



Guaranteed to cut costs.

With our new
eco-efficient solution.

Reduce fuel costs, lower emissions.

Increasing fuel costs and tougher emissions standards means you need a solution that is lean and green, while still maintaining the highest levels of operational productivity.

The Kalmar Eco Reachstacker provides you with an eco-efficient solution that will have a positive financial impact on your business. It uses up to 40% less fuel than older machines and 25% less than more recent machines, reducing your fuel costs and lowering your emissions significantly while matching the productivity levels of machines with much bigger engines.

Eco-efficiency at work.

Reducing the fuel consumption of your equipment also reduces your emissions, which will enhance your environmental reputation and help you meet current and future emissions standards. Together we can shape the future of cargo handling, with safe and eco-efficient solutions that improve your every move.

The Kalmar Eco reachstacker can offer your business:



Up to a 40% reduction in fuel costs and consumption.



A significant reduction in operating noise for your operators and others nearby.



Up to a 40% reduction in CO₂, NO_x, SO_x and particulate emissions.



An ergonomically designed cabin for operational ease.



A much smoother drive, which will reduce stress and pressure on your driver's body.



Proven in the field.

Over 150 customers are already benefiting from substantially reduced fuel consumption and CO₂ emissions around the globe, proving that this technology not only delivers on the promised savings but also on performance.

Power Mode: when maximum productivity is of the essence. With full engine speeds you will be able to move quickly about the yard, lift and lower at full speed, without compromising on safety.

Normal Mode: for normal productivity and yard operations, you can expect 5-10% lower fuel consumption without compromising on productivity.

Save
5-10%
on fuel consumption

Economy Mode: for off-peak or night time operations when productivity is not essential or lower noise levels are required, you can expect 10-20% lower fuel consumption.

Save
10-20%
on fuel consumption

Guaranteed to save you thousands.

Knowing exactly what your fuel costs are going to be each month gives you a greater level of financial predictability, which is why Kalmar is offering a Fuel Saving Guarantee with each of its Eco Reachstackers.

Guaranteed to deliver.

With an agreed and fixed level of fuel consumption, based on a set of agreed metrics, you'll have complete control over your variable fuel costs. Should the fuel usage levels exceed the guaranteed levels of fuel consumption, Kalmar will compensate you for the additional fuel cost with a one off payment.

The fuel saving guarantee also provides your drivers with specialist training so they can get the most out of the machine. You also get connected with Kalmar Insight, giving you the ability to track and monitor your reachstacker and take immediate actions to optimise its operational efficiency. This will substantially help to reduce your cost per move.

Guaranteed to cut costs.

Your Eco Reachstacker is guaranteed to use less fuel, cutting your fuel costs substantially. This reduction in fuel costs will also cut your costs per move, helping you to be more competitive in a tough market.

Quiet and eco-efficient.

Cabooter Group, currently operate one barge and two rail terminals in the Netherlands and have been a long term partner of Kalmar. They turned to Kalmar first, when they were looking for a solution that was both eco-efficient and would significantly reduce operational noise levels, as their terminals are in built up urban areas.

"We chose the Kalmar Eco Reachstacker as we felt it represented the next big step in product innovation. It provides us with a low emission solution that is also significantly quieter. From the start our fuel consumption dropped from 15.7 to 12.9 l/hr, reducing our costs significantly. Our drivers are extremely excited as it is like driving a new Ferrari, not an old Volkswagen. This is a new generation of reachstackers, that are really good."

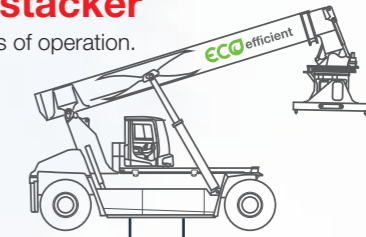
Peter Pardoel, Business Development and Operational Excellence, Cabooter Group.

Based on months of real operational data collected through Kalmar Insight, you can see the clear reduction in fuel costs and emissions between older machines and our new Kalmar Eco Reachstacker.

Kalmar Eco Reachstacker

Typical operating data for 2000 hours of operation.

Litres of fuel **33,270**
Euro **41,587**
Tonnes of CO₂ **89**



Saving you **up to 25%** in fuel costs in comparison to a recent machine.

Saving you **over 40%** in fuel costs in comparison to an older machine.

5 year old machine

Litres of fuel 41,068
Euro 52,334
Tonnes of CO₂ 110

10 year old machine

47,145
58,932
126

Calculations and assumptions: Fuel consumption data has been collected over a six month period using Kalmar Insight with an Eco Reachstacker, a 5 year old and a 10 year old reachstacker operating normally, with comparable idling time. We have used the following metrics for these calculations: 2000 operating hours per year, fuel at 1.25€ a litre and 2680 grams of CO₂ being produced per litre of fuel used.



When you drive your Kalmar Eco Reachstacker correctly, you will significantly reduce your fuel consumption and emissions by up to 40%.

Enhanced driving experience.



Increased safety and efficiency.

The Kalmar Eco Reachstacker uses a continuous variable transmission which provides smoother transition in shifts, drive stops and direction changes. This allows the operator to drive more precisely, resulting in increased safety levels.

Easier to operate.

