

德国物流研究院官方合作技术
Technology supported by Fraunhofer IML

德国高廷定制激光导航仪
Laser scanner powered by Götting KG

德国倍福双核嵌入式控制器
Embedded PC with dual core processors by Beckhoff

德国西克安全传感器
Safety sensors by SICK



移动机器人VRsp 01系列

激光引导自动前移式堆垛机器人 (1400/1600/1800公斤)

移动机器人VRsp 01系列是以林德R14 SP/R16 SP/R18 SP叉车为基础开发的激光引导自动前移式叉车。VRsp 01系列采用了先进的工程设计，一流的激光导航以及可靠的安全传感器控制系统，可应用于已有的厂房、仓库及配送中心等。

VRsp 01系列的控制系统可以独立工作，也可以配合现有的IT系统来执行订单处理。并和其他设备（如自动门、输送机）自动交互，实现信息的无缝连接。

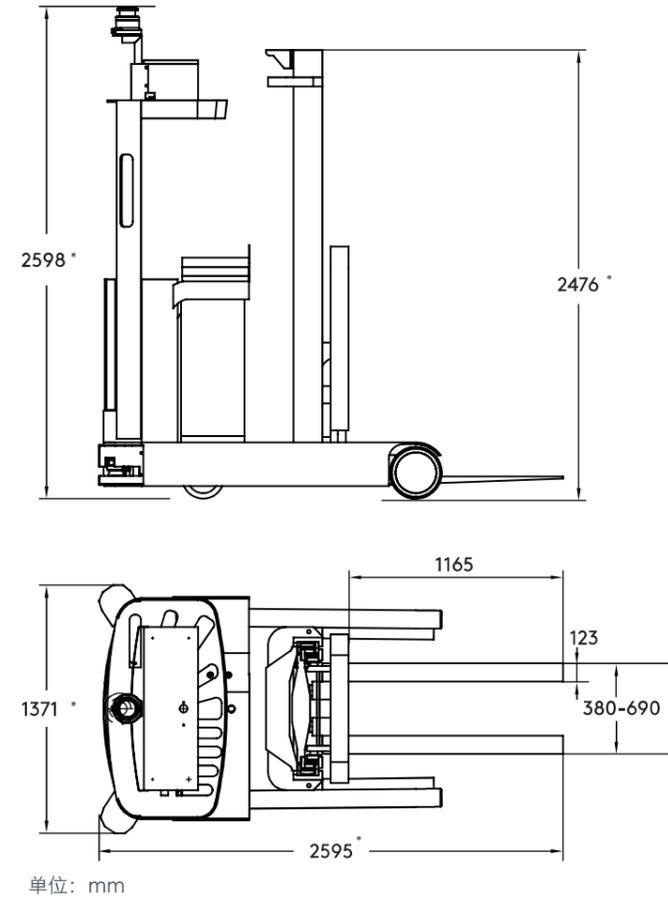
Mobile Robot VRsp 01 series

Laser guided reach stacking robot (1400/1600/1800kg)

The Mobile Robot VRsp 01 is a production developed automated guided vehicle based on Linde R14 SP/R16 SP/R18 SP reach truck. VRsp 01 uses advanced engineering combined with state of the art laser navigation and safety sensor control creates a product high-performance automated vehicle, which can be implemented into existing manufacturing facilities, warehouse operations and distribution centres.

The VRsp 01 control system can work independently or be integrated into existing IT systems to execute transport orders, and VRsp 01 can easily interact with the customer's environment (doors, conveyors) in real time.

VRsp 01系列 VRsp 01 series



系统增强功能 System Enhancements

VRsp 01系列还能提供多种其他选配功能，包括：
The VRsp 01 series can offer many additional options including:

- 集成条形码/RFID读取器
Integrated barcode/RFID readers
- 顶部障碍物安全激光扫描仪
Obstacle detection scanners
- 用于检测破损托盘的货叉头传感器
Fork tip sensors to detect faulty pallets
- 锂电池
Lithium battery
- 木流牛马自动充电装置
i-COW e-charger
- 蓝光安全灯
Blue spots safety light

技术参数 Technical Data

额定载荷 Load capacity	1400/1600/1800 kg
载荷中心距 Load centre distance	600mm
车体总重 Overall weight	3105kg (±10%) *
提升高度 Lift	4250mm(标准Standard) *
跨货叉宽度 Width over forks	380-690mm *
转弯半径 Turning radius	1674mm *
车体尺寸 Dimensions	2595mm(l) × 1371mm(w) × 2598mm(h) *
货叉尺寸 Fork dimensions	50mm(s) × 123mm(e) × 1165mm(l) *
空载/满载速度 Speed (empty/loaded)	0-2.5m/s
导航方式 Navigation	激光导航 Laser
行驶方向 Travel	前进后退 Forward and reverse
定位精度 Positioning accuracy	±10mm
最大爬坡能力 Max gradeability	≤4%
制动方式 Brake	电磁 Electromagnetic
蓄电池电压/额定容量 Battery voltage/rated capacity	48V/310 Ah *
电池类型 Battery type	铅酸电池 Lead acid battery (标准Standard)
安全装置 Safety	行驶兼侧面方向安全激光扫描仪 + 货叉传感器 Programmable Laser Scanner(Front & Side) + Fork Sensors

注: 带*号的数值基于VRsp 01标准车型。不同的门架及附属装置等都会改变相应的数值。苏州罗伯特木牛流马保留更改及技术更新的权利。
Note: the value with * is based on the VRsp 01 standard model. Different masts, additional equipment, ect. could produce other values. Right reserved for technical changes and improvements.