

Phoenix K-1,4 Mr

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 conveyer
- Belt conveyer
- Chain conveyer
- Flexible load handling
- Cover lift
- Dual operation
- Stainless steel vehicle
- Clean room vehicle
- Outdoor vehicle
- Heavy-duty vehicle
- Other



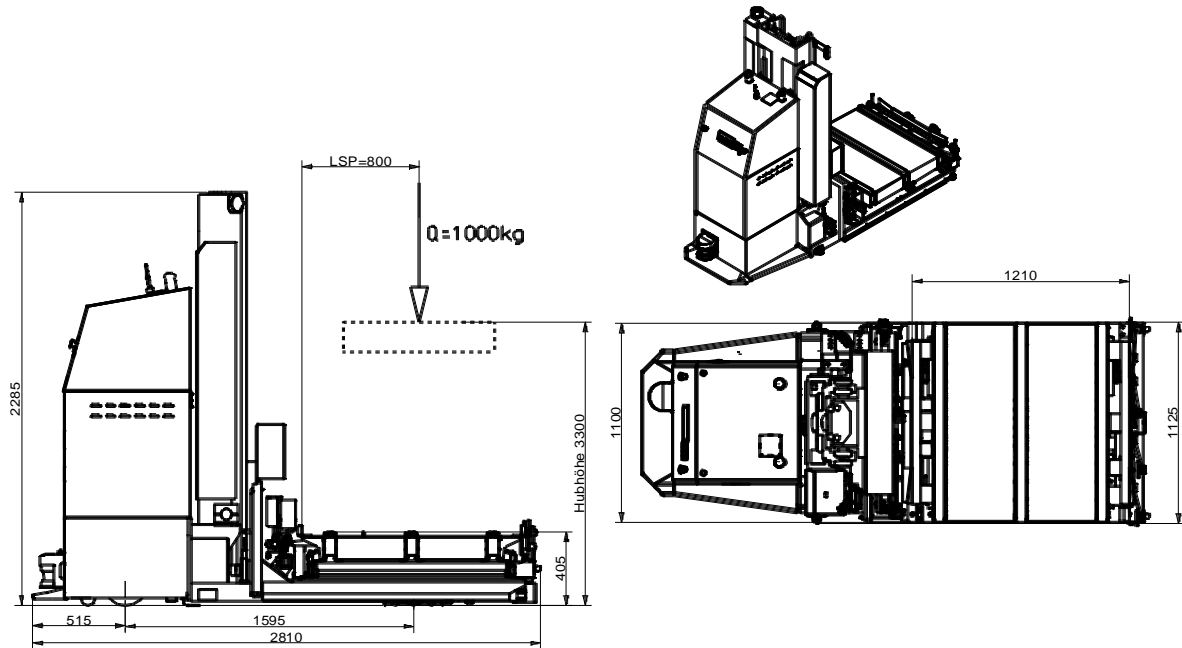
Application example Bosch Tiernahrung

An automated guided vehicle system developed and implemented by MLR transports cartons of animal feed from production to the commissioning stores at the animal feed producer.

The free-ranging fork trucks are equipped with a chain conveyer with a side shift that is mounted on a lift unit and can be extended out by up to 3,300 mm. In order to prevent the load from wobbling during the transfer, a tilting device aligns the conveyer to the sloped roller track. The chain conveyors are synchronized during load transfer by means of optical sensors that exchange signals.

Loads are received at four stationary conveyer systems. The pallets are handed off in the shelf unit at 776 stations with sloped roller tracks. The system runs in three-shift operation around the clock. The 380 m long course can move 960 pallets a day. The NiCd batteries are charged automatically as the load is received. The transport orders are generated by a warehouse management computer that is connected to the main LogOS computer via a data interface.

Technical data



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Dimensions (l x w x h)	2.810 x 1.100 x 2.285 mm
Load capacity	1.000 kg
Lift heights	3.300 mm
Ground clearance	25 mm
Drive	1,2 kW AC
Speed	1,5 m/s
Brake	Magnetic parking brake
Chassis	3-wheel vehicle; front: Suspension drive with two support wheels
Load Suspension Device	Chain conveyor, shifts and tilts to one side
Load	Europallets
Positioning accuracy	+/- 10 mm laterally and vertically
Energy concept	NiCd-Batterie 45,6 V/95 Ah
Battery charging	Automatic via contact plates
Data transfer	Wifi 5 GHz
Navigation	Free magnetic
Safety equipment	Laser scanner front and rear, bumpers at front and sides, side strip sensors on LAMM