Kalmar Eco Reachstackers are much easier to drive than other machines, as their smart programming does a lot of the work for you. Your drivers will no longer need to rev their engines to get the lifting and handling speeds they want, nor will they need to hold the brake pedal continually while lifting and lowering while stationary. This will dramatically reduce the strain and stress on their bodies.



Increased comfort.

Kalmar Eco Reachstackers come fitted with our ergonomically designed EGO cabin. With slim line b-pillars, adjustable seating, steering wheel and control panel, your drivers will benefit from a superior operating environment and visibility. The Kalmar Eco Reachstacker, with its unique driveline, is quieter inside and outside the cabin, and vibrates less than traditional reachstackers, further enhancing driver comfort.

Kalmar Training Academy.

Driving a Kalmar Eco Reachstacker is different than traditional reachstackers and, to get the most out of it, our training academy offers a range of courses for both your technicians and operators. Operators will be shown how to optimise their driving performance and what needs to be checked on the machine every day.

Technicians will be given the knowledge they need to be able to keep your new equipment in top condition. Courses are a mix of theory and hands on experience and can be held at Kalmar or at your site.

Kalmar Care.

Making sure your business never stops.

We offer you four different types of service and maintenance contracts, for any brand of equipment. Each is designed to help you improve your operational efficiency, drive productivity and secure financial predictability. The different contract types include a set of standardised service modules that can be tailored to meet your business needs. Opposite is an overview of the four contracts.

When the right part matters.

When something needs to be replaced you need a spare part that meets your exact needs – urgently. Kalmar offers a rapid delivery service for over 50,000 premium-quality genuine parts to anywhere in the world, with installation support if needed.

You may also want to consider outsourcing all or part of your spare parts management and inventory control, with Kalmar Parts Care. Kalmar Parts Care makes sure that critical spare parts are always on hand so your equipment downtime is kept at a minimum. Each Kalmar Parts Care plan is based on your operational needs, talk to us today and see how we can lift your parts availability, while reducing your inventory costs.

The four flexible types of service contracts.

Kalmar Support Care

We support your maintenance processes on demand.

- Availability of competent people with the right tools and parts
- Provides additional skills to existing maintenance organisation.

Kalmar Essential Care

We perform your agreed maintenance tasks proactively.

- Availability of competent people with the right tools and parts
- Higher degree of financial predictability
- Reduced operational risk to customer
- Improved availability of machines.

Kalmar Complete Care

We meet your complete maintenance requirements.

- Predictive maintenance planning
- Low operational risk to customer
- Reduced equipment downtime
- Reduced total cost of operation
- Increased operational predictability.

Kalmar Optimal Care

We optimise your business performance.

- Guaranteed availability
- Reduced tied-in capital
- Improved business performance
- Increased peace of mind.



Improve your fleet performance and your business.

Optimise your reachstacker with Kalmar Insight.

Kalmar Insight is a performance management tool for cargo and material handling, which gives you a valuable and easy to use overview of your daily operations based on equipment status and performance. Making it quicker for you to take action on relevant information that will help you improve your operations, your equipment's performance and your business.

Kalmar Insight* comes fitted in all new Kalmar machines and can be retrofitted to existing Kalmar machines or those built by other manufacturers. Kalmar Insight is included when the Eco Reachstacker is chosen with a Fuel Savings Guarantee.

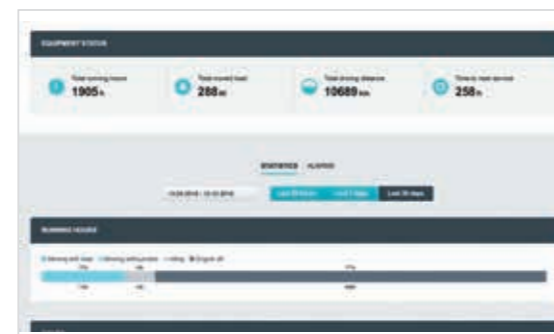


Access on mobile, tablet or traditional screen.

*Installation costs and/or an annual subscription fee may apply.



View each machine's movements as they occur.



Plan your maintenance and spare parts needs.



View each operator's performance in real time.

More support.

