KINOCRANES

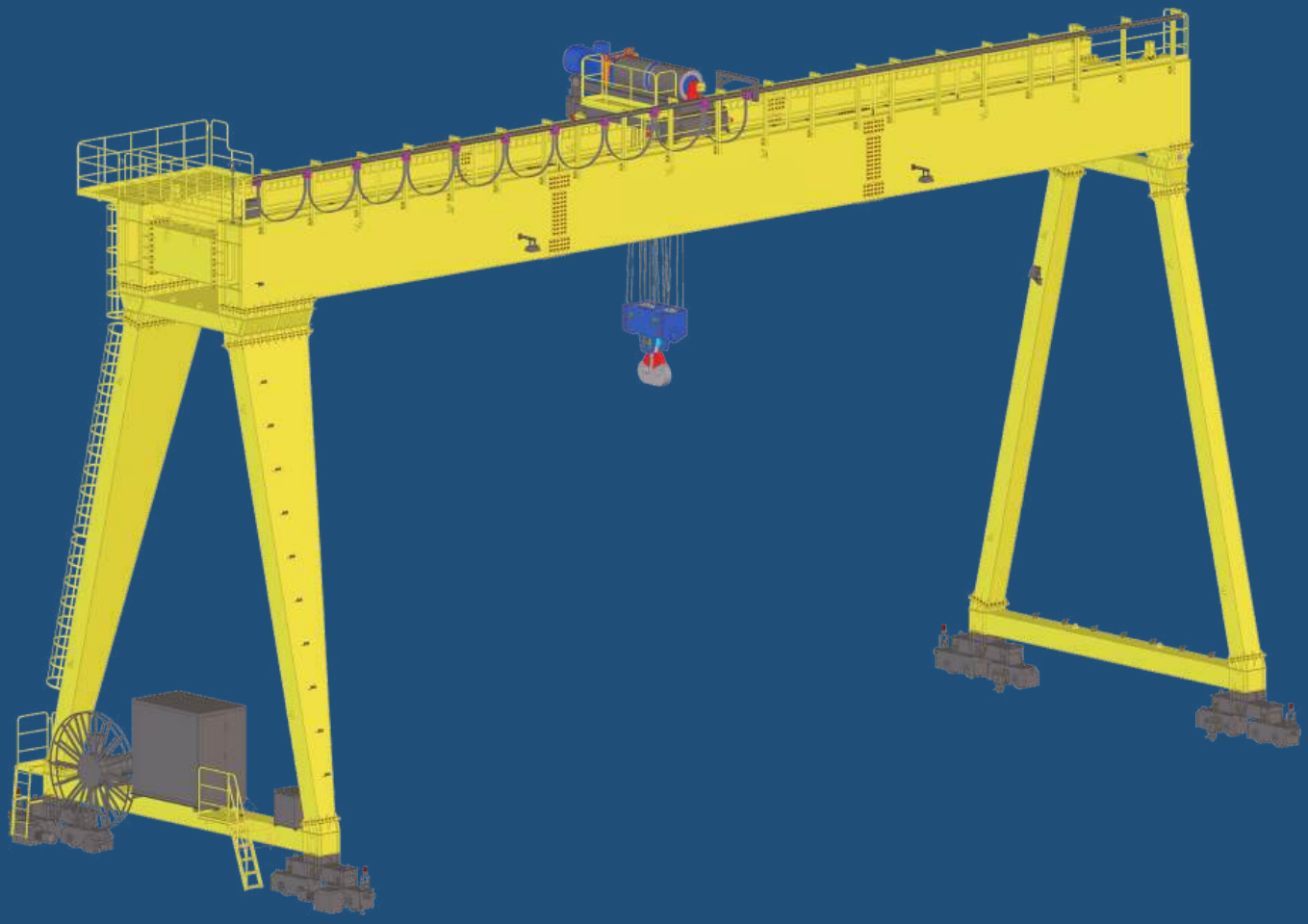
European Crane Technology | kinocranes.com

CE
CERTIFIED

European Gantry Crane

Single & Double Girder Gantry · Semi-Gantry · 3.2 - 32 t standard

Product Guide - Technical Overview & Specifications



3.2-32 t	9-28.5 m	CE · FEM · DIN · ISO	84
standard range, semi-gantry 0.5-32 t	standard spans, larger on request	certification & design codes	standard configurations, each with GA drawing

WHY A EUROPEAN GANTRY CRANE

Lifting power without a building.

