



Case study: Renault

Renault revs up with new Easy WMS run production warehouse

Location: Spain



The automotive maker Renault has installed the Easy WMS warehouse management system by Mecalux in its production warehouse in Seville (Spain). The manufacturing centre in this city focuses on the assembly of transmissions and the warehouse supplies manufacturing lines with much-needed goods on the go. These days, between 60 and 80 full pallets are dispatched to manufacturing, as well as around 3,000 boxes. The WMS oversees the storage of the goods and order prep, while also guaranteeing supply flows to the plant.

From aviation to autos

In term of its international presence, Renault is one of the largest automobile producers. Established in France in 1898, it has become one of the most pro-zero emissions e-car companies around.

The Seville plant opened in 1938 as ISA (Industrias Subsidiarias de la Aviación), an aeronautics parts manufacturing business.

Several years down the road, in 1958, ISA started to produce transmissions for Renault and, after the success of this venture, the French group purchased ISA.

This factory is highly regarded both inside and outside the Renault group. It fulfils 30% of the company's requirements worldwide and exports 80% of its production to the group's plants in France, the UK, Russia,

Turkey, Morocco, Argentina and Mexico, among others.

How the warehouse runs

This centre holds around 1,200 pallets and, currently, is expanding to house up to 1,000 more pallets. The warehouse receives pieces used to assemble transmissions, mainly axles and sprockets. In the Seville plant, a million transmissions are made a year and then

shipped to the various manufacturing centres that the Renault-Nissan Alliance owns throughout the globe.

On a daily basis, the warehouse issues unworked parts to the manufacturing plant. This involves parts, like drive shafts, that are unsuitable for picking due to their dimensions.

That said, most of the orders need some prep—they put together between 60 and 80 orders a day. This is true for sprockets, for example. Once received, the operators slot the items for each manufacturing order into the shorter racking units. At a later stage, these items are shifted to manufacturing by

Automatically Guided Vehicles (AGV). These racks are devised to provide the goods needed for manufacturing lines and to streamline the assembly of the transmissions. Each one holds essential items to supply two manufacturing orders (the first at the front and the second at the rear).

Easy WMS by Mecalux

Easy WMS, the warehouse management system developed by Mecalux Software Solutions, spearheads all in-warehouse processes taking place at the Renault installation, including the input of goods from the machine shops, picking tasks and sending products to the manufacturing lines and/or

to dispatch. For smooth running of the various warehouse operations, Easy WMS is in ongoing communication with GPT—the ERP of Renault—as well as with the automatic robot that organises the assembly lines. Via Modbus, a serial communications protocol, the robot issues a list to the WMS with the must-have items for each manufacturing order in progress.

Subsequently, the WMS transmits the orders to the workers. These personnel carry a handheld RF device to pick the list. The system pinpoints what goods each container requires and how much must be collected, which curtails any sort of potential error.



Our Easy WMS keeps in touch with the workers through radiofrequency devices, telling them how much stock they should insert into each container

Advantages for Renault

- **Perfectly controlled stock:** the warehouse management system is always on the ball with the real-time status of inventory.
- **Swift pickings:** the WMS tells the operators how to prepare orders being sent to the manufacturing lines, stamping out any potential mistake making.
- **Maximum throughput:** using Easy WMS means all in-house processes and operations run without a hitch.