Kalmar Load Measurement Solution

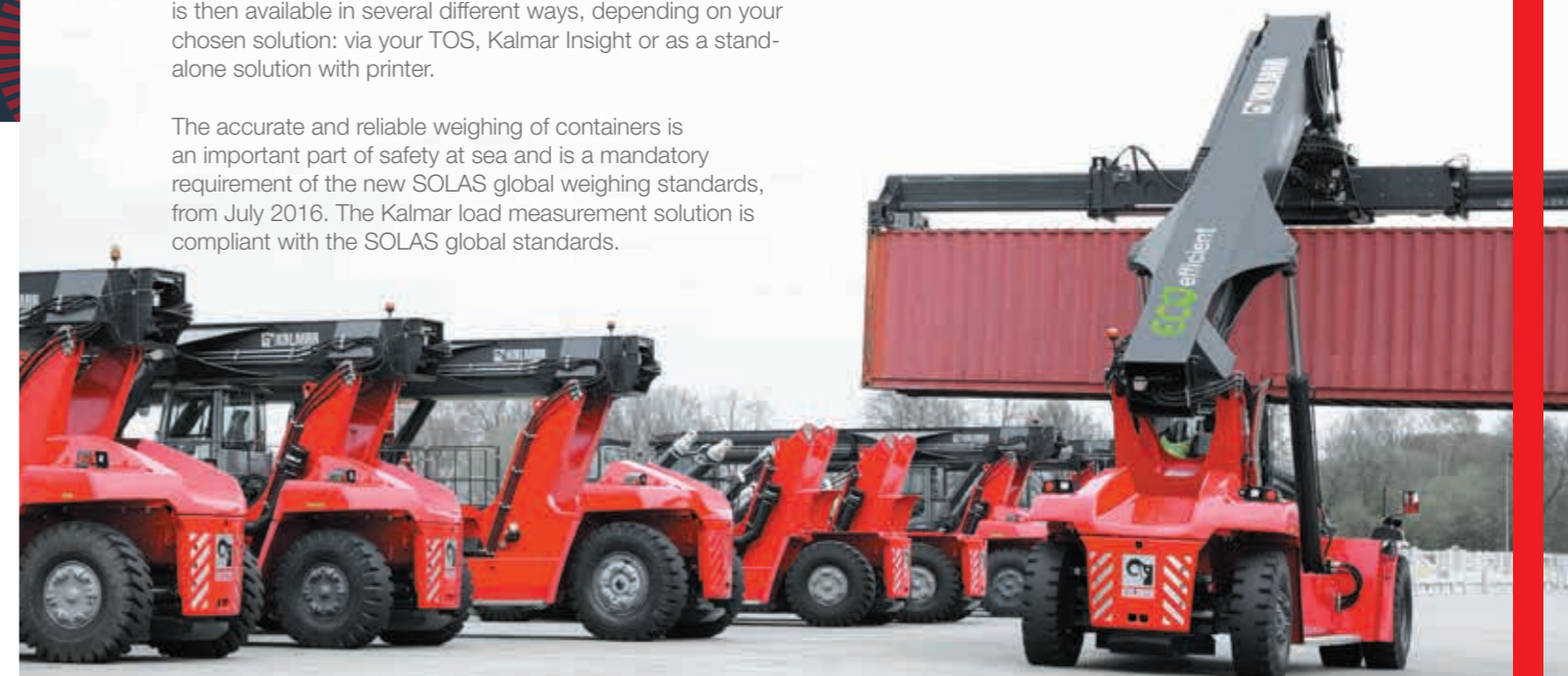
The Kalmar load measurement solution automatically weighs the load your equipment is handling. This information is registered so you can monitor and review each load, overloading or load distribution. The solution will save you time as the container is weighed while it is being moved and you can reduce paper work as this solution can automatically update other connected systems.

The Kalmar Load Measurement Solution records the Verified Gross Mass (VGM) of any load your equipment is handling, giving you the ability to monitor and review individual or batched loads and identify any overloading. This information is then available in several different ways, depending on your chosen solution: via your TOS, Kalmar Insight or as a stand-alone solution with printer.

The accurate and reliable weighing of containers is an important part of safety at sea and is a mandatory requirement of the new SOLAS global weighing standards, from July 2016. The Kalmar load measurement solution is compliant with the SOLAS global standards.

Financing options for you.

You may choose to buy your new Eco Reachstacker outright or consider leasing or renting your equipment. There are a range of leasing and renting options that give you the financial predictability you need and the option to upgrade your equipment after a fixed period. With our leasing package, you can focus on your core operations, while all your service and maintenance needs are covered. Kalmar can also help you with trading-in your old equipment.



How you will benefit from the Kalmar Eco Reachstacker:

- Big reduction in fuel consumption
- Big reduction in exhaust emissions
- Big reduction of noise levels, inside and outside the cabin
- Increased operation precision and control
- Increased driver comfort with less stresses and strains
- Increased driver efficiency and productivity
- Increased ease of operation.

Eco Reachstacker options.

Kalmar has an extensive list of options available that can help to improve operational safety or lower your fuel consumption. You choose which are right for you.

Kalmar eco-efficiency options.



Start/Stop function. An optional start/stop function can be added to automatically activate and deactivate the machine. In addition to reducing unnecessary emissions and extending the lifespan of components, this makes it possible to achieve up to 10% in fuel savings.



Tyre Pressure Monitoring System. Helps to reduce wear and tear on tyres which results in reduced fuel consumption. Bluetooth sensors keep the driver advised of the condition of the tyres. Active care of your tyres can result in a 10-40% increase in tyre life and up to a 10% decrease in fuel consumption.



Kalmar Speed Limitation System. The Kalmar Drive Speed Limitation System automatically restricts the speed at which your equipment can be operated, helping to reduce wear and tear as well as fuel consumption.



Reduced Steering Radius System. By reducing the overall steering radius of your reachstacker you will reduce wear and tear, extending the life of your tyres.

Kalmar safety options.



Reverse Warning System (RWS). Knowing what's going on behind you is critical when other personnel are present. Four rear sensors and a reversing camera relay real-time information to an in-cabin display, alerting the driver to any dangers, increasing personnel and driver safety. You can also add additional cameras on the spreaders or on the front of the machine.



Fire Suppression System (FSS). To protect your operator and machine from fire you can fit a FSS to your machine. The system utilises multiple spray nozzles that release a high-pressure water mist where the fire has been detected from a re-chargeable water tank. This can be activated manually or automatically through an in-cabin temperature sensor.



