Kalmar Reachstacker

DRG100

Dedicated to flexible empty and semi-laden container handling
All common spaces
A reachstacker like the Kalmar DRG100 adds another dimension to empty container handling. Containers can be transported at full width, turned 45° or lengthwise at 90°, making it possible to deliver “end-on” into and through low workshop doors, port sheds and other tight openings. Operators don’t have to pick up containers right-angled, and can increase efficiency and handling speed during yard stacking, loading of road trucks or container repairs.

Rotate, lift at a 45° angle, drive forwards or reverse with a full tilt stroke, reach 6 or 8 containers high and work in second or third row. All this is possible – and easy. You can even do a unique 1,000 mm side shift and rotate the container so the door is on the right side. The Kalmar DRG100 is the only reachstacker for empty and semi-laden container handling on the market that can offer all of these smart functions.

Fully equipped – safe and sound
Our Generation G reachstackers are safe machines and the Kalmar DRG100 is no exception. Extremely stable – it’s the only reachstacker on the market with the high-capacity 5.4 m wheelbase. It has the best combined lift capacity in rows 1-2-3, a spreader with the biggest side shift and 4 extra lift hooks, front and reverse tilts, twistlock status indicators, dual rotation motors and brakes, and a complete LED lamp kit as a standard.

Options include a Reverse Aid Warning System with a detection range from 0.5 up to 9 m, a Kalmar Personal Proximity System that covers up to 20 m and Kalmar TLX (Tyre Life eXtension), which allows tyres to move independently for better manoeuvrability, reduced tyre wear and increased fuel savings. Plus it offers the benchmark of the world’s best driver’s cabin, providing a working environment that keeps the operator comfortable, alert and in full control over all kinds of loads.

All clear for efficient workshops
Service, maintenance and repair of containers and tank cleaning may be the lesser part of your operations. To further minimise your total cost of ownership, Generation G reachstackers have a service life that’s longer than ever.

The Kalmar DRG100 offers full flexibility with full rotation, large sideshift and tilt to allow you to both transport and perform services, maintenance, repairs and cleaning with maximum efficiency. Low and narrow workshop doors don’t present a problem for our reachstackers. Just turn the container lengthwise and drive inside.

Loaded with productive versatility.

We are proud to present a new Gloria family member: the Kalmar DRG100. With this reachstacker for empty and semi-laden container handling you get it all. The ability to handle all sorts of containers, flat racks and slinged loads up to 10 tonnes precisely and safely. The rotation necessary for efficient action in confined spaces. And the quality that makes your business prosper, both in the short and long term. We offer two models: the DRG100-S6 stacks 6 containers high in the first row and the DRG100-S8 stacks 8 high in the second row.

Everything within container handling
The Kalmar DRG100 has the capacity to handle all types of containers (standard ISO, reefers, tanks, specials and flat racks) and slinged loads up to 10 tonnes.

- Standard ISO containers 20 ft – 40 ft and pick-up in 40 ft position for 45 ft – 56 ft sizes
- Standard ISO heights 4 ft – 9 ft 6 in or special 10 ft 6 in
- Reefer containers 20 ft – 40 ft (45 ft pick-up in 40 ft position)
- Tank containers 20 ft – 30 ft
- Flat racks 20 ft – 40 ft
- Slinged load in 4 lift hooks
It’s a new twist to productivity, efficiency and safety

We built the first commercial reachstacker thirty years ago. And we’ve been stacking up innovations ever since, constantly inspired by the challenges of cargo handling – and cargo handlers – across the world. Our Generation G with the Kalmar DRG100 reachstacker is the latest development that takes productivity, efficiency and safety to a new level of excellence.

Delivering every day
Productivity & Performance, Best Lifetime Value, Safety & Ergonomics, Environmentally-Friendly are guiding stars at Kalmar, and have made our reachstackers the preferred choice in more than 160 countries.

10,000 good reasons to choose Kalmar
The Kalmar DRG100 is built on our latest technology platform, Generation G, which is based on our experience from our more than 10,000 reachstackers sold. Our goal was to provide the most outstanding operator experience, the highest level of productivity and the best lifetime value. An ergonomic cabin, integrated components, an electrical control system, a high degree of automation and intuitive, digital interfaces are just a few of the standard features.

