formats and custom-made labels; tags; carbon ribbons; RFID labels & tags; specialty labels & tags, e.g. DuraMark™ wristbands, horticulture labels & tags, FlagTagSolution™, linerless labels among others.

#### Scanning Equipment & Terminals

SATO's solution always selects the most suitable option of scanning equipment and terminals to uniquely meet your identification and data collection needs.

#### Software & Applications

SATO Label Gallery™ software solution offers a scalable and versatile set of tools to meet all labelling design and printing needs.



#### Integration Services

Integration of printers and hardware components to your back-end enterprise system or business applications. In addition to application development and system deployment, we also provide consulting services, which starts with an unequivocal, rigorous understanding of the users' environment, unique challenges and organizational objectives. We then plan and select the solution set that ensures seamless integration and timely implementation.

#### Printing Solutions

Rugged industrial printing solutions, with RFID functionality. From print engines that power print-and-apply systems to enable the manufacturer to manage materials, track work-in-process, assure quality control, meet compliance requirements and enable product identification. Mobile printing solutions with wireless networking options allows on-demand, on-site printing and inventory control management.

##### • Industrial Printers: 4- & 6-inch

The various models are suited for a wide range of industrial applications, environments and requirements, from common industrial applications to applications that demand mission-critical performance and ruggedness, to seamless integration into enterprise systems and applications.

Rich set of options, including wide range of interface connectivity and RFID options.

##### • Mobile & Portable Printers: 2- & 4-inch

Worn at the waist, strapped over the shoulder, or vehicle-mounted, they combine convenience and durability to meet the efficiency requirements of your mobile printing needs.

##### • Wide Format Printers: 10-inch

Wide-label printing with industry-leading throughput. These rugged printers are designed to deliver consistent performance in demanding industrial environments and applications. RFID options available.

##### • Commercial Desktop Printers: 4-inch

Compact and versatile, their feature-rich designs make them suitable for applications in healthcare, logistics and food processing. RFID options available.

##### • Print Engines: 4- & 6-inch

Designed for easy integration into automatic print/apply systems, all components of these high-duty cycle engines are selected for reliable performance over extended periods of time. RFID options available.

#### Maintenance Services

Printer servicing, installation, repair and maintenance services conveniently provided by readily-available expert SATO service staff or SATO-trained intermediaries worldwide.



**Contact** For more information about SATO around the globe, visit [www.sato-worldwide.com](http://www.sato-worldwide.com)

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