Alco-lock. To ensure that your driver is at their best when operating your equipment, you can install an Alco-lock system. This system makes sure that the driver meets alcohol blood level standards before being able to start the machine, much like a breathalyser.



Additional lighting. Extra lighting, particularly if you operate your machine at night, as you can bring greater operational visibility and safety for personnel working on the site. You can choose additional LED working lamps on specific positions:

- 2 or 4 on the front mud guards
- 2, 4 or 6 on the lift boom
- 2 or 4 on the spreader
- 2 more on rear counter weight.



Drivelines.

Eco Reachstacker

Engine emission approvals		EU3 / Tier 3	EU4 / Tier 4F	EU5
Engine emission brand / series		Volvo D8	Volvo D8	Volvo D8
Engine model		TAD-853-VE	TAD-873-VE	TAD-883-VE
Engine after treatment type		No SCR / AdBlue	With SCR / AdBlue	With SCR / AdBlue
		No particle filter	No particle filter	With particle filter
Engine fuel / type		Diesel / 4-stroke	Diesel / 4-stroke	Diesel / 4-stroke
Engine design / cylinders		6-inline / common rail	6-inline / common rail	6-inline / common rail
Engine displacement	(dm3)	7.70	7.70	7.70
Max power	(kW)	235	235	235
Max torque	(Nm)	1310	1310	1310
Fuel consumption – average diesel	(l/h)	10–15	10–15	10–15
Fuel consumption – average AdBlue	(%)	-	1 - 5	3 - 7
Transmission model		Dana Rexroth R2-RS		
Transmission gear shift type		Hydrostatic + Mechanical (power split)		
Transmission clutch type		CVT (Continuous Variable Transmission)		
Transmission speed range (FWD - REV)		3 - 2		
Drive axle brand / series		Kessler D-102 (WDB)		
Service brake / cooling		Wet Disc Brakes with oil cooling		
Alternator, power	(W)	AC, 3640 (28 x 130)	AC, 3640 (28 x 130)	AC, 3640 (28 x 130)

Attachments.

There are a range of attachments that can be fitted onto your reachstacker, which one depends of your handling needs.



Container Handling - Top Lift (S)



Intermodal Handling - Top Lift and Trailer Lift (C)



Industrial Handling - Tool Carrier (A)



Industrial Handling - Lift Hook (Z)



Container Handling.

