

Caesar PM-2,0 Mk

DRIVERLESS



Type of vehicle

- High-lift fork truck
- High-shift stacker
- Lift stacker
- 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 conveyer
- Belt conveyer
- Chain conveyer
- Flexible load handling
- Cover lift
- Dual operation
- Stainless steel vehicle
- Clean room vehicle
- Outdoor vehicle
- Heavy-duty vehicle
- Roll transport fixture**

Application example Apollo Tyres

The tire manufacturer Apollo Tyres has automated the transportation of empty rolls at its plant in Gyöngyös (Hungary) with an automated guided vehicle system (AGVS) from MLR.

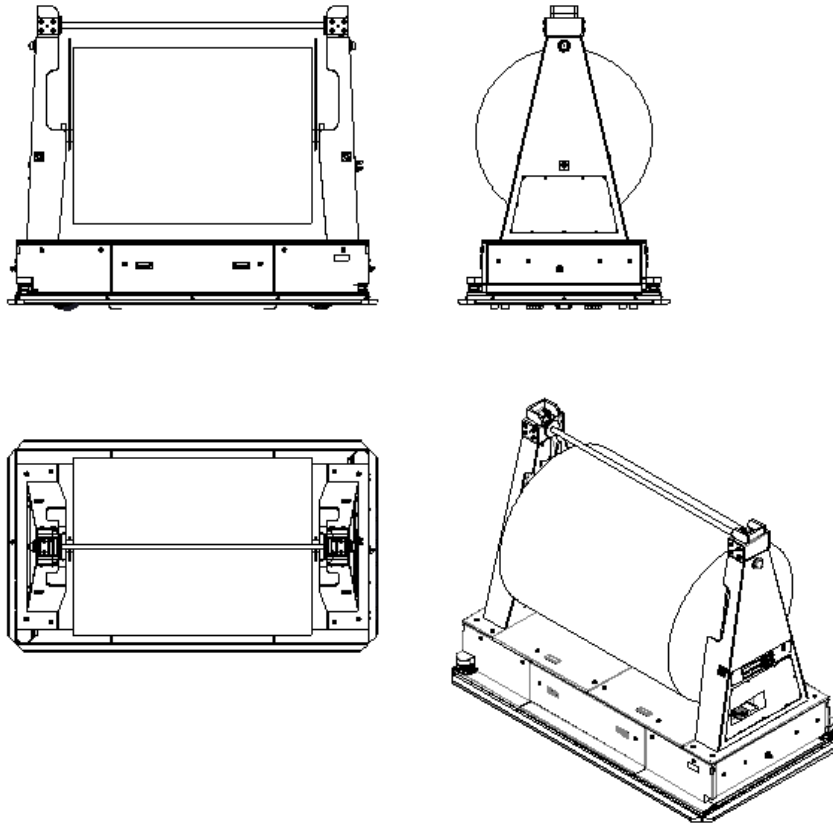
The automated guided Caesar model four-way vehicles use cranes to pick up rolls weighing up to 2,000 kg from floor-level storage spaces and move them between the STC and TBR/PCS transfer stations. All transport moves are made as double runs.

The four automated guided vehicles (AGVs) cover 3-shift operations. They run seven days a week, 365 days a year.

Coordination and control of the automated guided vehicles are handled by MLR's own control and management system, LogOS. The stations issue demand signals to LogOS via an interface. LogOS links the signals and uses them to generate transport orders for the AGVs, which are connected to the main controller via WLAN.

The vehicles are equipped with fast-charging lithium-ion batteries. These remain in the vehicle and are charged automatically via charging contacts built in to the STC transfer stations, along with other locations. The vehicles can thus be charging while the load exchange is taking place.

Technical data



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Length	2,730 mm
Width	1,560 mm
Height	2,230 mm
Weight with battery:	1,900 kg
Load capacity	2,000 kg
Ground clearance	35.5 mm beneath the vehicle frame
Speed	Forward: 1.0 m/s Backward: 1.0 m/s Sideways: 0.6 m/s
Battery	Li-Ion 48 V / 280 Ah
Protective devices	Laser scanner front and rear, side strip sensors, front and rear, emergency stop buttons, 2 on each side of the fixtures
Appropriate loads	Rollers Dimensions: max. 1,758 mm length, 1,300 mm diameter Weight: max. 2,000 kg