

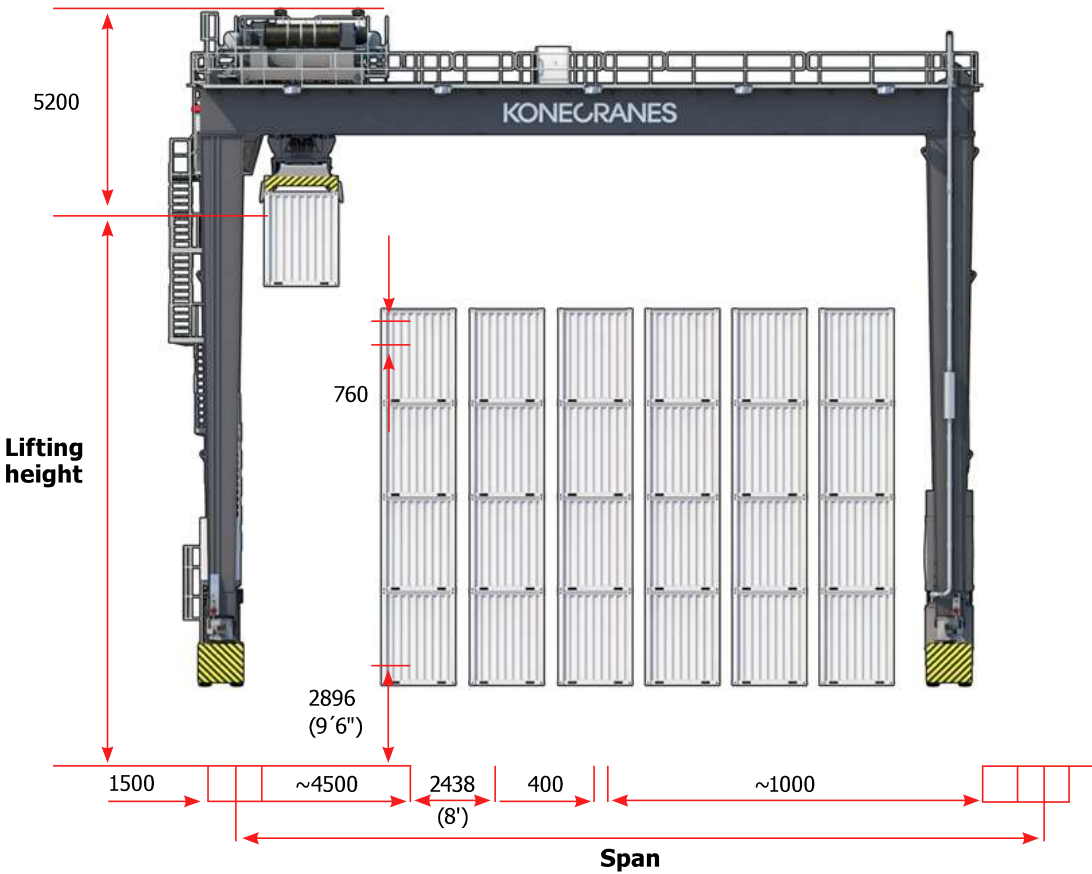
FEATURES AND TECHNICAL INFORMATION

Konecranes RTG: from the creator of the modern RTG

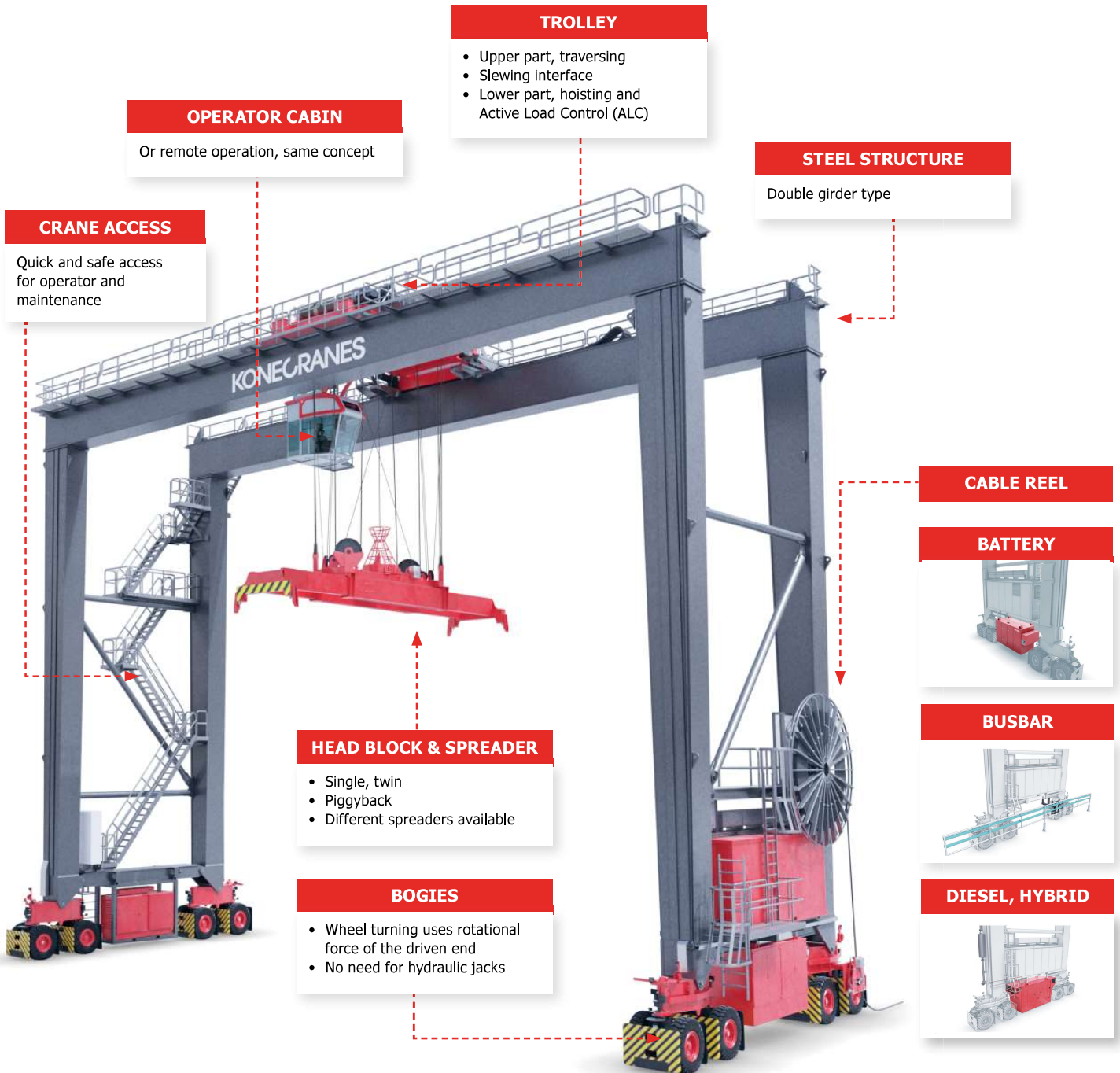


Konecranes RTG

Typical dimensions



Width	Span	Height	Lifting height
5+lane	20,800	1-over-3	12,340
6+lane	23,600	1-over-4	15,240
7+lane	26,400	1-over-5	18,100
8+lane	29,200	1-over-6	21,000

Konecranes RTG**Main modules,
all hydraulics-free**

Konecranes RTG