			DRG420-60S5E	DRG450-60S5E	DRG450-60S5ME	DRG450-60S5XE	DRG450-65S5E	DRG450-65S5XE	DRG450-65S5XSE	DRG450-65S6E	DRG450-65S6XE	
MAIN DATA	Type of handling		Container handling			Container handling						
	Lift capacity, row 1-2-3-4	Q1 - Q2 - Q3 - Q4 (tons)	42 - 25 - 12	45 - 27 - 13	45 - 30 - 15	45 - 35 - 18	45 - 32 - 16	45 - 38 - 21	45 - 38 - 21	45 - 32 - 16 - 9	45 - 38 - 21 - 12	
	Lift capacity, row 1-2-3-4 (including jacks)	Q1 - Q2 - Q3 - Q4 (tons)	-	-	-	-	-	-	45 - 41 - 29	-	-	
	Stacking capacity, in container row 1-2-3-4 of 8'6" / 9'6"		5/5 - 5/4 - 4/3			5/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3	6/5 - 5/5 - 4/4 - 2/2	6/5 - 5/5 - 4/4 - 2/2	
	Load centre, from front face of tyres, row 1-2-3-4	L4 - L5 - L6 - L7 (mm)	1965 - 3815 - 6315	1965 - 3815 - 6315	1965 - 3815 - 6315	1865 - 3815 - 6315	1965 - 3815 - 6315	1865 - 3815 - 6315	1865 - 3815 - 6315	1865 - 3815 - 6315	2265 - 3815 - 6315 - 8815	2165 - 3815 - 6315 - 8815
	Lost load centre, to front face of tyres	X (mm)	835	835	835	935	835	935	935	835	935	
Wheelbase	L3 (mm)	6000			6000	6500	6500	6500	6500	6500	6500	
WEIGHTS	Service weight, standard truck	(kgs)	65500	67400	69400	77500	69500	77300	80300	70500	77500	
	Axle load, front at load centre L4, unloaded - loaded	(kgs)	34500 - 96100	34600 - 100600	34600 - 100600	35600 - 101600	35000 - 99400	36000 - 100400	38500 - 102900	36000 - 102500	36500 - 103000	
	Axle load, front at load centre L5, unloaded - loaded	(kgs)	38900 - 83300	39000 - 86900	39000 - 92200	40200 - 102900	39000 - 939000	40300 - 106000	42800 - 108600	39500 - 94400	40200 - 105900	
	Axle load, rear at load centre L4, unloaded - loaded	(kgs)	31000 - 11400	32800 - 11800	34800 - 13800	41900 - 20900	34500 - 15100	41300 - 21900	41800 - 22400	34500 - 13000	41000 - 19500	
	Axle load, rear at load centre L5, unloaded - loaded	(kgs)	26600 - 7200	28400 - 7500	30400 - 7200	37300 - 9600	30500 - 7600	37100 - 9300	37500 - 9700	31000 - 8100	37300 - 9600	
WHEELS	Tyres, dimension, PLY rating, star rating ¹		18 x 25", PR40, E4			18 x 33", PR36, E4	18 x 25", PR40, E4	18 x 33", PR36, E4	18 x 33", PR36, E4	18 x 25", PR40, E4	18 x 25", PR36, E4	
	Tyre pressure (front - rear)	(MPa)	1,0 / 1,0			1,0 / 1,0						
	Track width (front - rear)	S1 - S2 (mm)	3030 - 2600			3030 - 2800	3030 - 2600	3030 - 2800	3030 - 2800	3030 - 2600	3030 - 2800	
DIMENSIONS	Boom angle, min - max	(deg)	0 - 60			0 - 60	0 - 60	0 - 60	0 - 60	0 - 62	0 - 63	
	Boom height, min - max	H3 - H5 (mm)	4600 - 18200			4700 - 18300	4600 - 18200	4700 - 18300	4700 - 18300	4500 - 19250	4600 - 19350	
	Chassis height - top of boom fixation, max	H2 (mm)	3925			4025	3925	4025	4025	3925	4025	
	Lift height, min-max in twistlocks, row 1	H4 (mm)	15100			15200	15100	15200	15100	16200	16300	
	Boom reach stroke	(mm)	7000			7000	7000	7000	7000	7700	7700	
	Truck height - seat height	H6 - H8 (mm)	4600 - 2575			4700 - 2675	4600 - 2575	4700 - 2675	4700 - 2575	4500 - 2575	4600 - 2675	
	Overall truck length, without - with boom	L (mm)	11200			11200	11700	11700	11700	12000	12000	
	Truck width over drive axle	B (mm)	4150			4150						
	Spreader sideshift	V1 (mm)	+/-800 (1600)			+/-800 (1600)						
	Spreader rotation	(deg)	+195/-105			+195/-105						
	Ground clearance	(mm)	250			300	250	300	300	250	300	
	Aisle width with 20'-40' container	A1 - A2 (mm)	11200 - 13600			11200 - 13600	11600 - 13600	11600 - 13600	11600 - 13600	11900 - 13900	11900 - 13900	
Turning radius, outer with 20'-40' container	R1 - R3 (mm)	8100 - 9400			8100 - 9400	8500 - 9400	8500 - 9400	8500 - 9400	8500 - 9450	8500 - 9450		
DRIVE LINE	Travel speed, fw unloaded - rated load / rw unloaded - rated load, max	(km/h)	28 - 22 / 18 - 18			28 - 22 / 18 - 18						
	Lifting speed, unloaded - 70% of rated load	(m/s)	0,42 - 0,25			0,42 - 0,25						
	Lowering speed, unloaded - rated load	(m/s)	0,36 - 0,36			0,36 - 0,36						
	Drawbar pull / towing capacity, max	(kN)	250			250						
OTHER	Tank volumes of working oil & brake oil	(l)	740 (600 + 140)			740 (600 + 140)						
	Working pressure boom/spreader, max	(MPa)	23 / 16			23 / 16						
	Noise level LpAZ (EN12053), inside cabin ²	(dB(A))	68 - 70			68 - 70						
	Noise level LpAZ (2000/14/EC), outside cabin ²	(dB(A))	103 - 106			103 - 106						

1. 4 + 2 pneumatic / diagonal tyres
2. Depending on ECO Drive Mode setting

Container Handling.