A gantry crane carries its own runway: it travels on ground-level rails, so it works where an overhead crane cannot - open yards, light buildings and bays without crane beams. The European design brings the same lightweight girders, K-series hoists and inverter drives as our overhead cranes - CE certified and engineered to FEM 1001, DIN 15018 and ISO codes.

No crane beams, no corbels

The full gantry runs on P22/P30 ground rails and needs no building structure at all; the semi-gantry needs an elevated runway on one side only - ideal for side bays and building retrofits.

84 standard configurations

3.2-32 t, spans 9-28.5 m, lifting heights 6/9 m - every combination pre-engineered with a GA drawing, dead weight and wheel loads. Proposals in days, and civil data for your designer immediately.

Floor stays clear and flat

Semi-gantry lower carriages run on flangeless flat wheels over a grooveless floor - forklifts and AGVs cross freely. Guard rings, scraper plates and a leg-mounted E-stop protect people at floor level.

One proven platform

Gantry and overhead cranes share the K-series hoist platform: HRC 60 lifetime-lubricated gearing, IP55 motors, dual overload protection at 2 %, iSS safety monitor - and one spare-parts pool shipped in 1-7 days.

The gantry family at a glance

Series	Capacity	Span	Lifting height	Travel
Single girder gantry	3.2 / 5 / 10 t	9 - 19 m	6 / 9 m	Ground rail P22/P30
Double girder gantry	16 / 20 / 25 / 32 t	13.5 - 28.5 m	6 / 9 m	Ground rail P30
Semi-gantry	0.5 - 32 t	per building	per building	Runway one side + floor
Heavy-lift gantry	on request	on request	on request	Project design

Semi-gantry range per equipment description HS006; single/double girder gantry per standardized parameter table V01.

ENGINEERING DETAILS

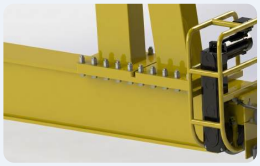
Built for ground-level work

Four-column gantry legs

Hot-rolled square-tube columns with connection plates and locating pins cut weight and resist torsion—no floor guiding needed. Grade 10.9 HT bolted joints with torque labels; outward or inward lean to suit the floor plan.

Lower end carriage

Flangeless flat wheels run on a grooveless flat floor, keeping logistics routes open. Box-section body with bearing housings, buffers, motor guard covers and floor-level scraper plates.



Personnel guard rings

Fitted at both ends of the floor-travelling carriage, gently alerting anyone within 0.5 m of the travel path on start-up—a safety device purpose-built for cranes that share the floor with people.

Leg-mounted E-stop

An emergency-stop switch at 1.5 m height on the leg puts a full power cut within reach of anyone on the floor—no climbing, no control room.

C-type compact drive

Motor and output shaft on the same gearbox side, with the motor tucked above the end carriage—no side overhang, maximizing clear space inside and outside the span.

Extension arm (option)

An extension arm carries the hook past the leg to serve the area outside the span—moving loads between bays in a single lift.

K-series hoist platform

The same hoists as our overhead cranes: HRC 60 hardened gearing lubricated for life, IP55 Class-F/H motors at 60% ED, dual overload protection at 2% accuracy, galvanized 2,160 N/mm² rope.

iSS safety monitor (patented)

33 real-time monitoring and protection items with Safe Working Period (SWP) calculation, full fault logs and optional 4G/SMS remote access—standard on every hoist.

POWER & PROTECTION

Three power schemes, layered safety

Travel power is chosen by current, travel distance and whether people or vehicles cross the crane's path - each scheme has clear application limits, fixed at proposal stage together with the civil interface.

Scheme	Suits	Limits	Civil works by customer
A - Overhead conductor line	High power or crossing traffic	>400 A; single-end feed to 100 m, both ends beyond	Posts with anchor foundations, main switch box, feeder cable
B - Ground safety conductor line	Dedicated crane runways	⩽400 A; no people/vehicles crossing; ~0.75 m posts; floor variation ⩽10 mm	Chemical-bolt post fixing, main switch box, feeder cable
C - Ground cable reel	Shorter runs with foot traffic	⩽150 A; travel ⩽150 m; people may cross, vehicles may not	Cable trench with grating cover, main switch box, feeder cable

Source: gantry power-supply selection sheet V05 (Oct 2021).

