SNIZELOG

Vectura

Reliable & energy efficient – proven pallet technology with a flexible design



Vectura is a fully automated stacker crane for storage and retrieval of palletized goods in high bay warehouses

Swisslog's Vectura stacker crane has a modular structure and is designed based on a set of standard components and modules to offer maximum flexibility. It can be used for single, double-to multi-deep storage, using the RowCarrier. With its proven technology and flexible design, Swisslog's Vectura pallet stacker crane accommodates a wide variety of pallet configurations in high-bay warehouses and distribution centers.

Designed to store and retrieve pallets more energy efficient

Vectura was designed for industries where a high variety of pallets and heavy products need to be stored. It is particularly energy efficient and sets high standards in quality. Vectura brings together the best engineering and pallet stacking know-how in the industry.

Benefits

Energy efficient

Up to 25% lower energy consumption compared to traditional cranes, thanks to innovative mast design and lighter crane weight design.

Versatile

Storage of different pallet sizes in one system.

Reliable

Low crane weight compared to traditional cranes means less wear and tear, while high quality production reduces maintenance and service costs.

Plug&Play

All Vectura pallet cranes are assembled and tested before shipping. This ensures a minimum time for installation and commissioning on site.

Projects implemented with Vectura: Gries Deco Company, XPO, Unilever

Vectura is a top-quality crane and can accommodate a broad range of requirements

Components mast



Mast

The tapered mast construction reduces power requirements and improves performance. It always comes with an emergency cabin for manual operation. The lifting carriage is close to the mast, which is convenient for access during servicing. There are also optional on-ride cameras for better visibility of the goods.

The mast sections are standardized and the Vectura crane only needs to be adjusted on the top section for project-specific heights. The crane is positioned asymmetric to the center of the aisle, to allow better access. To ensure best quality, Swisslog uses unique production technology with automated welding robots. Stress and deflection analysis of mast and chassis (static and dynamic forces).

Components chassis & load handling



Chassis

All bottom frames are heat treated after welding to remove residual stresses from the material. This ensures perfect wheel alignment without a need for adjustments over time. The complete chassis including hoist unit is pre-mounted on mast stub and pre-tested before delivery. To test full functionality, a completed chassis is also merged with a test mast allowing fully automatic operation of the crane. The factory test and pre-commissioning ensure high quality standards and reduces time on installation site.

Load Handling Units

Vectura comes with telescoping forks for single- and double-deep storage. The RowCarrier for multi-deep is driven by supercapacitors. Due to the unique design of Vectura single mast, it can even carry two loads handling units.

Components software & control



Warehouse Management System

Swisslog offers its own Warehouse Management System SynQ or a standard interface to any other system.

Control

Vectura's movements are controlled by CraneBox software. CraneBox ensures that transport tasks are executed properly and monitors processes to guarantee optimized interaction between subsystems.

Facts	
Load range	200 to 3,500 kg
Heights	4 to 48 m
Throughput	20 to 45 double cycles/h
Speed of operation	up to 5 m/s
Vertical speeds	up to 1.5 m/s
Product range	single mast
Storage density	single to multi-deep
Temperature range	from -30 °C to 50 °C (-22 °F to 122 °F)

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