			DRG450-65S6HE	DRG450-65S6HXE	DRG450-65S6HXSE	DRG450-70S5XE	DRG450-70S5XSE	DRG450-70S6HXSE	DRG450-75S5XSE	DRG450-75S6HXSE		
MAIN DATA	Type of handling		Container handling					Container handling				
	Lift capacity, row 1-2-3-4	Q1 - Q2 - Q3 - Q4 (tons)	45 - 33 - 18 - 10	45 - 39 - 21 - 13	45 - 39 - 21 - 13	45 - 41 - 23	45 - 41 - 23	45 - 41 - 23 -14	45 - 45 - 26	45 - 45 - 27 - 17		
	Lift capacity, row 1-2-3-4 (including jacks)	Q1 - Q2 - Q3 - Q4 (tons)	-	-	45 - 41 - 29 - 18	-	45 - 41 - 31	45 - 41 - 31 -19	45 - 45 - 34	45 - 45 - 35 - 23		
	Stacking capacity, in container row 1-2-3-4 of 8'6" / 9'6"		6/6 - 6/5 - 5/4 - 4/3	6/6 - 6/5 - 5/4 - 4/3	6/6 - 6/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3		6/6 - 6/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3	6/6 - 6/5 - 5/4 - 4/3		
	Load centre, from front face of tyres, row 1-2-3-4	L4 - L5 - L6 - L7 (mm)	2965 - 3815 - 6315 - 8815	2865 - 3815 - 6315 - 8815	2865 - 3815 - 6315 - 8815	1865 - 3815 - 6315		2865 - 3815 - 6315 - 8815	1865 - 3815 - 6315	2865 - 3815 - 6315 - 8815		
	Lost load centre, to front face of tyres	X (mm)	835	935	935	935						
	Wheelbase	L3 (mm)	6500			7000	7000	7000	7500	7500		
WEIGHTS	Service weight, standard truck	(kgs)	73500	82500	83500	78800	80300	84400	82400	86400		
	Axle load, front at load centre L4, unloaded - loaded	(kgs)	39000 - 110300	41500 - 112800	42500 - 113800	37500 - 100500	39000 - 102000	42600 - 112000	40000 - 101800	43900 - 111700		
	Axle load, front at load centre L5, unloaded - loaded	(kgs)	41000 - 97600	43800 - 111300	44800 - 112300	41500 - 110300	43000 - 111800	44700 - 113500	43800 - 117300	46000 - 119500		
	Axle load, rear at load centre L4, unloaded - loaded	(kgs)	34500 - 8200	41000 - 14700	41000 - 14700	41300 - 23300	41300 - 23300	41800 - 17400	42400 - 25600	43300 - 20500		
	Axle load, rear at load centre L5, unloaded - loaded	(kgs)	32500 - 8900	38700 - 10200	38700 - 10200	37300 - 9500	37300 - 9500	39700 - 11900	38600 - 10100	41300 - 12800		
WHEELS	Tyres, dimension, PLY rating, star rating ¹		18 x 25", PR40, E4	18 x 33", PR36, E4	18 x 33", PR36, E4	18x33",PR36/E4						
	Tyre pressure (front - rear)	(MPa)	1,0 - 1,0			1,0 - 1,0						
	Track width (front - rear)	S1 - S2 (mm)	3030 - 2600	3030 - 2800	3030 - 2800	3030 - 2800						
DIMENSIONS	Boom angle, min - max	(deg)	0 - 62	0 - 62	0 - 63	0 - 60	0 - 60	0 - 63	0 - 58	0 - 61		
	Boom height, min - max	H3 - H5 (mm)	4600 - 20800	4700 - 20900	4700 - 20900	4700 - 18300	4700 - 18300	4700 - 20900	4750 - 18400	4750 - 21000		
	Chassis height - top of boom fixation, max	H2 (mm)	3925	4025	4025	4025						
	Lift height, min-max in twistlocks, row 1	H4 (mm)	17700	17800	17800	15100	15100	17800	15200	17800		
	Boom reach stroke	(mm)	8500			7000	7000	8500	7000	8500		
	Truck height - seat height	H6 - H8 (mm)	4600 - 2575	4700 - 2675	4700 - 2675	2675						
	Overall truck length, without - with boom	L (mm)	12700			12200	12200	13200	12700	13700		
	Truck width over drive axle	B (mm)	4150			4150						
	Spreader sideshift	V1 (mm)	+/-800 (1600)			+/-800 (1600)						
	Spreader rotation	(deg)	+195/-105			+195/-105						
	Ground clearance	(mm)	250	300	300	300						
DRIVE LINE	Travel speed, fw unloaded - rated load / rw unloaded - rated load, max	(km/h)	28 - 22 / 18 - 18			28 - 22 / 18 - 18						
	Lifting speed, unloaded - 70% of rated load	(m/s)	0,42 - 0,25			0,42 - 0,25						
	Lowering speed, unloaded - rated load	(m/s)	0,36 - 0,36			0,36 - 0,36						
	Drawbar pull / towing capacity, max	(kN)	250			250						
OTHER	Tank volumes of working oil & brake oil	(l)	740 (600 + 140)			740 (600 + 140)						
	Working pressure boom/spreader, max	(MPa)	23 / 16			23 / 16						
	Noise level LpAZ (EN12053), inside cabin ²	(dB(A))	68 - 70			68 - 70						
	Noise level LpAZ (2000/14/EC), outside cabin ²	(dB(A))	103 - 106			103 - 106						

1. 4 + 2 pneumatic / diagonal tyres
2. Depending on ECO Drive Mode setting

Intermodal Handling.

