

Automated warehouse handles 10,000 tonnes of powder coating annually

Easy WMS coordinates storage and production supply flows at Sepal's facility.

Country: **Italy** | Sector: **hardware & industrial supplies**



CHALLENGES

- Optimise the management of powder coating materials used on production lines.
- Free up manufacturing space to support increasing activity volumes.

SOLUTIONS

- Automated Rack-Supported Warehouse for pallets.
- Easy WMS Warehouse Management System.

BENEFITS

- Efficient management of 10,000 tonnes of powder coating annually.
- Fast, organised replenishment of coating lines.





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“Automation simplifies many internal operations and enables us to work with greater safety and control.”

Representative, Sepal

industrial applications. The process consists of applying a special powder that melts in an oven, creating a durable, long-lasting protective coating.

The automated storage and retrieval system (AS/RS) serves as the central repository for powder coating materials used in production. Delivered as a turnkey solution, it consists of a rack-supported warehouse, automatic handling equipment, the Easy WMS warehouse management system and fire protection technology. “Automation simplifies many internal operations and enables us to work with greater safety and control,” says the company representative.

Based in the Lombardy region of Italy, Sepal specialises in the extrusion and finishing of aluminium profiles used in industries such as construction, manufacturing, furniture and architecture. The company leverages advanced technology to deliver a highly integrated process, from custom profile extrusion to surface treatments such as powder coating and anodising.

» **Founded: 1973**

» **Employees: 170**

Growing demand for high-quality finished aluminium profiles led Sepal to implement an automated warehouse for pallets at its facility in Lograto (Brescia, Italy). This solution streamlines the management of 10,000 tonnes of powder coating used every year in the treatment of aluminium profiles.

The transition to automation has enabled the company to overcome the shortcomings of its previous manual material handling processes. “With Mecalux’s new automated warehouse,

we’ve optimised the space available for production and improved the coordination of our logistics flows. The system supports the growth of our business while keeping the facility organised and ready for future expansion,” says a Sepal representative.

Mecalux technology helps Sepal fine-tune stock management for the electrostatic powder coating process. This treatment is applied to aluminium bars measuring 3 m to 7 m long and destined for a wide range of





The stacker crane optimises storage of Sepal's powder coating materials

Easy WMS directs and monitors all pallet movements within the warehouse while coordinating material replenishment to production. With this solution, Sepal can organise materials feeding its coating lines more accurately.

"One of the main benefits of Easy WMS is the improved coordination between storage and production. Materials now reach the coating lines in a more organised and efficient manner," says the Sepal representative.

Technology and safety in the automated warehouse

The AS/RS stands 18 m tall and provides a storage capacity of 576 pallets. It features double-deep seismic racking designed in accordance with Italy's NTC 2018 regulations, which account for seismic acceleration and site-specific ground conditions. A twin-mast stacker crane with telescopic forks stores and retrieves pallets as directed by Easy WMS.

In an area adjacent to the AS/RS, operators pick boxes containing powder coating materials. Automated conveyors, with two inbound and outbound points, supply the workstation with the required inventory. A picking robot assists with handling heavy loads and improves operator ergonomics. Once prepared, the boxes are transported by forklift to the coating lines.

The warehouse is completed with a fire protection system that uses inert gas as the extinguishing agent. If activated, this technology safeguards stored products without damaging them.

Automation supporting production

The new automated warehouse provides greater control over material flows and enhances traceability for goods used in aluminium profile manufacturing. With this solution, Sepal has strengthened its intralogistics capabilities and freed up valuable manufacturing space. This additional capacity supports the efficient supply of 10,000 tonnes of powder coating annually to the production lines.