Make every move count
When choosing the right machine for you, consider the full value. Kalmar reachstackers excel at reducing your total cost of ownership. With well-proven quality materials, durable components and sturdy design, the Kalmar DRG100 is a profitable choice. Extremely reliable, it minimises operational and maintenance costs on a daily basis – but also in regards to lifetime value.

Kalmar TLX (Tyre Life eXtension) is an optional feature that allows tyres to move independently and extends tyre lifetime 150-300%, saves fuel and increases manoeuvrability, stability and safety.

The Kalmar Start/Stop system is an automated start-stop function that makes it possible to achieve up to 10% fuel savings through automatic activation and deactivation of your machine. By substantially cutting down on idle time, it also provides an effortless way to reduce emissions and unnecessary wear on components.

The LED Light Kit is standard and gives the driver extremely strong illumination power at all times, even in bad weather or after sunset. LED increases the lifetime of the working lights to 30,000 hours and cuts energy consumption.

The Kalmar DRG100 also offers longer service and maintenance intervals, which cuts costs and increases uptime. The machine is easy to access for service. And Kalmar’s extensive, swift global service and after-sales network makes sure your uptime is maximised.

Power Mode is ideal when you require maximum performance at all times, more moves or tonne per hour.

Normal Mode allows for higher profitability with up to 10% fuel savings per tonne of cargo.

Economy Mode lets you save even more fuel per hour, offering up to 20% in reduced fuel consumption and reducing emissions.

Service intervals for DRG reachstackers

<table>
<thead>
<tr>
<th>Description</th>
<th>Check Intervals</th>
<th>Filter (hours)</th>
<th>Oil change (hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Machine service</td>
<td>500</td>
<td>1,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Working hydraulics (return line – no oil sample)</td>
<td>1,000</td>
<td>4,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Working hydraulics (return line – with oil sample)</td>
<td>1,000</td>
<td>4,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Working hydraulics (final filter)</td>
<td>500</td>
<td>4,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Engine (no oil sample)</td>
<td>1,000</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>Transmission</td>
<td>1,000</td>
<td>1,000</td>
<td></td>
</tr>
<tr>
<td>Drive axle</td>
<td>2,000</td>
<td>2,000</td>
<td></td>
</tr>
<tr>
<td>Spreader (daily)</td>
<td>Filter change 0.5 h – then after every 2,000 h</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LED Light Kit</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Experience the best
The EGO cabin is the result of our insight into operating conditions across the world, years of development and thousands of tests. It provides a seamless operating environment that minimises fatigue and enables optimal load handling.

Endless visibility
The open cabin design features slim profiles, no A-pillars and a wide-curved, corner-wrapped windscreen. With a near absence of blind spots, visibility is optimised at all angles. The windscreen is equipped with unique high-capacity double wipers, and the roof with a single wiper. These dry and clean the surface to ensure visibility in wet and dirty conditions.

The best you can get!

Stay in control naturally
The main operation work console, switches and indicators for data display and machine control systems are logically organised and well placed within sight and reach.

Fully equipped with electronic tools and an easy-to-use Kalmar Information Colour Display with intuitive Human-Machine Interface (HMI). All check-ups are easy to perform — you can see, hear, touch and react to inputs on the machine’s performance without losing focus on your load. The intuitive Head Up display allows you to monitor loading and unloading as symbols shift from green to yellow to red, showing the twistlock and support jack status.

Superior ergonomic design
The patented side-tilting steering wheel can be angled to the side or moved forwards slightly to avoid obstruction and increase comfort. It also provides better control of loads and allows new steering possibilities.

The ergonomic steering wheel with tilt function remains firmly secured in position for smooth, safe directional changes while optimising lifting capacity and ergonomically reducing arm fatigue.

The fully integrated, adjustable multi-seat provides the best possible sitting posture for long shifts and demanding operations.

The ergonomically designed comfort pedals are floor-based to minimise strain on the foot while enabling hard driving.

Our standard Climate package is the most powerful on the market. It has the highest capacity heater, cooling and filtered airflow for super interior comfort.