			DRG450-60C5E	DRG450-60C5XE	DRG450-65C5E	DRG450-65C5XE	DRG450-65C5XSE	DRG450-70C5XE	DRG450-70C5XSE	DRG450-75C5XSE
MAIN DATA	Type of handling		Intermodal handling		Intermodal handling					
	Lift capacity, row 1-2-3 / load center L4-L8 ¹	Q1 - Q2 - Q3 - Q4 - Q5 (tons)	45 - 25 - 10	45 - 32 - 15	45 - 28 - 13	45 - 34 - 17	45 - 34 - 17	45 - 38 - 20	45 - 38 - 20	45 - 43 - 24
	Lift capacity, row 1-2-3 / load center L4-L8 ¹	Q1 - Q2 - Q3 - Q4 - Q5 (tons)	-	-	-	-	45 - 38 - 24	-	45 - 38 - 27	45 - 45 - 32
	Stacking capacity, in container row 1-2-3 of 8'6" / 9'6"		5/5 - 5/4 - 4/3		5/5 - 5/4 - 4/3					
	Load centre, from front face of tyres	L4 - L5 - L6 - L7 - L8 including jacks (mm)	1965 - 3815 - 6315	1865 - 3815 - 6315	1965 - 3815 - 6315	1865 - 3815 - 6315	1865 - 3815 - 6315	1865 - 3815 - 6315	2765 - 3915 - 6415 - 8915	2765 - 3915 - 6415 - 8915
	Lost load centre, to front face of tyres	X (mm)	835	935	835	935	935	935	935	935
Wheelbase	L3 (mm)	6000	6000	6500	6500	6500	7000	7000	7500	
WEIGHTS	Service weight, standard truck	(kgs)	73500	81800	74100	81300	83500	83300	84800	88400
	Axle load, front at load centre L4, unloaded - loaded	(kgs)	41000 - 107000	42000 - 108000	41600 - 106000	42400 - 106800	44500 - 108900	43500 - 106500	45000 - 108000	46000 - 107800
	Axle load, front at load centre L5, unloaded - loaded	(kgs)	46700 - 91100	48000 - 105400	46900 - 94900	48000 - 106800	50200 - 109000	48800 - 112600	50300 - 114100	51000 - 121200
	Axle load, rear at load centre L4, unloaded - loaded	(kgs)	32500 - 11500	39800 - 18800	35200 - 13100	38900 - 19500	39000 - 19600	39800 - 21800	39800 - 21800	42400 - 25600
	Axle load, rear at load centre L5, unloaded - loaded	(kgs)	26800 - 7400	33800 - 8400	27200 - 7200	33300 - 8500	33300 - 8500	34500 - 8700	34500 - 8700	37400 - 10200
WHEELS	Tyres, dimension, PLY rating, star rating ²		18 x 25", PR40, E4	18 x 33", PR36, E4	18 x 25", PR40, E4	18 x 33", PR36, E4	18 x 33", PR36, E4	18x33",PR40/E4	18x33",PR40/E4	18x33",PR40/E4
	Tyre pressure (front - rear)	(MPa)	1,0 / 1,0		1,0 / 1,0					
	Track width (front - rear)	S1 - S2 (mm)	3030 - 2600	3030 - 2800	3030 - 2600	3030 - 2800	3030 - 2800	3030 - 2800	3030 - 2800	3030 - 2800
DIMENSIONS	Boom angle, min - max	(deg)	0 - 60		0 - 60	0 - 60	0 - 60	0 - 60	0 - 60	0 - 58
	Boom height, min - max	H3 - H5 (mm)	4600 - 18200	4700 - 18300	4600 - 18200	4700 - 18300	4700 - 18300	4700 - 18300	4700 - 18300	4750 - 18400
	Chassis height - top of boom fixation, max	H2 (mm)	3925	4025	3925	4025	4025	4025	4025	4025
	Lift height, min-max in twistlocks, row 1	H4 (mm)	14900	15000	14900	15000	14900	14900	14900	15000
	Boom reach stroke	(mm)	7000				7000	7000	7000	7000
	Truck height - seat height	H6 - H8 (mm)	4600 - 2575	4700 - 2675	4600 - 2575	4700 - 2675	4700 - 2675	2675	2675	2675
	Overall truck length, without - with boom	L (mm)	11200	11200	11700	11700	11700	12200	12200	12700
	Truck width over drive axle	B (mm)	4150		4150					
	Spreader sideshift	V1 (mm)	+/-800 (1600)		+/-800 (1600)					
	Spreader rotation	(deg)	+195 / -105		+195 / -105					
	Ground clearance	(mm)	250	300	250	300	300	300	300	300
	Aisle width with 20'-40' container	A1 - A2 (mm)	11200 - 13600	11200 - 13600	11600 - 13600	11600 - 13600	11600 - 13600	12100 - 13600	12100 - 13600	12500 - 13600
	Turning radius, outer with 20'-40' container	R1 - R3 (mm)	8100 - 9400	8100 - 9400	8500 - 9400	8500 - 9400	8500 - 9400	9000 - 9400	9000 - 9400	9400 - 9400
DRIVE LINE	Travel speed, fw unloaded - rated load / rw unloaded - rated load, max	(km/h)	28 - 22 / 18 - 18		28-22 / 18-16					
	Lifting speed, unloaded - 70% of rated load	(m/s)	0,42 - 0,25		0,42 - 0,25					
	Lowering speed, unloaded - rated load	(m/s)	0,36 - 0,36		0,36 - 0,36					
	Drawbar pull / towing capacity, max	(kN)	250		250					
OTHER	Tank volumes of working oil & brake oil	(l)	740 (600 + 140)		740 (600 + 140)					
	Working pressure boom/spreader, max	(MPa)	23 / 16		23 / 16					
	Noise level LpAZ (EN12053), inside cabin ³	(dB(A))	68 - 70		68 - 70					
	Noise level LpAZ (2000/14/EC), outside cabin ³	(dB(A))	103 - 106		103 - 106					

1. Rows for Intermodal handling / Load center for Industrial handling
2. 4 + 2 pneumatic / diagonal tyres
3. Depending on ECO Drive Mode setting

Industrial Handling.