Operating concept

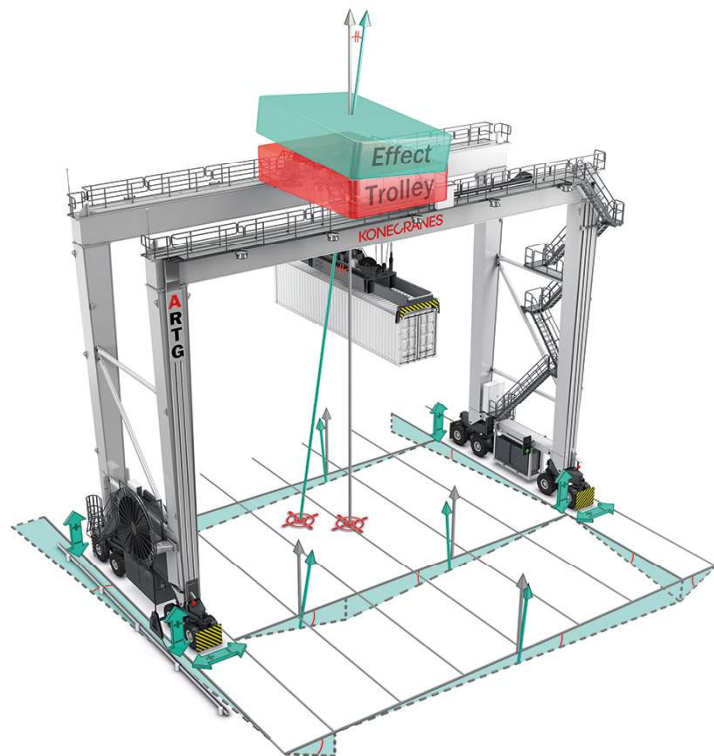


Smarter cabin and remote operation

The smarter cabin provides the operator with excellent visibility and comfort. The operating concept is consistent across cabin operation and remote operation, with a user interface that works identically across the two modes. It is remarkably easy to move to remote operation: the crane operators just move into an office working environment.