Staged overload protection

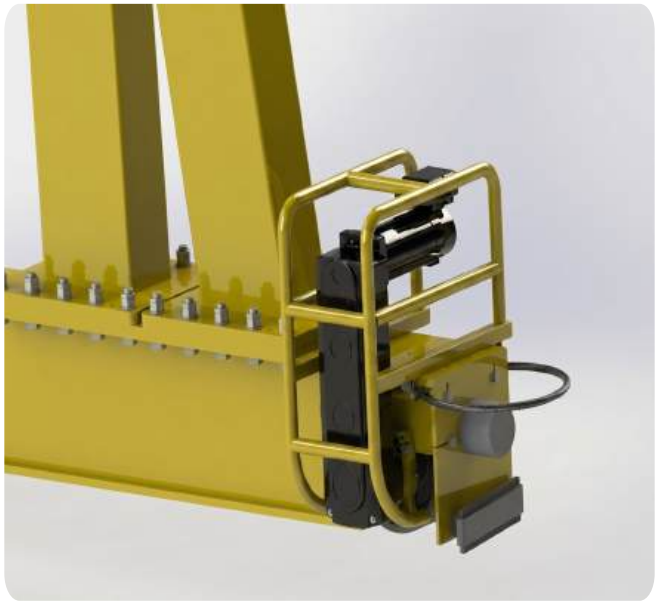
Dual electronic + mechanical load sensing with ±2 % full-load accuracy: alarm at 100 %, hoisting blocked at 110 % (lowering stays available), automatic stop at 125 %.

Complete protection set

Under-voltage, over-current, earth-fault and short-circuit protection · Phase-loss and phase-sequence protection · Motor thermal protection on all drives · Six-step hoisting limits with anti-two-block ultimate limit · Travel limits (IP65) with infrared long-travel option · Anti-derailment and anti-drop devices · Energy-absorbing buffers · Guard rings and scraper plates on floor-travelling carriages · Leg-mounted emergency stop at 1.5 m · Options: electronic anti-sway, zero-speed hover, micro-move (2-100 mm), area limitation, storm anchor with wind limits and rain covers for outdoor service

iSS intelligent safety monitor - standard

The patented iSS monitor supervises **33 protection items** in real time and computes the remaining **Safe Working Period (SWP)**, with full fault logs and optional 4G/SMS remote access - so maintenance is planned from data, not guesswork.