		DRG500-60A5E	DRG540-60A5XE	DRG540-65A5XE	DRG540-65A5XSE	DRG600-75A5XE	DRG600-75A5XSE	DRG570-65ZE	DRG600-65ZXE	DRG600-65ZXSE	DRG700-75ZXE	DRG700-75ZXSE		
MAIN DATA	Type of handling	Tool carrier			Tool carrier			Lifting hook						
	Lift capacity, row 1-2-3 / load center L4-L8 ¹	Q1 - Q2 - Q3 - Q4 - Q5	(tons)	50 - 27 - 16 - 11	54 - 33 - 20 - 14	54 - 38 - 25 - 17	54-38-25-17	60-45-29-21	60-45-29-21	57-54-31-19-14	60-60-38-25-18	60-60-38-25-18	70-60-45-30-22	70-60-45-30-22
	Lift capacity, row 1-2-3 / load center L4-L8 ¹	Q1 - Q2 - Q3 - Q4 - Q5	(tons)	-	-	-	54-45-34-23	-	60-50-38-27	-	-	60-60-45-34-24	-	70-60-50-39-28
	Stacking capacity, in container row 1-2-3 of 8'6" / 9'6"			-						-				
	Load centre, from front face of tyres	L4 - L5 - L6 - L7 - L8 including jacks	(mm)	2000 - 4000 - 6000 - 8000 - 10000			2000 - 4000 - 6000 - 8000 - 10000			1500 - 2000 - 4000 - 6000 - 8000				
	Lost load centre, to front face of tyres	X	(mm)	835	935	935		935		835	935	935	935	935
Wheelbase	L3	(mm)	6000	6000	6500	6500	7500	7500	6500	6500	6500	7500	7500	
WEIGHTS	Service weight, standard truck	(kgs)	63000	72600	74000	76200	77000	78000	61100	70900	72100	74000	75000	
	Axle load, front at load centre L4, unloaded - loaded	(kgs)	29500 - 102800	29600 - 108800	31000 - 109600	33200 - 111800	34200-118700	35200-118700	26000 - 103500	27300 - 114600	28300 - 115600	30600-123300	31600-124300	
	Axle load, front at load centre L5, unloaded - loaded	(kgs)		-			-			-				
	Axle load, rear at load centre L4, unloaded - loaded	(kgs)	33500 - 10200	43000 - 16300	43000 -18400	43000 -18400	42800-19300	42800-19300	35100 - 14600	43600 - 16300	43600 - 16300	43400-20700	43400-20700	
	Axle load, rear at load centre L5, unloaded - loaded	(kgs)		-			-			-				
WHEELS	Tyres, dimension, PLY rating, star rating ²		18 x 25", PR40, E4	18 x 33", PR36, E4	18 x 33", PR36, E4	18 x 33", PR36, E4			18 x 25", PR40, E4	18 x 33", PR36, E4	18 x 33", PR36, E4	18x33",PR36/E4	18x33",PR36/E4	
	Tyre pressure (front - rear)	(MPa)		1,0 / 1,0		1,0 / 1,0					1,0 / 1,0			
	Track width (front - rear)	S1 - S2	(mm)	3030 - 2600	3030 - 2800	3030 - 2800	3030 - 2800	3030 - 2800	3030 - 2800	3030 - 2800	3030 - 2800	3030 - 2800	3030 - 2800	
DIMENSIONS	Boom angle, min - max	(deg)	0 - 60			0 - 60	0 - 58	0 - 58	0 - 60			0 - 58	0 - 58	
	Boom height, min - max	H3 - H5	(mm)	4600 - 18200	4700 - 18300	4700 - 18300	4700 - 18300	4750 - 18400	4750 - 18400	4600 - 18200	4700 - 18300	4700 - 18300	4750 - 18400	4750 - 18400
	Chassis height - top of boom fixation, max	H2	(mm)	15150	15250	15250	15250	4025	4025	15300	15400	15400	4025	4025
	Lift height, min-max in twistlocks, row 1	H4	(mm)		-		15250				15400			
	Boom reach stroke	(mm)	7000			7000			7000					
	Truck height - seat height	H6 - H8	(mm)	4600 - 2575	4700 - 2675	4700 - 2675	4700 - 2675	2675	2675	4600 - 2575	4700 - 2675	4700 - 2675	2675	2675
	Overall truck length, without - with boom	L	(mm)	10800	10800	11300	11300	12300	12300	10900	10900	10900	11900	11900
	Truck width over drive axle	B	(mm)	4150			4150			4150				
	Spreader sideshift	V1	(mm)	+/-450			+/-450			-				
	Spreader rotation	(deg)	+195 / -105			+195/-105			360 endless					
	Ground clearance	(mm)	300			300			300			300	300	
Aisle width with 20'-40' container	A1 - A2	(mm)	-			-			-					
Turning radius, outer with 20'-40' container	R1 - R3	(mm)	8100	8100	8500	8500	9400	9400	9400	12450	12450	9400	9400	
DRIVE LINE	Travel speed, fw unloaded	(km/h)	28 - 22 / 18 - 18			28-22 / 18-18			28 - 5 / 18 - 5					
	- rated load / rw unloaded - rated load, max	(m/s)	0,42 - 0,24			0,42 - 0,24			0,42 - 0,22					
	Lifting speed, unloaded - 70% of rated load	(m/s)	0,36 - 0,36			0,36 - 0,36			0,20 - 0,36					
	Lowering speed, unloaded - rated load	(m/s)	250			250			250					
OTHER	Drawbar pull / towing capacity, max	(kN)	250			250			250					
	Tank volumes of working oil & brake oil	(l)	740 (600 + 140)			740 (600 + 140)			740 (600 + 140)					
	Working pressure boom/spreader, max	(MPa)	23 / -			23			23					
	Noise level LpAZ (EN12053), inside cabin ³	(dB(A))	68 - 70			68 - 70			68 - 70					
Noise level LpAZ (2000/14/EC), outside cabin ³	(dB(A))	107 - 110			107 - 110			107 - 110						

1. Rows for Intermodal handling / Load center for Industrial handling
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