



NPE NEW PROCOND ELETTRONICA

Four automated vertical lift modules to manage and protect electronic components

Managing a large number of electronic part numbers, reducing operator travel and ensuring suitable storage conditions for production materials: these were the challenges NPE S.r.l. faced as it sought to overcome the limitations of traditional warehousing and improve internal logistics efficiency. A Made in Italy leader, NPE is an innovative company founded in 1965 in Longarone (Belluno), in the heart of the Dolomiti Innovation Valley. Specialising in the design and manufacture of printed circuit board assemblies (PCBAs), electronic components and advanced control systems, it develops technological solutions for several industries, from electric mobility to energy management. Before vertical automation, NPE stored electronic components on conventional shelving, using SAP to identify storage locations and applying FIFO principles. During picking, however, operators had to walk to the different storage positions to retrieve the required materials. Luciano Bucciarelli – Supply Chain & Production Director at NPE – explains the solution configured by Ferretto for the company.

CUSTOMER

NPE New Procond Elettronica

WHERE

Longarone (BL), Italy

SOLUTIONS

Vertimag®
Ejlog



Less walking and faster picking: 79 trays to organise electronic components
 “When picking, the operator had to move between the different storage locations, covering quite a considerable distance.” To improve the process, NPE installed four Vertimag® 103 XL automated vertical lift modules, with 79 trays offering 345.83 m² of storage surface in a footprint of just 69.6 m². The configuration consolidates electronic components in a compact area, makes use of the available height and delivers materials directly to the operator according to the goods-to-person principle. Ferretto was also selected for its ergonomic Ergo-Tech® access station, which prepares the next tray while the operator works on the current one, reducing waiting times during picking. “After considering the pros and cons of the different products, we chose Ferretto for its innovative Ergo-Tech® access station, which prepares the second tray beneath the first tray already at the access point, thereby saving time.” The trays are divided into compartments to organise individual part numbers, while an LED light bar indicates picking positions and makes components easier to identify.

Protecting electronic components from dust, electrostatic discharge and unsuitable environmental conditions Correct storage of circuit boards and electronic components requires particular attention to environmental conditions, especially for materials sensitive to dust, humidity, temperature and electrostatic discharge (ESD). To meet NPE’s needs, three Vertimag® units are used to manage electronic components, while the fourth features thermal insulation and temperature and humidity control for materials requiring specific storage conditions. The solution also includes ESD protection and fire safety devices, while keeping materials inside the machines helps limit dust exposure. All four Vertimag® units are managed by Ferretto’s WMS, integrated with SAP, which coordinates picking priorities and tray movements. Displays, light signals, barcode readers and audible confirmations guide operators and improve control over the stored part numbers. The benefits achieved by NPE extend across the internal logistics process, from picking through to inventory management.



Objectives

- Reduce operator travel
- Speed up component picking
- Simplify stocktaking
- Protect sensitive materials
- Control storage conditions

Solution

- 4 Vertimag® 103 XL automated vertical lift modules
- Ergo-Tech® ergonomic access stations
- WMS BASIC integrated with SAP
- Guided picking accessories
- Thermal insulation, ESD and fire protection
- Ferretto Service with H16 support and maintenance

Value added

- 83 m² of tray storage surface within a 69.6 m² footprint
- Less time spent and less operator travel
- Faster, more accurate inventory
- Fewer picking errors
- Better protection of electronic components
- Operational continuity and technical support

WAREHOUSE IN NUMBERS

Installed solution	4 Vertimag® 103XL300-BIG H4461
Total trays	79
Footprint	69.6 m ²
Total tray surface	345.83 m ²
Usable storage volume	85.5 m ³
Load capacity per tray	300 kg
Maximum complete cycle time	47 seconds