

FEATURES AND TECHNICAL INFORMATION

Straddle Carriers



Konecranes Noell Straddle Carrier at a glance

All-round well-built

The design of Konecranes Noell Straddle Carriers takes its cue from conditions prevailing in the terminal. They are easily maneuverable and offer high travel speeds. Their light-weight, but adequately rigid and durable steel structure and their low center of gravity provide a high degree of safety and convenience for the driver.

The slender portal and an all-round glazed cab offer drivers the best possible view of the whole working area at all times. In combination with the Konecranes Noell Spreader and the use of state-of-the-art components, the result is a highly cost-effective vehicle design.

VETRO CAB DRIVER'S CAB

- Large glass panels for good all-round visibility
- Ergonomically designed, adjustable driver seat; electrically rotatable on request
- Clearly structured displays
- Second seat for training instructor (optional)
- Other cab models available



Customer-specific cab configurations possible.

STAIRWAYS

- For easy and safe access to the driver's cab and machinery platform
- Second stairway (optional)



PORTAL

- Lightweight steel design with diagonal braces
- Yoke beam guided by low-maintenance sliding pads in the portal
- Spreader power and hydraulic supply via cable scissor arm or cable chain

SPREADERS

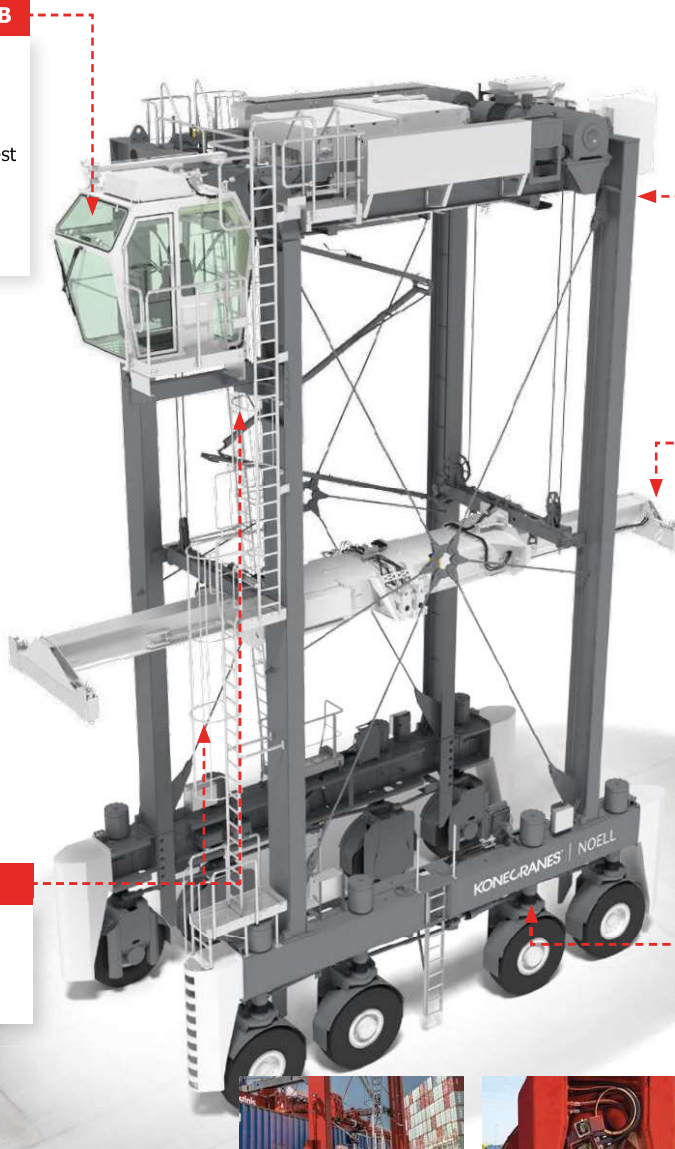
- Konecranes Noell Single-Lift and Twin-Lift Spreaders
- Patented modular twistlock mounting and locking
- Simple thanks to modern interface technology (CAN bus, corresponding to straddle carrier)
- Precise and fast thanks to smart sensor system and laser technology
- Soft landing function, automatic set-down function and low-maintenance guides

TRAVEL GEAR

- Good load distribution thanks to eight individually steered wheels
- Direct drive units thanks to wheel hub motors in four driven wheels
- Maintenance-free three-phase motors
- Wheels individually steered by steering cylinders and rods
- Individual wheel suspension with maintenance-free spring system
- Low tire wear thanks to electronic steering control
- Main fuel tank easily accessible in the carriage beam



Wheel hub motor



Machinery platform in focus

Easily accessible

The machinery platform of the Konecranes Noell Straddle Carrier is clearly structured. Its components are arranged for easy access in order to make service and maintenance quick and convenient. The use of durable components ensures long service intervals, which significantly contributes to the high availability of Konecranes Noell Straddle Carriers.

The diesel-generator set positioned at the center of the machinery platform can be fitted with a compartment to reduce noise emissions from the machine if required.

The hoist system of Konecranes Noell Straddle Carriers is positioned at the edge of the machinery platform to save space. It consists of a centrally positioned electric motor and two synchronized rope drums.



