

RAIL 500

*Compact
Gantry Crane
(230 V Electric Drive)*



Rail 500 is a compact, portable gantry crane equipped with an electric chain hoist and motorized trolley, designed for lifting and handling loads along a straight working zone where traditional overhead cranes are not available or are uneconomical to install.

A 4.1 m front span combined with a 1.5 m side clear opening enables cross-loading between vehicles, work areas or door openings without moving the gantry out of the working zone. The foldable, knock-down design simplifies transport, storage and use on temporary or rented sites.

Rated lifting capacity	500 kg
Maximum lifting capacity	Up to 1000 kg
Maximum lifting height	Up to 4.2 m
Front clear opening (span)	4.1 m
Side clear opening (between supports, for cross-loading)	1.5 m
Power supply	1×230 V AC, 50 Hz; 0.85 kW
Principle of operation	Electric trolley and electric chain hoist, dual-speed
Controls	Wired pendant (optional radio remote)
Approximate weight	380 kg



Typical Applications

RAIL 500 is intended for material handling tasks such as:

- Loading and unloading pallets, machinery and equipment inside workshops, service bays and small industrial units.
- Cross-loading between vans, flatbed trucks and indoor work areas through doors, gates or openings aligned with the gantry span.
- Positioning of compact machines, pumps, HVAC units and components onto foundations, platforms or mezzanines within the 4.1 m working span.
- Temporary lifting setups on rented or semi-permanent sites, where installing a fixed overhead crane is not feasible.
- Maintenance, repair and small construction works requiring a relocatable lifting solution that can be dismantled or folded for transport.

Key Features & Benefits

- **Knock-down / foldable design**
The gantry frame can be folded into a compact envelope (approx. 1.4 × 0.8 × 5.4 m) for easy transport, storage and relocation between sites.
- **Cross-loading through side opening**
A 1.5 m side clear opening between the legs enables

cross-loading between different work zones (for example, from a truck parked alongside to an indoor bay) without needing to reposition the entire gantry. Electric drive makes RAIL 500 particularly suitable for rented buildings, workshops or sites where permanent crane installation is not justified.

- **Motorized trolley for precise positioning**
The electric trolley provides controlled, dual-speed horizontal travel along the 4.1 m span, improving positioning accuracy and reducing manual pushing of the load.
- **Complete, ready-to-use package**
Supplied as a complete system including the gantry frame, electric chain hoist, electric trolley and wired pendant control; optional radio remote enables safe operation from a distance.
- **Single-phase 230 V power**
Operates from a standard 230 V AC single-phase supply (50/60 Hz), with installed power around 0.85 kW, allowing use on common industrial and commercial electrical infrastructures.
- **Ideal for temporary and rented facilities**
The combination of foldable structure, moderate weight and standard-voltage electric drive makes RAIL 500 particularly suitable for rented buildings, workshops or sites where permanent crane installation is not justified.

Technical Specifications

Lifting Performance

Rated lifting capacity (SWL)	500 kg
Maximum lifting capacity	Up to 1000 kg
Maximum lifting height	Up to 4.2 m (hook height, depending on hoist configuration)
Front clear opening/span	4.1 m
Side clear opening between supports (for cross-loading)	1.5 m



Gantry Structure & Travel

- **Gantry type:** free-standing, portable gantry crane with fixed span and foldable / knock-down support frames.
- **Travel system:** motorized trolley running on the main beam (electric, dual-speed).
- **Support arrangement:** two portal support frames forming the 4.1 m span with 1.5 m side opening for cross-loading.

Hoist & Controls

Hoist type	Electric chain hoist, dual-speed lifting
Trolley	Electric travel trolley, dual-speed horizontal motion
Standard control	Wired pendant with direction controls and emergency stop
Optional control	radio remote control for wireless operation of lifting and travel motions (start/stop, up/down, trolley travel; emergency stop).

Safety & Standards

RAIL 500 is designed and supplied in conformity with applicable EU machinery safety requirements, including: Directive 2006/42/EC (Machinery Directive) — CE marked, EN ISO 12100 – Safety of machinery, general principles for design, EN 60204-1 – Electrical equipment of machines, EN ISO 13849-1/-2 – Safety-related parts of control systems.

Integrated protective functions include: Overload limitation (preventing lifting above the rated capacity), Over-hoist limit switch for the hoist hook, Emergency E-stop function acting on the electrical control circuit.

An EU Declaration of Conformity and standard documentation set are supplied with each unit upon delivery.

Power Supply & Generator Requirements

- **Supply voltage:** 1×230 V AC, 50/60 Hz.
- **Supply type:** single-phase, via industrial plug / socket (details per project).
- **Installed power:** approx. 0.85 kW (gantry hoist + trolley).

Figure 1

General arrangement / side view and main dimensions of RAIL 500 (erected position).

