

DRIVERLESS



Type of vehicle

- High-lift fork truck
- High-shift stacker
- Straddle truck
- Telescoping mast stacker
- Spreader stacker
- Drawbar stacker
- Teleskoping fork stacker
- Side shift stacker
- Narrow-aisle stacker**
- High-rack stacker**
- Tractor
- Drive-under tractor
- Platform truck
- Other

Special equipment

- RFID-/barcode reader
- Weighing function
- Metering function
- Roll conveyor
- Belt conveyor
- Chain conveyor
- Flexible load handling
- Cover lift
- Dual operation
- Stainless steel vehicle
- Clean room vehicle
- Outdoor vehicle
- Heavy-duty vehicle
- Telescoping platform**

Mayesto

Narrow-aisle stacker with telescoping platform

The Mayesto series automated narrow-aisle stacker is equipped with a telescoping platform with tines that extend to the right and left like a shelf loader in order to load and unload loading units.

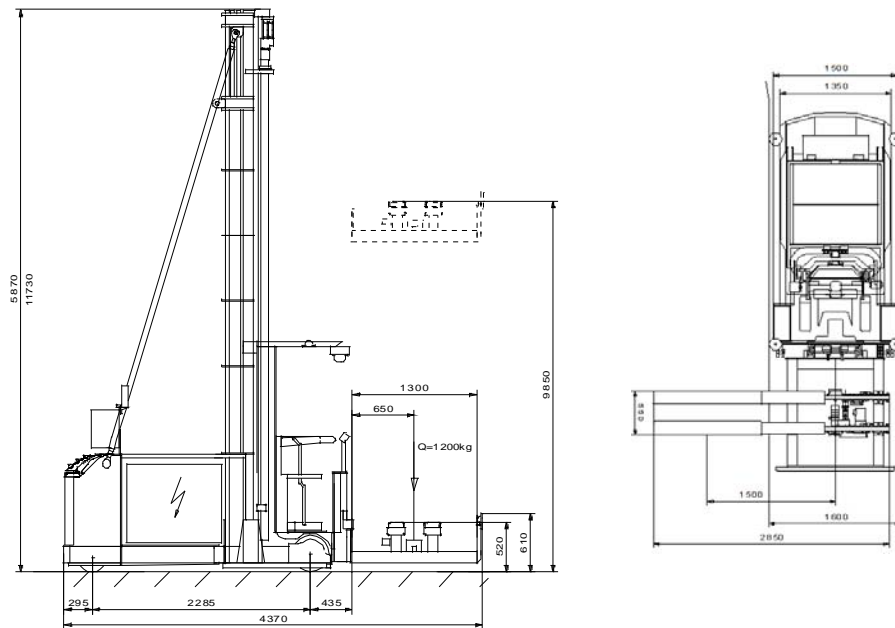
The vehicle can also be optionally equipped with a swivel reach fork. The MAYESTO can be used for transfer heights of up to 11 meters and loads up to 1.5 tonnes.

The automated high-rack stacker is based on high-quality narrow-aisle stackers that are mechanically reinforced for automated operation. The fully automated Mayesto has decisive advantages:

It can move at up to 2.7 m/s when guided on roller tracks in the shelf aisles, and thanks to the reliable MLR magnetic navigation system, can also navigate freely in the front end of the warehouse, for example to change aisles.

One particular highlight is the newly developed fine-positioning system for height and space size, which uses laser scanners and a corresponding realignment. The laser light provides extremely short measurement and control times.

Technical data



Basic unit	
Length x chassis width	4.370 mm x 1.500 mm
Height	5,870 mm (retracted), 11,730 mm (extended)
Aisle width between guide tracks	1.600 mm
Load capacity	1.500 kg
Lift heights	9,850 mm, telescoping reach fork
Bottom transfer height	440 mm
Ground clearance	30 mm
Traction drive	80 V/7 kW AC
Travel speed	2.7 m/s Max. speed depending on lift height.
Brake	Electromagnetic brake
Chassis	3-wheeled vehicle
Lift drive	Hydraulic
Lift/lower speed	0,45 m/s maximum
Load Suspension Device	Telescoping reach fork, 2 tines
Reach drive	Elektric
Extension travel	1.500 mm
Reach speed	0,2 m/s maximum
Automation	
Controller	Special controller for AGV use; Linux operating system
Navigation principle	Free magnetic navigation, position determined by magnetic sensor strips, piezo-gyroscope and two separate measurement wheels on the load side. Mechanical track guidance in the aisle
Positioning	Using navigation, distance measurement in the rack aisle, pallet position within the shelf bay additionally determined by laser scanners at left and right of telescoping reach fork
Positioning accuracy	+/- 10 mm
Lift travel capture	Absolute with cable lift encoder, connected to CAN-Bus
Reach travel capture	Absolute with rotary encoder, connected to CAN-BUS
Load monitoring	Optical sensor load detection, left, right; optical sensor contour control, left, right
Safety equipment	Laser scanner front, rear
Data transfer	Via WLAN to main computer
Energy concept	Lead battery 80 V/930 Ah, manual charging in the vehicle or battery changeout
Other	Two cameras at right and left on the cabin roof, WLAN controls, pivot mounts