Better tolerance for uneven yard surfaces

- Bogies with pinned joints
- Steel structure with pinned diagonals
- Dual hoist machinery trolley
- Four-wheel trolley drive
- Tolerates even ± 1 ft (≈ 30 cm) difference in ONE corner in static condition
- With Active Load Control, a prerequisite for successful automated operation



Konecranes RTG

Trolley

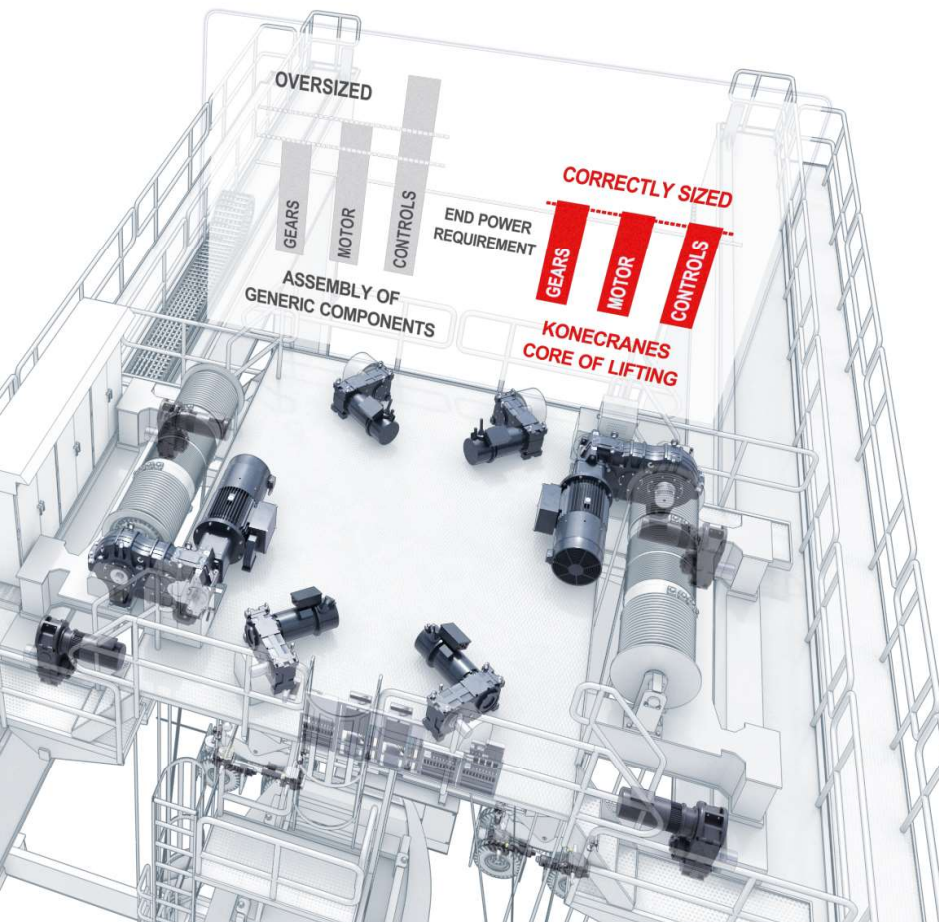
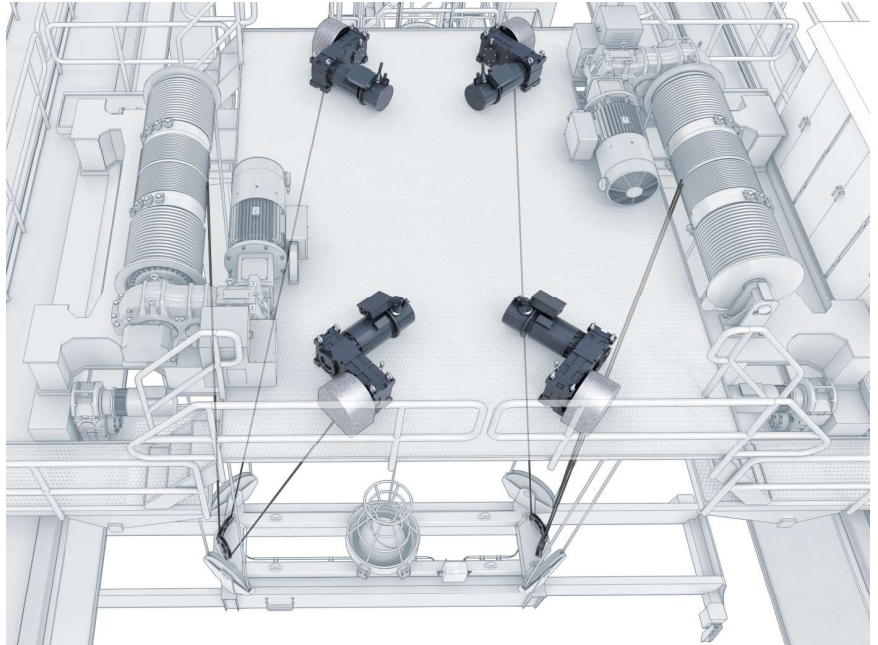
ACTIVE LOAD CONTROL (ALC) Integrated sway prevention and fine positioning system