Kalmar SmartFleet Remote Monitoring: Remotely monitors your equipment so you can increase its availability, providing optimal equipment efficiency at all times.

Boosting the core of efficiency
Reachstackers are only as good as their operators. So to make sure they can operate on a high level, we handle them with care. The EGO cabin of the Kalmar DRG100 offers an outstanding working environment and driving experience. The result is less downtime, fewer cargo damages and more alert, productive and healthy operators.
The mechanics of full capacity

Long-lasting, hard-working hydraulics

- Load-sensing hydraulics (power-on-demand) with highly efficient variable piston pumps for increased oil and fuel efficiency with fewer heat and pressure peaks

- Exceptionally clean working oil 24/7, with return-line filters (2x10 um), servo filter (10 um) and low-pressure ultra-fine filter (5 um) to reduce particles, sludge and water. Also a brake-oil filter (10 um)

- Powerful double oil cooling for working hydraulics (l) and for the brake hydraulics.

This amounts to uniquely long-lasting hydraulics!
Strong drive trains – driving precise performance

The Kalmar DRG100 is equipped with the Volvo D-8 engine series in EU stage 3A and 4 emission levels and DANA automatic transmission. Reliable, powerful and fuel efficient even at low revs, it supplies massive power and torque for rapid acceleration and safer maneuverability.

Durable and reliable
All the components in the drive train, from the engine and transmission to the drive axle and the oil-cooled wet disc brakes, are proven for lifetime durability, strength and precision. The electronically controlled gearbox, for instance, helps to ensure safe and effective driving at all speeds, together with highly precise control of lifting equipment.

Advanced redundant electronics – increase uptime

The electrical control system of the Kalmar DRG100 is smart, intuitive and reliable. A distributed and redundant CAN-bus technology, developed by Kalmar, constantly monitors the engine, transmission, hydraulics and spreader functions to provide the operator with constant real-time data to help maximise uptime. Thanks to segmented wiring with a long lifetime, few wires and connection points, the system is not prone to faults and is easy to configure, diagnose and service.

Safe and proven diagnostics
The CAN-bus system constantly feeds condition-monitoring data to the eye-level colour display in the cabin. Pop-up messages mean the operator can simply check the display’s troubleshooting page and find the error codes that lead straight to the relevant section of the operator’s manual.

Smart sensors for fluid levels
Sensors alert the operator to low engine oil or coolant levels – long before any stoppage or component damage occurs. This avoids costly the consequences of fluid levels being checked too late.

Central lubrication on truck and spreader
An optional central lubrication system can be installed to ensure greater control over the machine’s lubrication cycle. Electronically monitored and controlled, it alerts the operator in advance whenever a blockage or other malfunction arises – anywhere in the lubrication cycle.

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### Engine emission approvals

<table>
<thead>
<tr>
<th>Engine model</th>
<th>Diesel / 4-stroke / 6-cyl / common rail</th>
<th>Diesel + AdBlue / 4-stroke / 6-cyl / common rail</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCR + AdBlue + cooled EGR</td>
<td>SCR + AdBlue / cooled EGR</td>
<td></td>
</tr>
</tbody>
</table>

### Engine fuel / type / cylinders

<table>
<thead>
<tr>
<th>Engine brand / series</th>
<th>Diesel / AdBlue</th>
<th>Diesel + AdBlue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volvo / D-8</td>
<td>Diesel / 4-stroke / 6-cyl / common rail</td>
<td>Diesel + AdBlue / 4-stroke / 6-cyl / common rail</td>
</tr>
</tbody>
</table>

### Engine charger technology

<table>
<thead>
<tr>
<th>Engine brand / series</th>
<th>Turbo / Intercooler</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volvo / D-8</td>
<td>Fixed Geometry Turbo (FGT) / Intercooler (air to air)</td>
</tr>
</tbody>
</table>

### Engine intercooler technology

<table>
<thead>
<tr>
<th>Engine brand / series</th>
<th>Intercooler</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volvo / D-8</td>
<td>Intercooler (air to air)</td>
</tr>
</tbody>
</table>

