

Case studies

SUSTAINABILITY AND SAFETY ARE THE KEY WORDS FOR BUCHER HYDRAULICS' AUTOMATIC STORAGE SYSTEM



Sector: Hydraulics

Location: Reggio Emilia

Bucher Hydraulics is a leading international company specializing in the production of innovative hydraulic drives and controls. In order to keep pace with the steady growth of its business, it undertook a big project for the renovation of its long-standing production site in Reggio Emilia. A renovation pursuing sustainability and innovation, which have always been fundamental values for the company. The expansion of the premises includes the construction of new offices and labs, as well as an area used for storing semi-finished and finished products.

Warehouse efficiency and sustainability

The Ferretto Group responded to Bucher's needs by designing and building a self-supporting and environmentally friendly automatic storage system, which combines extremely high efficiency and optimization of the working conditions. The system was designed both to serve the production process, by storing semi-finished products, and to manage finished products. In particular, the storage system is equipped with 3 stacker cranes that automatically perform the picking and placing activities within the system. In contrast, a system of rectilinear shuttles is used to serve the 2 head-ends of the storage system. The latter were designed, respectively, for the management of the semi-finished products necessary for production and for the storage of finished products and order preparation. Special care was paid to all aspects related to safety: the storage system is equipped with an oxygen reduction fire-fighting system. With the automatic solution supplied by the Ferretto Group, Bucher Hydraulics has been able to reorganize its storage space, optimizing storage capacity, improving production efficiency, and speeding up the management of finished products and the preparation of orders. All this in full compliance with the company's policies on eco-sustainability and

technological innovation.

Objectives:

- Expansion of the production site following the company's growth
- Reorganization of storage space
- Optimization of production processes
- Concentration of the storage of semi-finished products at a single location

Solution:

- Self-supporting automatic storage system for metal trays, pallets and half-pallets
- 3 single-column stacker cranes
- Single and double depth shelving on 25 load levels
- System based on rectilinear shuttles, serving the 2 head-ends of the storage system

Technical features:

- Oxygen reduction fire extinguishing system to meet the company's need for maximum safety, innovation and sustainability

Added value:

- Improved space organization
- Optimization of production processes
- Greater efficiency in the preparation of orders
- Maximum safety in the work environment

The storage system in figures:

Total area:	580 m ²
Unit loads:	Metal bins 600 mm x 800 mm x H 700/850 mm Europallet 800 mm x 1,200 mm x H from 350 mm to 1,200 mm / Europallet 800 mm x 600 mm x H from 350 mm to 700 mm
Overall capacity:	6,336 pallets
Storage system height:	21 m
Load levels:	18 – 20 – 25
Type and number of stacker cranes:	3 single-mast stacker cranes
Shuttles:	system of rectilinear shuttles







