KFI
KEY FOR INDUSTRY

DUCATI Official Supplier 2022

Case Study

Goals

- Speed up the operator training phase
- Reduce picking errors (quantitative and qualitative)
- Increase the pick rate
- Improve ergonomics

Results

- 90% training time reduction
- Defects reduction
- Maintenance of costs as complexity increases
- Increased productivity

Future implementations

- Extension of Pick By Light to further areas
- Introduction of ESL for parts receipt

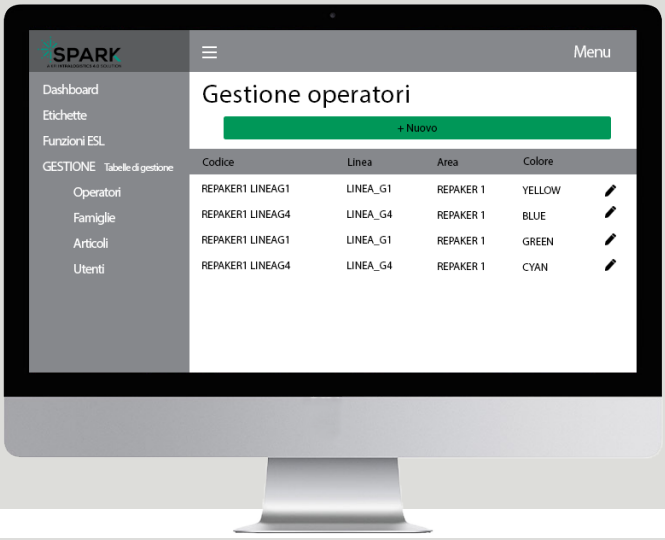
Spark takes Pick by Light to pole position

At the Borgo Panigale (BO) plant, Ducati has introduced wireless Pick-by-Light technology to ensure maximum efficiency in serving the assembly stations of its motorcycles.

The new process, digitized and orchestrated by Spark, has led to a significant decrease in errors and allowed to drastically reduce operator training times.

SPARK
A KFI INTRALOGISTICS 4.0 SOLUTION

Spark is the KFI software platform supporting logistics activities that interface with key host systems to enable the use of innovative technologies according to optimized process logics. It also collects operational KPIs in real time, reporting them through customizable graphical dashboards. Spark orchestrates operators allowing them to work in synergy with different solutions such as voice systems, ESL, Pick/Put By Light, RTLS, RFID, and AMR.



Ducati Factory - Borgo Panigale (BO), Italy

The project at the historic Ducati plant started from the production line of the Monster, SuperSport and DesertX families: an area dedicated to the assembly of 130 motorcycle versions and the management of around 200 different parts, with the possibility of creating up to 150 motor vehicles per day. Subsequently, the Pick By Light solution was extended to the Diavel and XDiavel assembly area, to that of the ABS systems, and is finally ready to become operational also on the production line of the Multistrada family.

Adriano Daniotti, Ducati Improvement Process

Since 2003 in Ducati, he deals with the improvement of production processes with a specific focus on the most innovative technologies in the logistics sector.

/THE CHALLENGE
A supermarket to develop

The picking process from the supermarket responsible for supplying the production line of the Monster, SuperSport and DesertX families was managed by 3 operators who operated guided by paper lists, often relying on their own memory. This led to defects due to incorrect or missed samples, and training periods of 1 or 2 weeks before new employees learned to compose the kits correctly.

With the increase in motorcycle versions to be produced and in the mix of parts, Ducati has felt the need to introduce a flexible and easily reprogrammable system capable to simplify and digitize the process.

/THE SOLUTION
Green light for pick by light

With the introduction of Spark, KFI has made it possible to interface between SAP and an innovative wireless Pick By Light system. In fact, the software manages SpeedyPick Air devices which, using semiotics based on a combination of coloured lights and flashes, allow multiple operators to simultaneously locate the parts, view the quantities on the display and confirm the picks by pressing buttons.

After selecting the picking list from the terminal and assembling the kit following the luminous indications, the employee attaches the automatic printout of the picked items and sends everything to the assembly stations. At the same time, the administrator views real-time operational process data and manages the SpeedyPicks by associating them with areas, optimizing battery consumption and monitoring their status.

/THE RESULTS
Efficiency soars

The process redesigned by KFI and Ducati's management has allowed for a marked improvement in the ergonomics of the operators, who can now carry out completely hands-free picking and reach the end of the day less tired. This has translated into a considerable decrease in errors, from those deriving from choosing the wrong paper list to those linked to an excessive use of memory. In fact, for Adriano Daniotti:

> *"The solution tiptoed into production but now we can no longer do without it, so much so that the project has been extended to a total of 4 areas. The most obvious advantage, apart from the reduction in defects, concerns the efficiency in the training phase, which has dropped from two weeks to a few hours necessary to illustrate the operation of the Pick By Light system. The activity is now simpler, but not only that, the operator is better protected and works more serenely".*

KFI

With innovation as a constant driver for continuous improvement, since 1991 KFI has been supporting Supply Chain companies in the implementation of technologies and solutions, driving them to Industry 4.0.

KFI's mission is to bridge the gap between modern field technologies and business logics through the integration with the main management systems, placing its expertise and services at the disposal of companies, of any size.

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