



PRODUCT DATASHEET / STORAGE AND RACKING

ST-1450

AGV stacker

ST-1450 automates picking up and depositing open pallets in racks. Lifting height, working capacity and mast dimensions must be selected for the required storage levels.



Rated load capacity

2000 kg

Lifting height

5000 mm

Navigation

Laser SLAM

Matched to your process

We select the robot for the load carrier, load weight, route geometry and operating schedule. Nominal specifications, working capacity and equipment are confirmed for the selected configuration.



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Technical specifications

Load and operation

Specification	Value
Product name	Autonomous forklift
Operating mode	Automatic navigation
Pallet type	Open pallet
Rated load capacity	2000 kg
Load centre distance	600 mm
Standard lifting height	5000 mm
Travel speed (laden / unladen)	1.0 / 1.5 m/s
Cage storage	Optional
Pallet storage	Optional

Dimensions and site conditions

Specification	Value
Weight (including battery)	1175 kg
Truck dimensions (L x W x H)	1724 x 1039 x 1994 mm
Fork dimensions (L x W x H)	1220 x 180 x 60 mm
Outer fork width	555 / 600 / 680 mm
Minimum turning radius	1337 mm
Temperature and humidity range	TEMP: 0°C to 50°C / RH: 10% to 90%, non-condensing
Floor conditions (gradient / step / gap)	<5% / 10 mm / 30 mm
Right-angle stacking aisle width, 1000 x 1200 pallet (1200 along forks)	2003 + 300 mm
Right-angle stacking aisle width, 800 x 1200 pallet (1200 along forks)	1932 + 300 mm
Right-angle stacking aisle width, 1000 x 1000 pallet (1000 along forks)	1892 + 300 mm



Technical specifications

Navigation and safety

Specification	Value
Navigation type	Laser SLAM
Navigation positioning accuracy	±10 mm
Navigation angle accuracy	±1°
Number of lidars	1 (3D) + 2 (SICK HV) + 1 (C200) / 1 (P+F R2000) + 2 (SICK HV) + 1 (C200)
Wi-Fi roaming	Standard
3D obstacle avoidance	Standard
Pallet recognition	Standard
HMI display	Standard
Emergency stop button (E-stop)	Standard
Audible and visual signals	Standard
Braking distance (1 m/s / 1.5 m/s)	≤30 cm / ≤50 cm
360° laser protection	Standard
Fork height protection	Standard
ISO 3691-4	Standard
EMC	Standard
UN38.3	Standard
RED	Standard
High-bay pallet recognition	Optional

Battery and charging

Specification	Value
Battery specification	24 V / 210 Ah (lithium iron phosphate)
Battery runtime	10 h
Charging time (10% to 80%)	2 h to 2.5 h
Charging method	Manual / Automatic

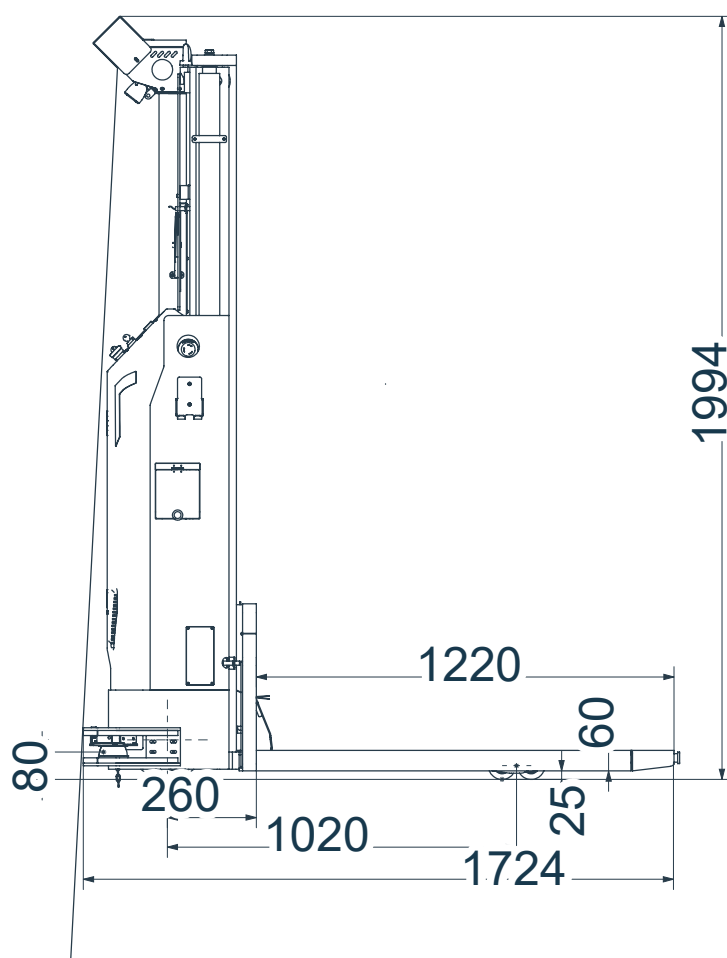
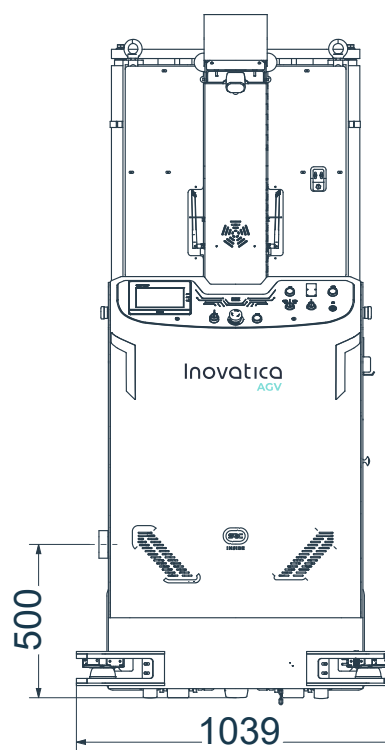