The container:

- Does not sway
- Can be fine-positioned in all directions without moving gantry or trolley
- Is fully controlled during the entire work cycle

You get:

- Faster and safer work cycles
- Reduced energy consumption
- Reduced crane wear



Core of Lifting

- Integrated package of gearbox, motor and controls that is designed and manufactured by Konecranes in-house specifically for cranes and lifting motions
- Over 1,000,000 gearboxes made and delivered since 1933
- Over 2,000,000 motors made and delivered since 1933



Konecranes RTG

Technical data

Main parameters	16 wheels	8 wheels
Lifting capacity	40LT, 50LT	
Performance	Up to 40+ containers/hr	Up to 40+ containers/hr
Main dimensions, vertical	1-over-3 up to 1-over-6	
Main dimensions, horizontal	5 + truck lane up to 8 + truck lane	
Simultaneous movements	2 or 3 movements	

Speeds	Active Load Control (ALC)	Electrical anti-sway
Lifting speed with full load	Up to 31 m/min	26 m/min
Lifting speed without load	62 m/min	52 m/min
Trolley travel speed with & without load	Up to 82 m/min	70 m/min
Gantry travel speed	Up to 135 m/min	Up to 130 m/min

Sway prevention system	Active Load Control (ALC)	Electrical anti-sway
Performance	40+ containers/hr	30+ containers/hr
Automation readiness	Full	Partial
Fine positioning	±250mm (4 directions)	Optional spreader side-shift
Trim	±5°	±5°
Skew	±5°	±5°

Bogies	16 Wheels	8 Wheels
Tire size / pressure, bar	14.00 x 24 / 10	18.00 x 25 / 10
Wheel load, tons, with 1-over-5 and 6 + truck lane, max. load, no wind	18.0	31.5
Runway width	Min. recommended 1.8m	Min. recommended 1.8m
Wheels driven	50% (8 wheels)	50% (4 wheels)

Main options	
DGPS Auto-steering	Dual-antenna technology for accurate real-time heading info and rapid signal recovery
Diesel Fuel Saver System	Two-step or variable speed application

Konecranes RTG

Smart Features, components, power options

Most common Smart Features

Auto-steering	Keeps RTG on a pre-programmed, straight path creating "virtual rails" +/-100mm
Auto-positioning	Automatically stops gantry & trolley over next container target slot based on "hold to run" approach (requires Auto-steering)
Auto-truck Guiding	Automatically guides the truck to position under the RTG in line with the bay, like entering a car wash
Stack Collision Prevention	Helps crane operator (or remote operator) prevent container collisions and knock-downs when a container is moved in bay direction
Truck Lift Prevention	Automatically stops hoisting motion if a truck lift is detected
Auto-path Optimizing	Increases container handling efficiency in the stack
Auto-TOS Reporting	Enables accurate yard inventory

Core of Lifting components*

16 wheels and 8 wheels

Motors*	Konecranes
Gear reducers*	Konecranes
Drive system*	Konecranes/Danfoss drives
Programmable Logic Controller (PLC)	Siemens

*Extended 5-year warranty available

Power supply options

Primary power source

Secondary power source

Diesel engine	X	X
Cable reel 3-phase, 50/60 Hz, 1-10kV	X	
Busbar, 460-500V	X	
Hybrid	X	
Battery pack	X	X
Auxiliary genset		X

Konecranes RTG

Mass (kg)