### Engine displacement

<table>
<thead>
<tr>
<th>Engine brand / series</th>
<th>(dm³ (in³))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volvo / D-8</td>
<td>7,700</td>
</tr>
</tbody>
</table>

### Engine bore × stroke

<table>
<thead>
<tr>
<th>Engine brand / series</th>
<th>(mm (in))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volvo / D-8</td>
<td>110 × 135</td>
</tr>
</tbody>
</table>

### Max power @ engine speed

<table>
<thead>
<tr>
<th>Engine brand / series</th>
<th>kW (hp) @ rpm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volvo / D-8</td>
<td>185 @ 1,600 – 2,200</td>
</tr>
</tbody>
</table>

### Max torque @ engine speed

<table>
<thead>
<tr>
<th>Engine brand / series</th>
<th>Nm (lb-ft) @ rpm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volvo / D-8</td>
<td>1,160 @ 1,100 – 1,500</td>
</tr>
</tbody>
</table>

### Fuel consumption – average diesel

<table>
<thead>
<tr>
<th>Engine brand / series</th>
<th>L/h (gall/h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volvo / D-8</td>
<td>8 – 15</td>
</tr>
</tbody>
</table>

### Fuel consumption – average AdBlue

<table>
<thead>
<tr>
<th>Engine brand / series</th>
<th>L/h (gall/h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volvo / D-8</td>
<td>0.25 – 0.50</td>
</tr>
</tbody>
</table>

### Alternator type – power

<table>
<thead>
<tr>
<th>Engine brand / series</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volvo / D-8</td>
<td>AC – 4,200</td>
</tr>
</tbody>
</table>

### Transmission brand – series

<table>
<thead>
<tr>
<th>Engine brand / series</th>
<th>Transmission model (gear – FWD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANA / TE</td>
<td>TE-17300 (5+3)</td>
</tr>
</tbody>
</table>

### Transmission gear shift type

<table>
<thead>
<tr>
<th>Engine brand / series</th>
<th>Transmission type</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANA / TE</td>
<td>Automatic powershift</td>
</tr>
</tbody>
</table>

### Transmission clutch type

<table>
<thead>
<tr>
<th>Engine brand / series</th>
<th>Torque converter</th>
</tr>
</thead>
<tbody>
<tr>
<td>DANA / TE</td>
<td>ZF 713</td>
</tr>
</tbody>
</table>

### Drive axle brand / series

<table>
<thead>
<tr>
<th>Engine brand / series</th>
<th>Brand / series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volvo / D-8</td>
<td>Kalmar / single cylinder</td>
</tr>
</tbody>
</table>

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The Kalmar DRG100 is equipped with the Volvo D-8 engine series in EU stage 3A and 4 emission levels and DANA automatic transmission. Reliable, powerful and fuel efficient even at low revs, it supplies massive power and torque for rapid acceleration and safer maneuverability.

Durable and reliable
All the components in the drive train, from the engine and transmission to the drive axle and the oil-cooled wet disc brakes, are proven for lifetime durability, strength and precision. The electronically controlled gearbox, for instance, helps to ensure safe and effective driving at all speeds, together with highly precise control of lifting equipment.

Advanced redundant electronics – increase uptime

The electrical control system of the Kalmar DRG100 is smart, intuitive and reliable. A distributed and redundant CAN-bus technology, developed by Kalmar, constantly monitors the engine, transmission, hydraulics and spreader functions to provide the operator with constant real-time data to help maximise uptime. Thanks to segmented wiring with a long lifetime, few wires and connection points, the system is not prone to faults and is easy to configure, diagnose and service.

