

# Phoenix QH-2,0 Lr

**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 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 Küster Druck

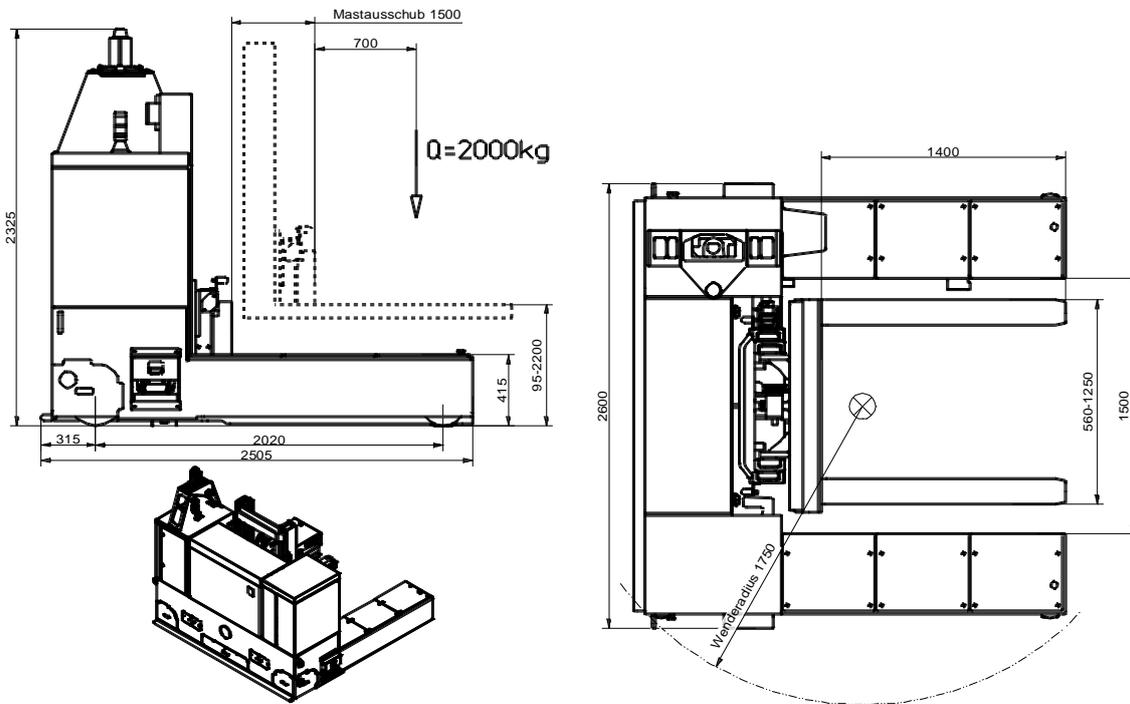
An automated guided vehicle system (AGVS) transports paper rolls from the roll storage area to the roll changers at the printing lines in the Küster print shop.

The laser-guided vehicle has a reach mast and contoured forks. Raising and extending the mast, closing the prismatic forks, detecting the roll diameter, and lifting and retracting the roll all take place with high precision in order to avoid damaging the sensitive surface of the paper roll, which can weigh up to two tonnes. The rolls vary in length from 350 mm to 1,400 mm. The diameter of the rolls is between 290 mm and 1,300 mm.

Paper rolls with a diameter of less than 450 mm are transported on a fixture known as a cradle. The rolls are picked up at the roll warehouse by a special conveyer system, intermediately stored on shelves at two levels, and then handed over to the printing machines at floor level. Due to the tight space constraints, the four-wheel vehicle can travel both forward and backward, as well as sideways and diagonally.

Control of the automated guided vehicle system is handled by the LogOS management and control software from MLR.

# Technical data



## Phoenix QH-2,0 Lr

Dimensions (l x w x h)	2.505 x 2.600 x 2.325 mm
Load capacity	2.000 kg
Lift heights	2.200 mm
Ground clearance	30 mm
Drive	2 x 4,0 kW AC
Speed	0,7 m/s
Brake	Electromagnetic parking brake
Chassis	4-wheeled vehicle, steering gear on each wheel
Load	Paper rolls (L max. 1,400 mm, D max. 1,300 mm)
Load Suspension Device	Prismatic forks, side-shifting
Positioning accuracy	+/- 15 mm
Energy concept	Lead battery 48 V/930 Ah
Battery charging	Automatic via floor contact plates
Data transfer	Wifi 5 Ghz
Navigation	Free laser
Safety equipment	Laser scanners, strip sensors