

# Automated Guided Vehicles

## Vehicle application



**ISI-S RH-1,5 Lr**

The ISI-S RH-1,5 Lr is a completely redesigned vehicle, based on a standard electric high-level fork-lift truck.

The drive unit and the lift frame were engineered for efficient integration of automation components (scanner, sensors, control system) and to ensure easy access to them.

The ISI-S is an extremely compact 4-wheel vehicle, capable of transporting loads of up to 1,500 kg at a top speed of 1.67 m/s.

Standard lift height is 1,600 mm. We can supply variants for other lift heights and weight classes and with different lifting attachments to suit specific requirements.

The drive unit can, for example, be bolted on to a rear section with a roller conveyor, or it can be configured as a towing tractor.

Power is supplied from lead batteries. Recharging is manual, with automatic recharging offered as an option.

Traction and steering drive use low-maintenance AC technology.

Safety components comprise a laser scanner for forward movement, light sensors for the fork movement, and emergency off buttons on the front section and on the lift frame.

Communication with the control system is via broadband radio.

The standard ISI-S version is configured for laser navigation, so that route changes are quick and easy, and incur minimum cost.

The load can be manipulated either manually, using the tiller arm, or automatically using data from sensors mounted on the mast.

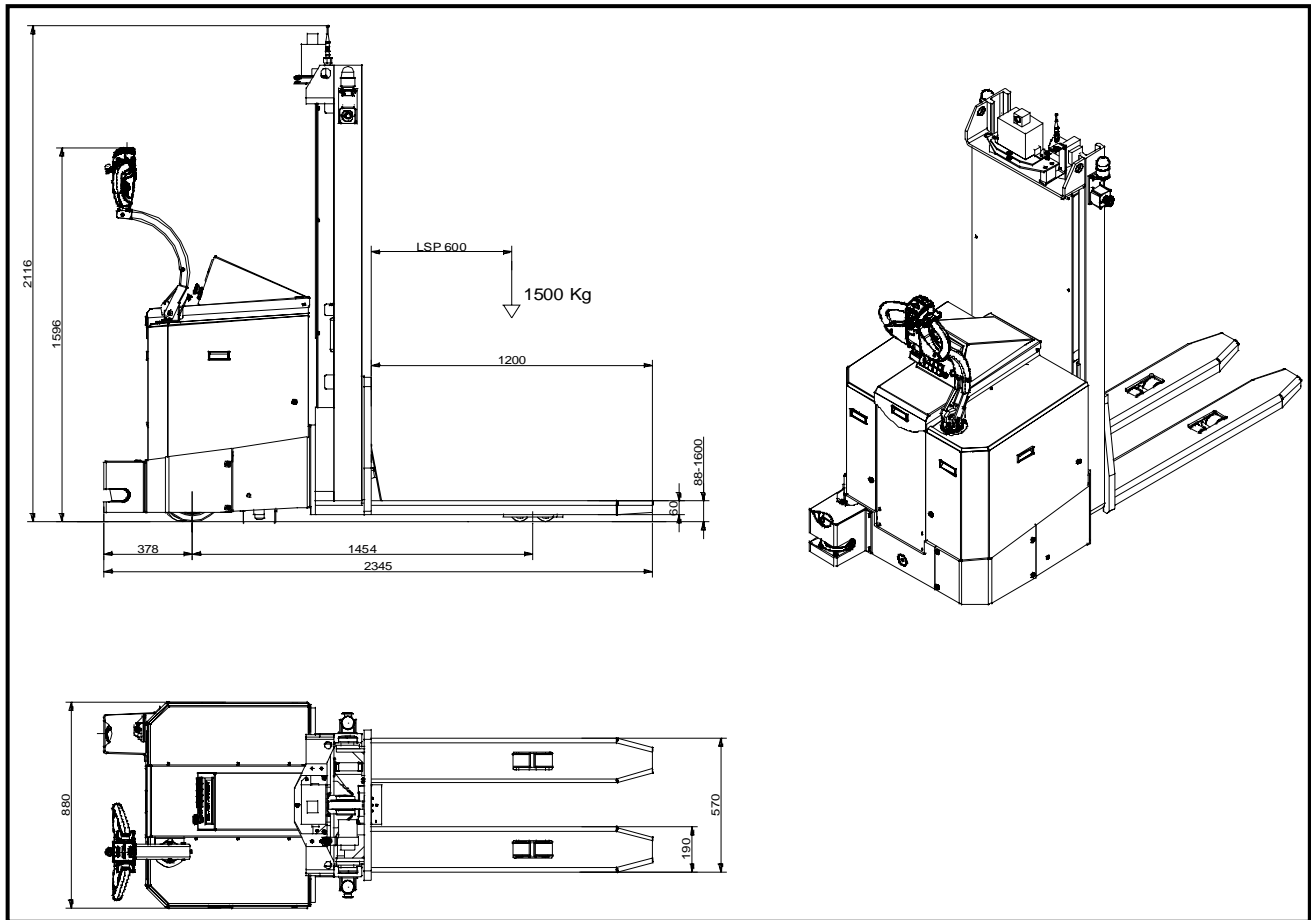
In manual operation, the ISI-S operates like a conventional forklift truck, with all the advantages, including clear-view mast, multi-function tiller and regenerative braking.

Switching between manual and automatic operation is very simple.

Simply push the tiller arm into top position and push the Start button.

**References: Hassia Mineralquellen, Bad Vilbel • LMC Bondues, France • Merba Osterhout, The Netherlands • Akzo Nobel, Hilden**

# Technical Data



- **Type:** ISI-S RH-1,5 Lr
- **Dimensions:** 2,345 x 880 x 2,116 mm (l x w x h)
- **Load capacity:** 1,500 kg (others on request)
- **Floor clearance:** 28 mm
- **Power:** 2.0 kW AC
- **Maximum speed:** 1.67 m/s
- **Brake:** Electromagnetic
- **Undercarriage:** 4-wheel vehicle  
Wheel hub drive vertical with separate steering drive
- **Positioning accuracy:**  $\pm 15$  mm
- **Lift height:** 1,600 mm (others on request)
- **Lift drive:** Hydraulic
- **Energy supply:** NiCd or lead battery 24 V
- **Battery charging:** Manual (automatic on request)
- **Data transmission:** Radio communication
- **Navigation:** Laser
- **Safety devices:** Laser scanners on the front of the vehicle and light sensors for the fork movement  
Emergency off buttons on the front section and on the lift frame

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