

**Stacker Crane warehousing systems**

Warehousing system based on Stacker Cranes allows to reach high warehousing power (goods loading and unloading) with direct access to the pallet. The goods can be stored on pallets or in containers in the racks. Warehouses that will be equipped with Stacker Crane system are in their dimensions and functionality designed for this type of equipment.

Stacker Crane is the basic unit of the stock. It is produced in two basic versions – manual and automatically operated (with and without cabin operator). The manually operated Stacker Crane can be additionally upgraded to the automated version. The basic advantages of Stacker Cranes are low operating expenses. Because of the Stacker Crane’s operation by the lower and upper rail system the equipment doesn’t make the lateral fluctuation and the possibility of damage in the load goods or the rack itself by touching with transporting unit is reduced to minimum.

**Manually operated Stacker Crane ZAPRO 1100M**

The single mast Stacker Crane consists of – traveling and hoisting carriages, mast, operator cabin, telescopic forks, control system panel, safety units. Traveling and hoisting units and forks moving is realized by NORD geared motors with frequency drives. Stacker Crane operation in horizontal direction is done by the lower and upper rail system (the upper one is mostly a part of the rack system). The load limiter for crane lifting protects the manipulation against a load higher than the maximum load. The safety catching system prevents the hoisting unit against falling down due to critical malfunction.

Control system panel of ZAPRO 1100M Stacker Cranes can be embedded either by Rockwell Automation or Siemens PLC and frequency drives.

The pallets can be loaded into the racks transversely or endwisely. Pallet loading direction and control system type must be given by the specification.

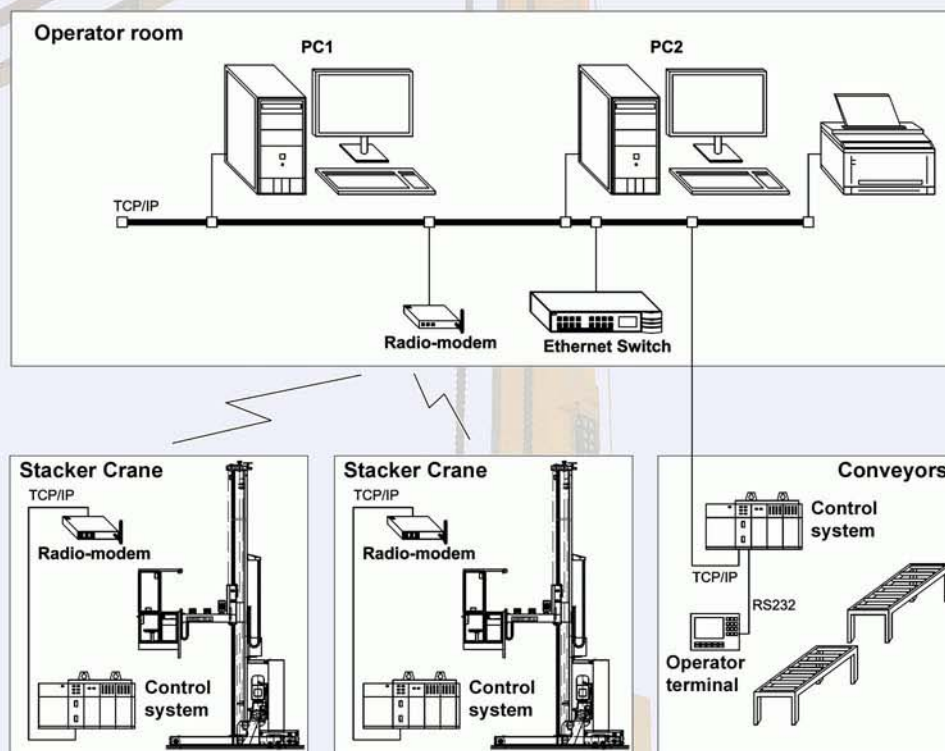
Max. load		1 100	kg
Dimensions	height, max.	11 785	mm
	length	4 075	mm
	width	1 200	mm
Hoisting	min.	560	mm
	max.	10 500	mm
Fork shift	max.	1 350	mm
Traveling speed	micro	0,033	m.s <sup>-1</sup>
	deceleration	0,3	m.s <sup>-1</sup>
	max.	1,66	m.s <sup>-1</sup>
Hoisting speed	micro	0,033	m.s <sup>-1</sup>
	deceleration	0,08	m.s <sup>-1</sup>
	max.	0,5	m.s <sup>-1</sup>
Fork speed		0,2	m.s <sup>-1</sup>
Supply: 3NPE 400/230V 50Hz TN-S		3x400	V
Rated power		35	kVA
Weight (exclude load and operator)		3 400	kg



## Automated warehousing systems

These systems provide full automation of all manipulating and warehousing operations, which increase labour productivity, loading and unloading frequency and load goods safety. The stocks can work nonstop.

Automated warehouse is based on Automated Stacker Cranes, service conveyors (chain or roller), loading and unloading operator stations for goods registration. All these equipments are controlled by the central computer or the control system, which can cooperate with enterprise software systems, for example SAP. Central control system works under special user software for complete warehouse control.



## Automated Stacker Crane ZAPRO 1100A

Unlike to manual, the automated Stacker Crane ZAPRO 1100A is additionally equipped with the address positioning system (cell address in the stock), the wireless communication system between the Stacker Crane control system and the warehouse control system, and optical switches for the pallet presence control in the rack's cell and on the fork. Upon request, it is possible to equip it with bar code readers, etc. Address identifiers are included in accessories.

## Supply specification

The PROCONT Company provides complex deliveries for warehouse facilities based on the Stacker Crane system, from project documentation to the warehouse turn-key solutions (manually or automatically operated). The company provides delivery and erection of Stacker Cranes including accessories, chain and roller conveyors and warehouse control system with appropriate software.

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