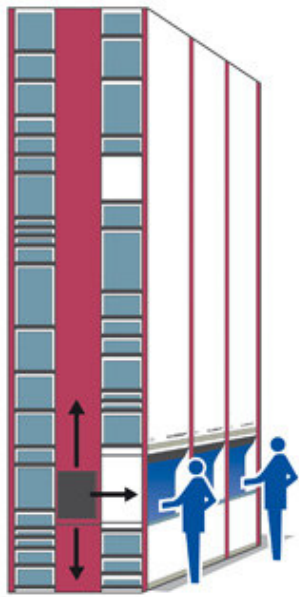


## PRODUCT SHEET: AUTOMATIC VERTICAL LIFT MODULES

Revision 3 on December 2020, 23rd

The term "vertical warehouse" at first sight would seem to refer generically to any warehouse that develops in height, in reality it is the specific name of a class of automatic machines that consist of a parallelepiped of variable height between three and fifteen meters, paneled on the four sides and equipped with one or more openings on one or both long sides, called access bays.



Inside, the vertical warehouses can be set up with "**shifted shelves**" in the case of materials of various weights and sizes or when a greater frequency of access is required.

The machine every time a floor returns to read the height of the materials deposited on it, allocating it to the internal location of adequate height. Instead they will be set up with "**rotating shelves**" in the case of materials of contained size and weight and less frequency of consultation.

When he has to insert or pick up an article, the operator interacts with the computer of the machine via keyboard, touch screen or barcode reader and the software automatically moves the shelves inside the machine according to the fastest path, making the floor where you have to operate.



In the warehouse with shifted floors, the consultation bays can be more than one, in one or both long sides of the machine and at different heights, making it possible to connect several floors of a building.



The exclusive self-supporting sides of the warehouses we deal with allow us to reach heights of up to twenty meters with the maximum guarantee of static stability and, consequently, mechanical reliability.

Thanks to the particularly robust native mechanical construction, they can be certified for seismic zones in compliance with the Italian legislation (NTC). They are also among the fastest and most reliable machines.

**standard equipment:**

- ☺ vertical speed from 1 and up to 2.3 m / s, horizontal 0.5 m / s
- ☺ each of the four corners of the shuttle slides on a 45 degrees side guide and hangs on double chains. No problems with uneven load distribution. Even the horizontal movements are with silent chains;
- ☺ control panel;
- ☺ multifunction trays with vertical pitch up to 25mm and capacities up to one ton;
- ☺ internal bay equipped with a folding slide for tray extraction;
- ☺ safety with optical barriers and mechanical sliding door, control of incoming goods shape;

**equipment on request:**

- ☺ self-propelled tray-carrying trolleys that interface directly with the loading bay (photo1);
- ☺ beams of colored LEDs for identifying the point in the drawer where to work;
- ☺ camera to archive snapshots of drawers;
- ☺ closed environment with controlled temperature, humidity, cleaning
- ☺ automatic rear shutters for closed environments or multiple access bays;
- ☺ weighing system in bay with four load cells;
- ☺ installation outside your building (photo2);
- ☺ double shuttle for a net increase in operating speed (photo3);
- ☺ elevator shared on several columns up to 9 meters in overall width for compositions at 90 degrees and / or medium frequency access (photo4).
- ☺ stoccaggio di pallet EPAL (photo5);

*Photo1*



*Photo2*



*Photo3*



*Photo4*



*Photo5*

**ADVANTAGES OF VERTICAL WAREHOUSES:**

- ☺ better use of the surface in relation to traditional mezzanines with walkways;
- ☺ closed goods protected from dust and theft;
- ☺ automation of goods to man, or rather ergonomics, comfort, profitability;
- ☺ connecting several floors of a building;
- ☺ order, cleanliness, image.
- ☺ Stand alone machines, easy to assemble and use, new, used, full service rental is available