SWITCH CABINETS

- Contain the entire electrical equipment and electronics
- All cabinets stainless steel, partially air-conditioned

HOIST SYSTEM

- Maximum lifting capacity 60t
- Rope drums driven by centrally positioned electric motor
- Maintenance-free three-phase motor
- Simple, clearly arranged and protected rope guides up to the yoke beam
- Small number of rope pulleys for low rope wear in operation



BRAKE RESISTORS

- Both actuated and regulated



DRIVE UNIT

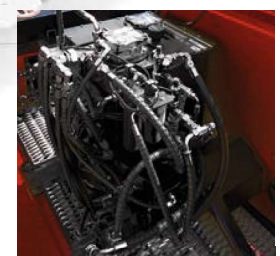
- High-performance diesel-generator set
- Sliding cover for easy maintenance access

WALKWAYS

- Amply dimensioned

HYDRAULICS MODULE

- Supplies spreader, steering cylinders and brake system with hydraulic energy
- Compact construction, physically separated from the diesel-generator set
- Driven by a separate shaft on generator



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Technical data hoist unit

		3-high	4-high
Nominal speeds	lift/lower with 40 t load *	20.0 m/min	20.0 m/min
	lift/lower with 50 t load *	16.0 m/min	16.0 m/min
	empty *	24.0 m/min	24.0 m/min
<p>Lifting and driving can be done simultaneously to increase the number of cycles. The electronic control prevents overloading of the diesel engine and ensures the distribution of load between the hoist unit and the chassis.</p>			
	Side shift/swing angle	+/-300 mm +/-6°	+/-300 mm +/-6°

* Data are based on operation with standard spreader.

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Chassis

Most common Smart Features		3-high	4-high
Nominal speeds	with load	approx. 30 km/h*	approx. 24 km/h*
	without load	approx. 30 km/h*	approx. 24 km/h*
Acceleration times	0–50 m		
	load and lift	approx. 12 s *	approx. 12 s *
	without load	approx. 15 s *	approx. 15 s *
	with load	approx. 25 s *	approx. 25 s *
Climbing ability	with / without load	approx. 6 %	approx. 6 %
Turning radius	inside	approx. 3.6 m	approx. 3.6 m
	outside (40' container)	approx. 9.3 m	approx. 9.3 m
Fuel tank	Total capacity of tank	750/1500 litres	750/1500 litres

Remark:

Containers are rarely loaded to their full capacity, the average container weights are approx. 17 t for 20' containers and 23 t for 40' containers. In view of this, all straddle carrier performance data relate to a nominal weight of 30.5 t which corresponds to the permissible gross weight of an ISO 40' container.

* with engine at operating temperature.

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Dimensions and weights

	3-high	4-high
Lifting height under twistlocks [H2]	9.1 m	12.0 m
Lowest position BE (below edge) spreader	0.3 m	0.3 m
Overall height (unloaded) [H1]	12.5 m	15.5 7 m
Overall length including ram buffer [L3]	10.3 m	10.3 m
Overall width (with front cab) [W2]	4.87 m	4.87 m
Clearance sill beam [W1]	3.47 m	3.47 m
Wheel baseWheelbase (inside wheels) [L1]	3.7 m	3.7 m
Wheel baseWheelbase (outside wheels) [L2]	7.7 m	7.7 m
Inside turning radius [R1]	3.6 m	3.6 m
Outside turning radius [R2]	9.3 m	9.3 m
Total weight, ready to operate, including spreader	63.0 t	67.0 t

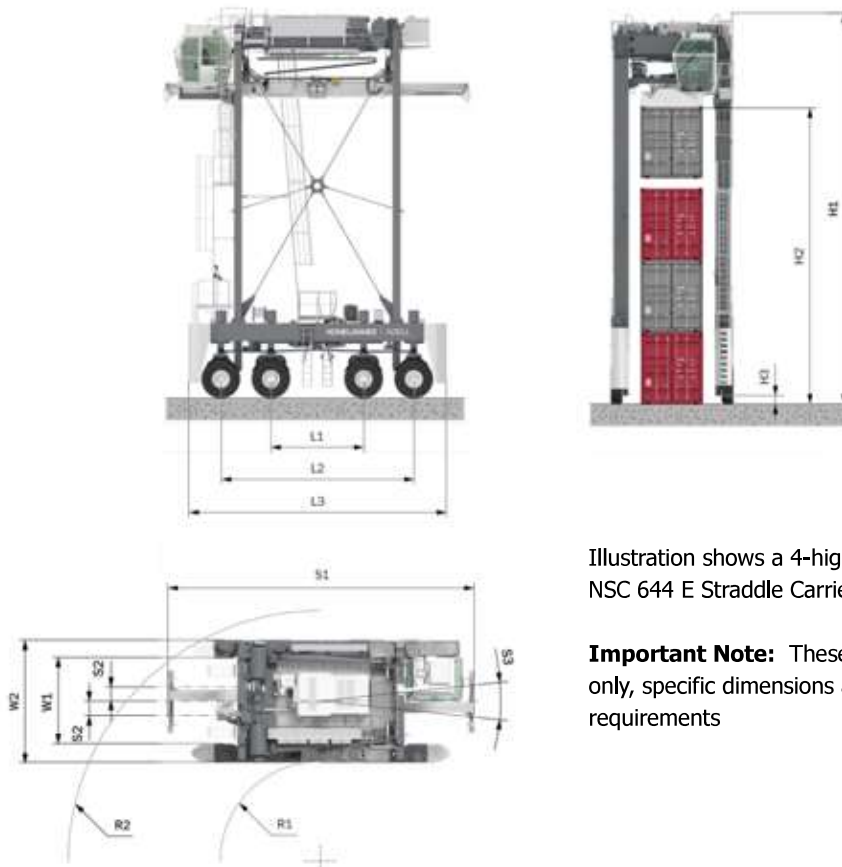


Illustration shows a 4-high KONECRANES | NOELL NSC 644 E Straddle Carrier

Important Note: These dimensions are examples only, specific dimensions are as per project / Customer's requirements

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