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**Technical Information**

### Model Designation
- **DRG100-54 S6**
  - Empty and semi laden
  - KALMAR DRG100-54 S8
  - Empty and semi laden

### Main Data
- **Lifting capacity, in container row 1-2-3**
  - DRG100-54 S6: 10,000
  - DRG100-54 S8: 10,000
- **Light capacity, at max height**
  - DRG100-54 S6: 9,000
  - DRG100-54 S8: 9,000
- **Load centre, from front face of tyres, row 1-2-3**
  - DRG100-54 S6: 3,840
  - DRG100-54 S8: 3,840
- **Stacking height, in container row 1-2-3, of 8’6” / 9’6”**
  - DRG100-54 S6: 5 / 5
  - DRG100-54 S8: 6 / 6

### Spreader Information
- **Spread type, extension stops, locking**
  - DRG100-54 S6: L1 – L4
  - DRG100-54 S8: L1 – L5
- **Wheelbase**
  - DRG100-54 S6: 5,400
  - DRG100-54 S8: 5,400
- **Reachstacker Generation**
  - DRG100-54 S6: Diesel
  - DRG100-54 S8: Diesel
- **Technical Stack height (no. of containers)**
  - DRG100-54 S6: 6 / 5
  - DRG100-54 S8: 6 / 6

### Main Data
- **Drive axle type, service brakes (on drive wheels)**
  - DRG100-54 S6: Differential / hub reduction / oil-cooled wet disc brakes
  - DRG100-54 S8: Differential / hub reduction / oil-cooled wet disc brakes
- **Tyre type, tyre design, tube design**
  - DRG100-54 S6: Pneumatic Diagonal Tubeless
  - DRG100-54 S8: Pneumatic Diagonal Tubeless
- **Engine norm and emission approvals**
  - DRG100-54 S6: ISO 8178-8 EU stage 3A + 4 EPA Tier 3 + 4F
  - DRG100-54 S8: ISO 8178-8 EU stage 3A + 4 EPA Tier 3 + 4F
- **Fuel consumption, average diesel and tank volume**
  - DRG100-54 S6: 8 – 15 L/h/dm³
  - DRG100-54 S8: 8 – 15 L/h/dm³
- **Engine power, torque, displacement**
  - DRG100-54 S6: 140 kW / 190 hp
  - DRG100-54 S8: 140 kW / 190 hp
- **Load centre, from front face of tyres**
  - DRG100-54 S6: 5,300
  - DRG100-54 S8: 5,300
- **Spreader**
  - DRG100-54 S6: 10,000
  - DRG100-54 S8: 10,000
- **Spread width, driven / front + rear**
  - DRG100-54 S6: 3,285 – 3,860
  - DRG100-54 S8: 3,285 – 3,860
- **Spreader side tilt, tilt angle, tilt power**
  - DRG100-54 S6: 0 – 67.5°
  - DRG100-54 S8: 0 – 75°

### Dimensions
- **Track width (front + rear)**
  - DRG100-54 S6: 3,285
  - DRG100-54 S8: 3,285
- **Overall truck length, without and with boom**
  - DRG100-54 S6: 7,100 – 11,050
  - DRG100-54 S8: 7,100 – 10,950

### Weights
- **Axle load, front at load centre L5, unloaded – rated load**
  - DRG100-54 S6: 14,900 – 7,300
  - DRG100-54 S8: 15,300 – 8,600
- **Axle load, back at load centre L6, unloaded – rated load**
  - DRG100-54 S6: 16,700 – 10,400
  - DRG100-54 S8: 16,900 – 10,600

### Tyres
- **Tyre pressure, front + rear**
  - DRG100-54 S6: 1.0 MPa
  - DRG100-54 S8: 1.0 MPa
- **Tyre type, dimension, PLY rating (front + rear)**
  - DRG100-54 S6: 14.00 × 24" PR24 E3
  - DRG100-54 S8: 14.00 × 24" PR24 E3

### Transmission
- **Transmission type, function, safety**
  - DRG100-54 S6: Automatic powershift / torque converter / reverse protection
  - DRG100-54 S8: Automatic powershift / torque converter / reverse protection
- **Battery voltage / capacity**
  - DRG100-54 S6: 2 × 12 V/140 A
  - DRG100-54 S8: 2 × 12 V/140 A
- **Alternator, type - power, voltage and capacity**
  - DRG100-54 S6: AC – 4,200 W/V/Am
  - DRG100-54 S8: AC – 4,200 W/V/Am
- **Noise level LpAZ acc. to EN12053, inside cabin**
  - DRG100-54 S6: 72 dB(A)
  - DRG100-54 S8: 110 dB(A)
- **Noise level LwAZ acc. to 2000/14/EC, outside cabin**
  - DRG100-54 S6: 110 dB(A)
  - DRG100-54 S8: Yes / yes / yes