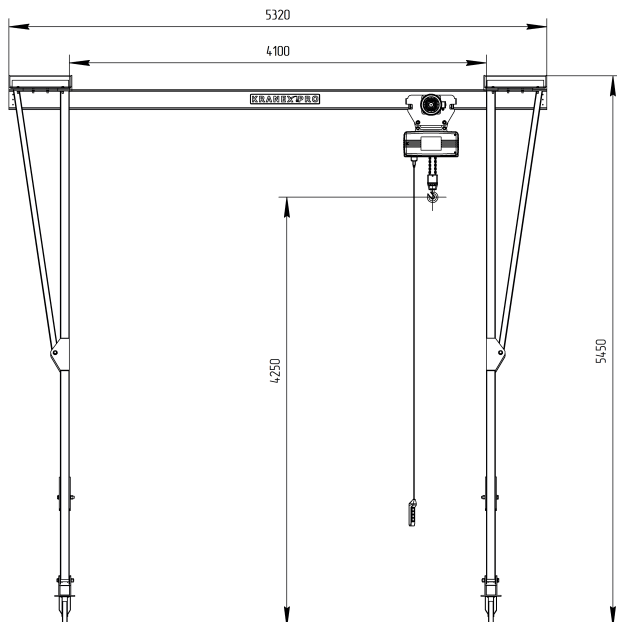


Figure 2

Working envelope and clear openings (front span and side opening).

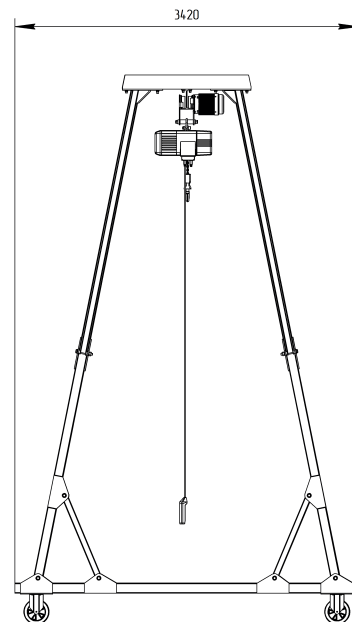
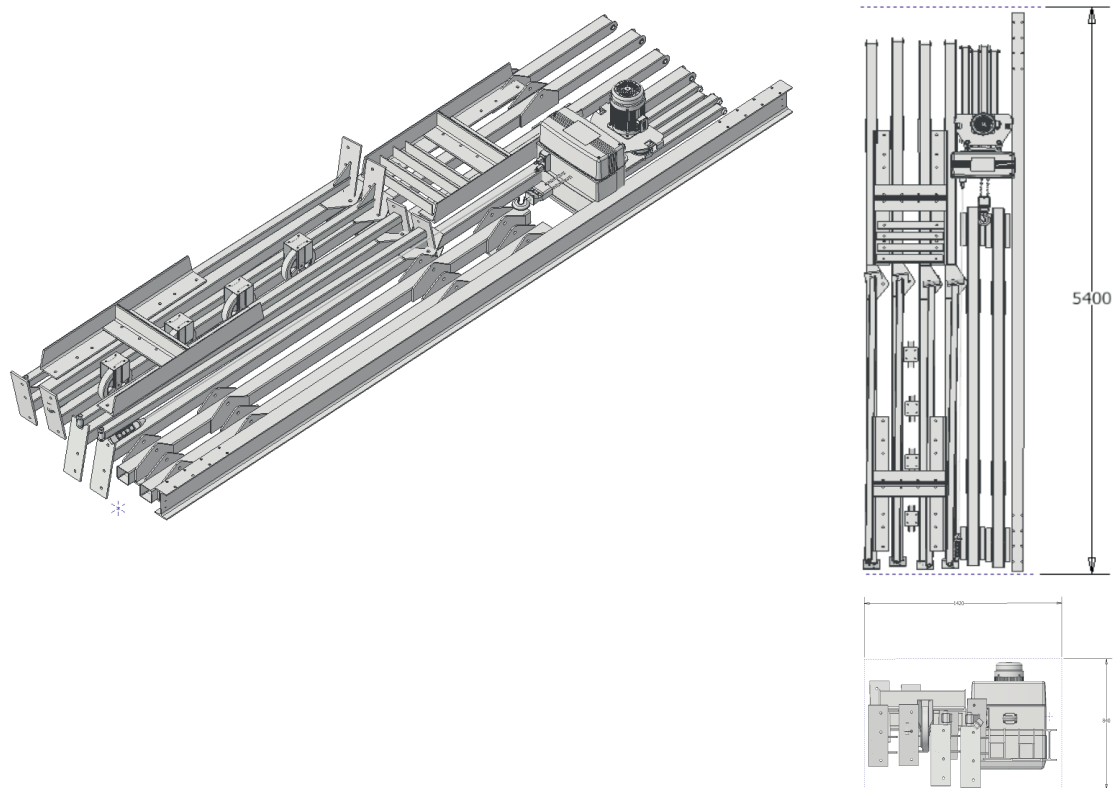


Figure 3

Overall dimensions in transport (stowed) position.



Options & Accessories

RAIL 500 can be configured with a range of accessories to match specific applications and site conditions, for example:

- Hoist & trolley options
- Alternative electric chain hoist configurations (e.g. different lifting heights or rated capacities up to 1000 kg).
- Alternative travel speeds for the electric trolley, depending on application.
- Lifting accessories
- Additional hooks, shackles and lifting slings.
- Simple spreader beams or lifting frames for handling long loads, bundles or equipment skids.
- Power & control
- Radio remote control set (if not included in the base package).
- Extended power and pendant control cable sets to suit local installation layouts.
- Site equipment
- Additional support / bearing pads, mats or wedges for use on sensitive or slightly uneven floors.

Availability of specific options may vary depending on configuration and market; detailed option lists and project-specific configurations are available on request.