



Solutions for Automotive Industry - Assembly



satoeurope.com

Over the factory

Visualize status of worker operation and facility

- Immediately send notification

Link factory facilities including machinery, robots, and PLC with wearable devices such as smartphones and smart watches to notify facility status in real-time to workers. For example, facility error notification speeds up error response. Alarm message of the changeover improves operation efficiency.



- Visualize facility status

Collect data of facilities, worker operation and things utilizing IoT technologies, and show on the device's screen. Enhance factory QCD and support decision making. Save time and effort to capture actual data over the factory.



Press

Solutions to prevent operational errors to assure quality

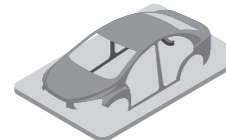
- Location tracking technology 'Quuppa' for mold management

Easy to find molds stored in the factory using indoor location tracking technology 'Quuppa'. Apply a tag on each mold for the antenna set inside the factory to read. Solve difficulty in finding mold location when needed and improve work efficiency.



- Tool management

Producing new product requires to prepare new tools. More tools to manage more complex to handle. With RFID or durable labels on tools, trolleys and cage cart, operation improves.

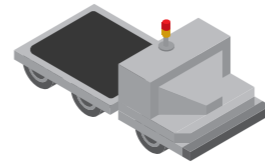


Weld

Location tracking technology to avoid downtime

- Location management of Automatic Guided Vehicle (AGV)

Production line might be delayed when AGV is stuck on the way. Indoor location tracking system Quuppa or a beacon tracks "Where AGV is traveling now or being stuck" to prevent production delay.



Paint

Solutions to improve operation efficiency

- Voice inspection

Voice data entry increases inspector's work efficiency over the conventional way to manually log inspection result. Hands-free recording improves efficiency saving time to switch their hands from inspection tools to inspection sheet.



Assembly

Auto-ID technologies help improve productivity and traceability

- Vital monitor beacon 'MEDITAG' for labor management and performance measurement

Labor management with MEDITAG to acquire worker's status such as location, heart rate and falling accident. Safety management at dangerous area such as painting process. Also can be used for work analysis to find the best environment to encourage worker's performance.



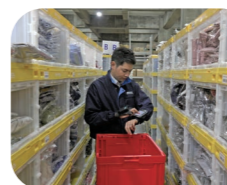
- Prevent operation error using location tracking system 'Ultra-wideband' (UWB)

UWB location tracking system prevents operation error and logs work history as evidence. Apply UWB tags to tools such as torque wrench and connect to the system. Traceability record includes work history of who did, on which car, and with which tension the screw was tightened.



- Improve efficiency on parts picking

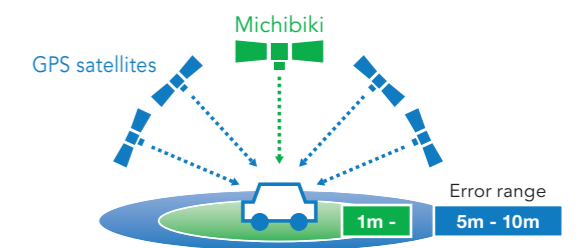
Route navigation system Visual Warehouse® using 3D map and audio navigation enhances efficiency of picking work. iPod is worn on the picker's arm and gives picking order with the shortest path using proprietary algorithm.



Location tracking outdoor

- Positioning with 'Michibiki', Japanese satellite navigation system

Michibiki can be used along with GPS and makes high precision positioning possible. Enables to capture the current status in real-time of "What is located in where". Also enables to digitize 'Place, time, and movement' to improve management efficiency and information traceability, which was conventionally said to be difficult to capture as data.

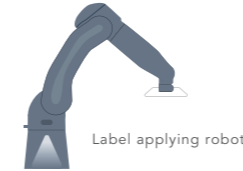


Sub-Assembly plant

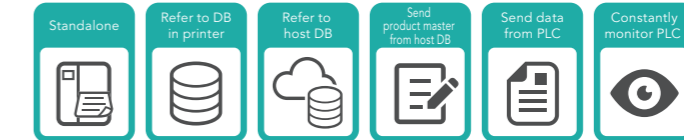
Multiple ways to print nameplates, essential item for traceability

- Automate print-and-apply process of nameplate labels

Depend on the needs, choose best printer model and labels for nameplate printing. Connecting printers with labeling robots enable saving time and work to apply labels.