RTG Size	Steel structure	Walkways	Cableways	Total mass [kg]
1 over 5, 5+lane	58,000	6800	1240	64,800
1 over 5, 6+lane	61,500	7000	1400	68,500
1 over 5, 7+lane	64,000	7200	1560	71,200
1 over 6, 5+lane	66,500	6800	1240	73,300
1 over 6, 6+lane	70,000	7000	1400	78,400
1 over 6, 7+lane	73,500	7200	1560	82,260
16 W bogies				22,000
8 W bogies				25,000
Trolley Active Load Control (ALC)				22,500
Trolley (Dynapilot)				20,500
Spreader				8000
Headblock				2000
Diesel generator				6000
E-room				5000

Konecranes RTG**With diesel power generation**

Battery (N/A)
 Hybrid (apply - 0.1 ton)
 Busbar (apply - 0.6 ton)
 Cable reel (apply + 0.6 ton)

RTG 16W Active Load Control		Wheel loads [t]					
Load	Wind speed	1-over-5			1-over-6		
[t]	[m/s]	5+lane	6+lane	7+lane	5+lane	6+lane	7+lane
0		10.5	10.8	11.0	11.0	11.3	11.6
26	0	13.4	13.7	14.0	13.9	14.2	14.6
40.6	0	15.0	15.4	15.6	15.5	15.9	16.2
50.8		16.1	16.5	16.8	16.7	17.0	17.4
0		12.6	13.0	13.4	13.5	14.0	14.4
26	25	15.5	16.0	16.4	16.4	16.9	17.4
40.6	25	17.1	17.6	18.0	18.0	18.6	19.1
50.8	25	18.2	18.8	19.2	19.2	19.7	20.2

RTG 16W Electrical anti-sway		Wheel loads [t]					
Load	Wind speed	1-over-5			1-over-6		
[t]	[m/s]	5+lane	6+lane	7+lane	5+lane	6+lane	7+lane
0		10.3	10.6	10.8	10.8	11.1	11.4
26	0	13.2	13.5	13.7	13.7	14.0	14.3
40.6	0	14.8	15.1	15.4	15.3	15.7	16.0
50.8		15.9	16.3	16.6	16.4	16.8	17.2
0		12.5	13.0	13.4	13.5	14.0	14.4
26	25	15.4	15.9	16.3	16.4	16.9	17.4
40.6	25	17.1	17.6	18.0	18.0	18.5	19.1
50.8	25	18.2	18.7	19.2	19.2	19.7	20.2

RTG 8W Electrical anti-sway		Wheel loads [t]					
Load	Wind speed	1-over-5			1-over-6		
[t]	[m/s]	5+lane	6+lane	7+lane	5+lane	6+lane	7+lane
0	0	20.9	21.5	21.9	22.0	22.5	23.1
26	0	26.7	27.3	27.9	27.7	28.4	29.0
40.6	0	29.9	30.6	31.2	31.0	31.7	32.4
50.8	0	32.2	32.9	33.5	33.2	34.0	34.7
0	25	25.5	26.4	27.1	27.4	28.3	29.2
26	25	31.2	32.2	33.0	33.2	34.2	35.2
40.6	25	34.5	35.5	36.3	36.4	37.5	38.5
50.8	25	36.7	37.8	38.7	38.7	39.8	40.8

RTG 8W Active Load Control		Wheel loads [t]					
Load	Wind speed	1-over-5			1-over-6		
[t]	[m/s]	5+lane	6+lane	7+lane	5+lane	6+lane	7+lane
0		21.3	21.9	22.4	22.4	23.0	23.6
26	0	27.1	27.8	28.3	28.2	28.9	29.5
40.6	0	30.4	31.1	31.6	31.4	32.2	32.8
50.8		32.6	33.4	34.0	33.7	34.5	35.2
0		25.6	26.5	27.2	27.5	28.4	29.3
26	25	31.4	32.3	33.1	33.2	34.2	35.2
40.6	25	34.6	35.6	36.4	36.5	37.5	38.5
50.8	25	36.9	37.9	38.8	38.7	39.8	40.8



Konecranes is a world-leading group of Lifting Businesses™, serving a broad range of customers, including manufacturing and process industries, shipyards, ports and terminals. Konecranes provides productivity enhancing lifting solutions as well as services for lifting equipment of all makes. In 2019, Group sales totaled EUR 3.33 billion. Including MHE-Demag, the Group has around 18,000 employees in 50 countries. Konecranes shares are listed on the Nasdaq Helsinki (symbol: KCR).

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