### Longitudinal load monitoring information & controls
- **Load-sensing / working oil & brake oil tanks**
  - DRG100-54 S6: 425 / 90 dm³
  - DRG100-54 S8: 425 / 90 dm³
- **Working pressure boom / spreader**
  - DRG100-54 S6: 23.0 / 16.0 MPa
  - DRG100-54 S8: 23.0 / 16.0 MPa
- **Load-sensing / working oil & brake oil tanks**
  - DRG100-54 S6: 425 / 100 dm³
  - DRG100-54 S8: 425 / 100 dm³
- **Tank volumes of working oil & brake oil**
  - DRG100-54 S6: 425 / 100 dm³
  - DRG100-54 S8: 425 / 100 dm³
- **Working pressure boom / spreader**
  - DRG100-54 S6: 23.0 / 16.0 MPa
  - DRG100-54 S8: 23.0 / 16.0 MPa
- **Transmission type, function, safety**
  - DRG100-54 S6: Automatic powershift / torque converter / reverse protection
  - DRG100-54 S8: Automatic powershift / torque converter / reverse protection
- **Battery voltage / capacity**
  - DRG100-54 S6: 2 × 12 V/140 A
  - DRG100-54 S8: 2 × 12 V/140 A
- **Alternator, type - power, voltage and capacity**
  - DRG100-54 S6: AC – 4,200 W/V/Am
  - DRG100-54 S8: AC – 4,200 W/V/Am
- **Noise level LpAZ acc. to EN12053, inside cabin**
  - DRG100-54 S6: 72 dB(A)
  - DRG100-54 S8: 72 dB(A)
- **Noise level LwAZ acc. to 2000/14/EC, outside cabin**
  - DRG100-54 S6: Yes / yes / yes
  - DRG100-54 S8: Yes / yes / yes

### Maximum Data
- **MAXI DATA**
- **DIMENSIONS**
- **WEIGHTS**
- **WHEELS & TYRES**
- **TRANSMISSION**
- **ENG. SPECIFICATION**
- **TECHNICAL SPECIFICATION**
- **ELECTRICAL SPECIFICATION**
- **SAFETY SPECIFICATION**
- **ENVIRONMENTAL SPECIFICATION**
- **SERVICE SPECIFICATION**
- **PERFORMANCE SPECIFICATION**
- **STOCK SPECIFICATION**
Standard

Kalmar DRG100, 66-88 / Empty Container Reachstackers / 10 tonnes

Norms, standards and regulations
- Machinery Directive 2006/42/EC
- Safety Valves Rules PSA (SM 169-A3)
- Safety Low & High Lift Trucks ANSI B56.1
- CE-marking for trucks within EU/EEA
- AEC/EEC-marking for North America trucks

Chassis
- Strong and durable heavy-duty chassis
- Safe access steps, platform & hand rails (LHD)
- Long bottom access (on both sides)
- Lifting eyes and anchor points (front & rear)
- Good rear visibility and the truck
- Towing pin (pinсад)

Body
- Steps with anti-slip protection
- Rear view mirrors - front on protectors and strong protruding mudguards (front & rear)
- Noise isolation for the complete truck

Steer Axle (rear)
- Kalmar steer axle with dual pivot bearings
- Optical power steering with double acting cylinder

Drive Axle (front)
- Key-plan drive axle with differential drive
- Wide side for high stability (2410 mm)
- Double wheel brakes (WBS)
- High pressure filter (10 µm) for the brakes
- Brake tank (100 L), cooling & breather filter

Wheels (tyres & rims)
- Drive tyres 14.00x24 PR2 (4x)
- Steer tyres 14.00x24 PR2 (4x)

Drive train (can-bus)
- Volvo D-8 in EU stage 3A and 4 emission levels
- 6-cylinder diesel engines with pre-heater
- High power & torque with low fuel consumption
- Engine speed and load control
- Electronic transmission control