TECHNICAL DATA

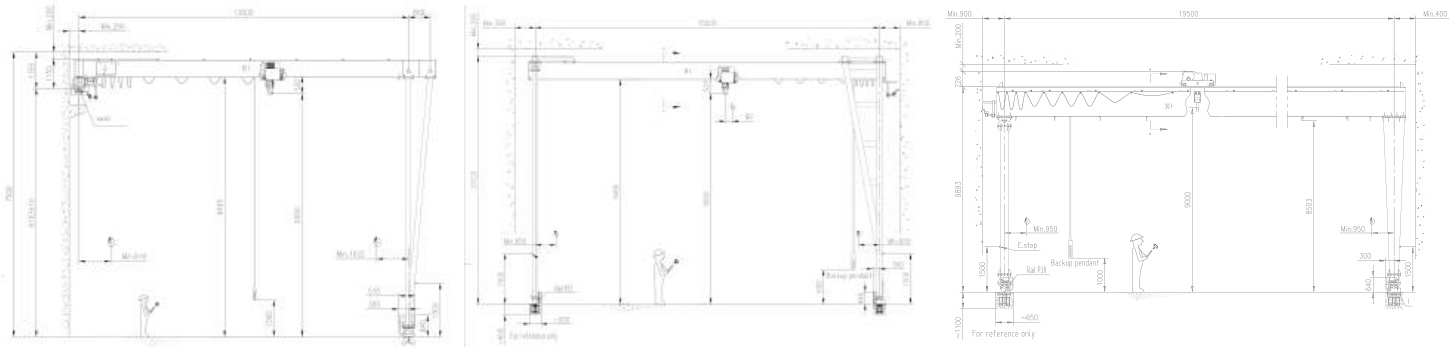
Series range

Product series	Single girder gantry · double girder gantry · semi-gantry · heavy-lift gantry (project design)
Rated capacity	Standard gantry 3.2-32 t (84 pre-engineered configurations); semi-gantry 0.5-32 t
Span	Single girder 9-19 m; double girder 13.5-28.5 m in 3 m steps; larger spans on request
Lifting height	Standard 6 / 9 m; higher lifts on request
Duty class	Crane A5; hoisting unit FEM M4-M6
Hoisting speed	5/0.83 m/min (3.2-10 t) · 4/0.67 m/min (16-25 t) · 3.2/0.5 m/min (32 t); inverter option
Travel speeds	Trolley: inverter 0-20 m/min; crane: inverter 0-32 m/min
Crane rail	P22 (3.2-5 t single girder) · P30 (10 t and all double girder) - ground level
Leg configuration	European four-column legs, outward lean standard / inward optional; grade 10.9 bolted joints
Travel power supply	Overhead conductor line (>400 A) · ground safety conductor line (⩽400 A) · ground cable reel (⩽150 A, ⩽ 150 m)
Design standards	FEM 1001 · DIN 15018 · ISO · welding to DIN 18800 · hooks to DIN 15400 · motors to IEC 34
Certification	CE certified - current certificates available on request
Power supply	3-phase five-wire TN-S, AC 380 V ±10 %, 50 Hz (other voltages / 60 Hz on request)
Control voltage	AC 48 V standard via isolating transformer (115/220 V optional)
Ambient conditions	-10 to +45 °C, RH <90 %; low-temperature packages to -30 °C optional
Outdoor options	Storm anchor with wind limits, rain covers, panel heating / forced cooling
Control modes	Radio remote (2.4 GHz) · pendant (IP65) · cabin · remote control

Typical configurations

Series	Capacity	Span	Lifting height	Hoisting speed (m/min)	Travel motors (kW)	Max wheel load (kN)	Rail	Crane weight (t)
SG gantry	3.2 t	13 m	9 m	5 / 0.83	2 x 0.65	32.5	P22	6.96
SG gantry	5 t	13 m	9 m	5 / 0.83	2 x 0.65	42.9	P22	7.72
SG gantry	10 t	15 m	9 m	5 / 0.83	2 x 1.1	76.1	P30	11.3
DG gantry	16 t	19.5 m	9 m	4 / 0.67	4 x 0.65	65.6	P30	22.65
DG gantry	25 t	22.5 m	9 m	4 / 0.67	4 x 1.1	94.8	P30	28.6
DG gantry	32 t	25.5 m	9 m	3.2 / 0.5	4 x 2.2	119.5	P30	35.5

Six of 84 standard configurations (parameter table V01); trolley speed 0-20 m/min inverter on all models. Full tables for every capacity/span/height combination - with girder section, end carriage type and GA drawing - are available on request.



QUALITY YOU CAN AUDIT

Manufacturing & testing

Gantry cranes are built in the same audited plant, on the same processes and test rigs, as our European overhead cranes.

Fabrication process

Girder webs are cut from whole plates on a 40 m NC cutting system and joined by automatic submerged-arc welding; welds are verified by UT/MT/PT non-destructive inspection. Complete girders pass through shot blasting to Sa2.5 before a dual-layer epoxy coating system (≥120 µm total) rated for a 10-year service life. Legs join girders and end carriages with grade 10.9 HT bolts, torque-labelled at every joint.

Factory testing - before anything ships

14 test categories cover every critical component: 100 % dynamic balancing of all rotors, stator insulation and surge testing, motor dynamometer curves, gearbox pressure-tightness testing, CMM dimensional inspection, full-life testing of limit switches, and load calibration of every safety monitor. Every hoisting unit passes a powered full-function test and load test before dispatch.

Certified and audited

Products carry **CE certification**, with current certificates available to customers on request. Cranes are produced at a dedicated 12,863 m² facility in Tianjin, China, running Baosteel plate and Schneider Electric components as standard; the plant was assessed by independent auditor V-Trust in a full supplier assessment. Products are exported to the EU, North and South America and Southeast Asia.


MACHINERY DIRECTIVE
ATTESTATION OF CONFORMITY


CERTIFICATE OF CONFORMITY OF QUALITY MANAGEMENT SYSTEM CERTIFICATION
HENAN KINO CRANES CO., LTD.
GB/T 19001-2016/ISO9001:2015 Standard
SALES AND EXPORT OF CRANES AND ACCESSORIES

84	2±%	HRC 60	1-7 days
standard configurations with GA drawings	overload sensing accuracy	gear hardness, lubricated for life	spare parts dispatch

Ready to specify your gantry crane?
Send us your capacity, span, lifting height and site conditions - we will return a full technical proposal with the GA drawing, wheel loads and the right power-supply scheme.
inquire@kinocranes.com · Tel/Fax +86-373-3809044

www.kinocranes.com

Specifications subject to change with product development. Values in this guide are drawn from the manufacturer's technical documentation; configuration-specific data is confirmed at quotation.