- Print label with AEP



CL4NX

The value of SATO's RFID

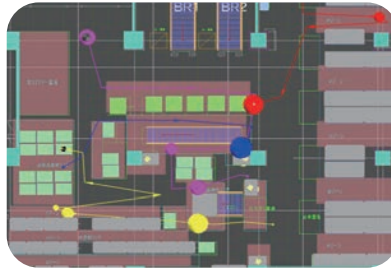
Offer original inlays as well as standardized ones. Five features of the original inlays to realize high reading rate; Antenna design suitable for each factory's operation, high-speed production facility, to offer most appropriate tags and labels, quality control based on accumulated production know-how, to provide solutions based on our knowledge gained over the experience at customers' sites.



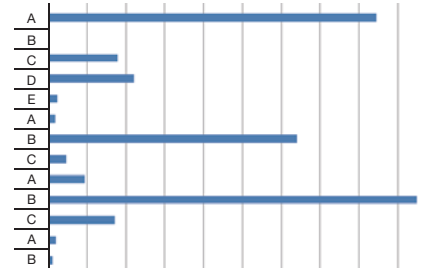
Location tracking technology Quuppa & RTLS with Lufthansa Industry Solutions



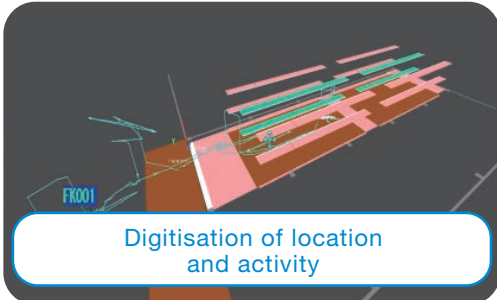
Digitise workload by analysing operation time and worker's position against the target



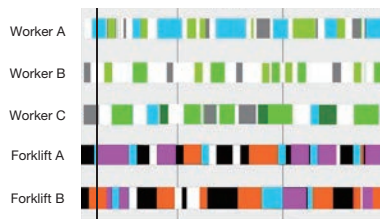
Paths taken



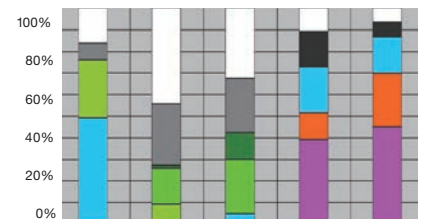
Distance travelled



Digitisation of location and activity



Time spent at area (by hours)

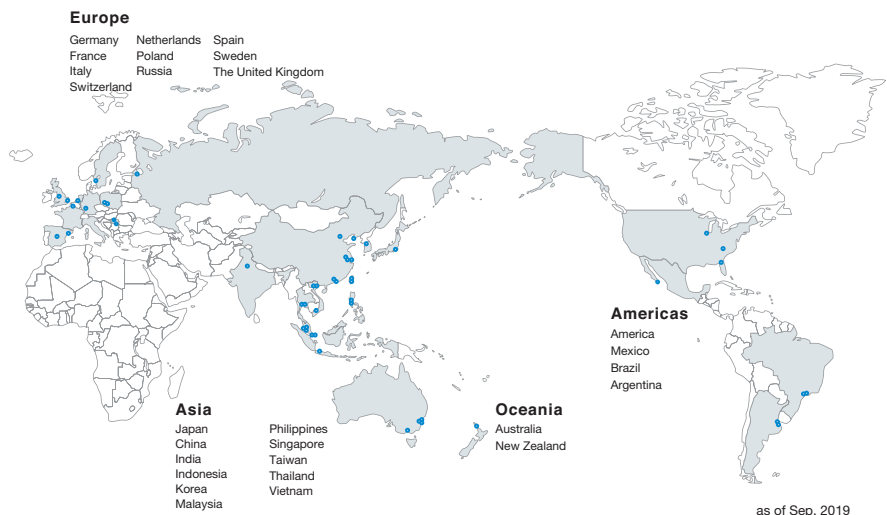


Time spent at area (by ratio)

SATO group expanding worldwide

We have offices in **27** countries/regions worldwide.

Our business is expanding in more than **90** countries/regions.



For more information, please contact your local SATO office, or visit:

satoeurope.com



Ceaseless Creativity for a Sustainable World

© 2019 SATO CORPORATION. All rights reserved.
For more information, please contact your local SATO office, or visit: satoeurope.com