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Robot dimensions

Dimensions in mm. Read the drawings according to their numerical labels.

The diagram shows overall dimensions with the forks lowered. Confirm the lifting height and dimensions of the ordered mast during selection.

Side**Front**

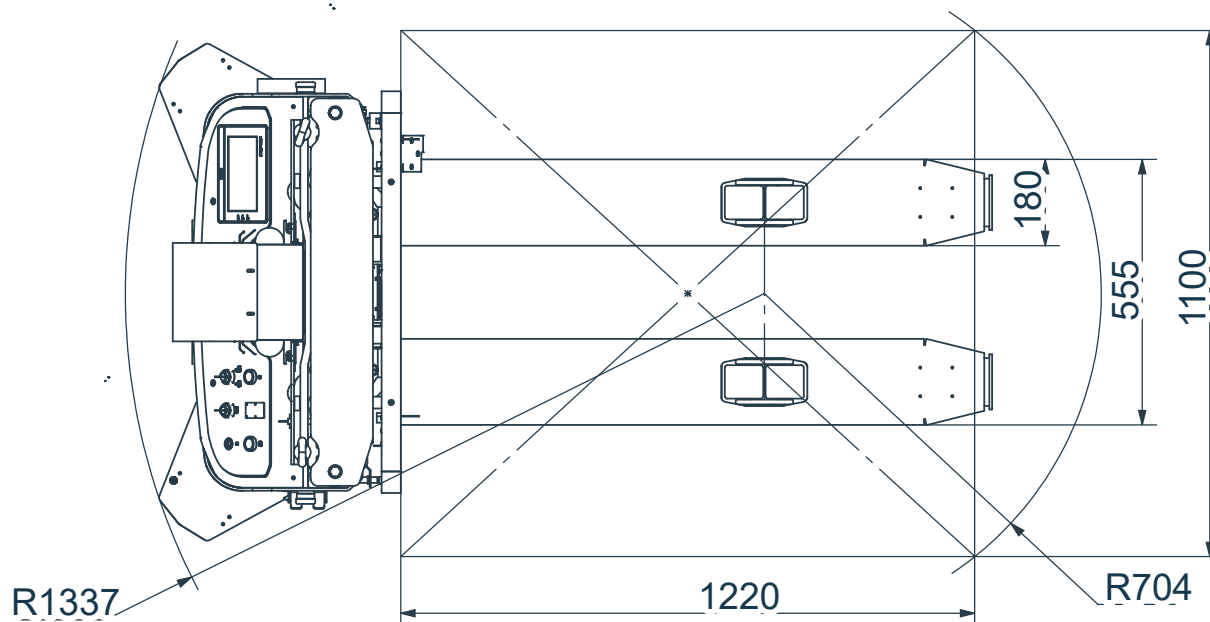


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Robot dimensions

Dimensions in mm. Read the drawings according to their numerical labels.

Top



Front



Side

View the model and available materials at agv.inovatica.com.

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