Load-Sensing Hydraulics
- Load-sensing variable piston pump Dhi
- Pumps for boom, spreader, brakes & steering
- Gear pumps for brake & oil cooling
- Return filters for the work hydraulics (20x10 µm)
- Hydraulically controlled filter with bypass
- Sano filter for the work hydraulics (10 µm)
- Brake oil filter for the brakes
- Regeneration high-speed lifting & extension
- Boom and damping (low speed/low loads (20-40 m/s²)
- Power steer, power brakes & ORFS couplings
- Hydraulically cooled & breather filter
- Separated dual tank units

Lifting boom
- Electric, manually operated, flange boom with guide pads
- Duplex 2-stage 56, 6x6 / 56x (H 162.9 mm)
- Trepal 3-stage 56, 6x6 / 56x (H 71 cm)
- Long boom nose for flat racks (64 = 600 mm)
- Boom with 2 lift cylinders & 1 extension cylinder
- Attachments

Kalmar DRG100, 66-88 / Empty Container Reachstackers / 10 tonnes

Battery box 2x12V A main power switch
- Electric service box on chassis (LHD)
- 2 working LED-lights on attachment
- 2 working LED-lights on front edge cabin
- 2 LED-lights on fenders (when reversing)
- 2 lights on fenders (right/bow view)
- 2 position LED-lights on each side
- 2 tail LED lights / brake LED-lights
- 4 LED-blinkers (front-near-left-right)
- 2 nailing brake LED (when reversing)
- 1 rotating warning LED-beacon
- 1 acoustic signal / reverse alarm (in rear)

Cabin (EQO)
- Spacious, modern cabin with best ergonomic level
- Large windows, good visibility in all directions
- Manual movable cabin (stroke 1750 mm)
- Step for roof access
- Instal handle (left side)
- Sliding window on both sides
- Door with air damper and key lock L + R
- Tinted terminated windows

Comfort
- Seat Kalmar, mach. spring, high-back
- Adjustable armrest (R/L), 2-position safety belt
- Inside rear view mirror (right side)
- Front lights with fade away function
- 2x4V bat. connection in door (L + R)
- Fully adjustable steering wheel incl function
- Fully adjustable colour display
- Electrically adjustable operational console with joystick, operational buttons & armrest (LHD)
- Power steering wheel with steer knob
- Electric horn
- LED background light for buttons & switches

Controls
- Joystick for boom, spreader & forward / reverse
- Auto-rev accelerator at lifting/extension
- Electric accelerator pedal (hanging)
- Only first gear activated (PS)
- Only second gear activated (PS)
- Safety overspeed for hydraulic functions (by code)
- Multi-function lever L/R (torque, gear direction
- Joystick selector 2-speed
- Warning - hard brake (on/off)
- Parking brake

Climate
- EEC, electronic climate control (heater, ventilator & filter)
- Air-conditioning inc. fresh air and recirculation filter
- Air-pressurewashers on front, rear and roof
- Intergal wiper functions on front, rear and roof
- Tinted window (LHS), cooling & breather filter

Information systems
- Colour display & automatic fault analysis
- Menu control with toggle wheel & push buttons
- Electronic safety, overload, scale & synchronisation
- LLM1 Longitudinal Load Moment Indicator
- LLMC Longitudinal Load Moment Control

ECO Drive Modes (EDM):
- Power mode
- Normal mode
- Economy mode

Kalmar DRG100, 66-88 / Empty Container Reachstackers / 10 tonnes

Chassis
- DRG100-54S (3x3/400 mm / 6-high 8’6”)
- DRG100-545S (3x3/400 mm / 6-high 8’6”)

Cabin
- Hydraulic lifting cabin (stroke 10 degrees)

Comfort
- Seat with Air-cushion, heating & 3-p belt
- Head rest for the seat
- Armrest with adjustment L/R
- Horizontal dampening/suspension of seat
- Extra rear seat incl 2-p safety belt (LHD)
- Bracket for terminal and monitor (RHS)
- Writing pad, A4 paper box and reading lamp (RHS)

Controls
- Lever steering incl switch for forward/reverse
- Mini-wheel steering incl switch for forward/reverse

Head-Up display for twiststick indication:
- LED indicators for alignment & twiststicks

Various warning lights & signals:
- Charging battery
- Low brake pressure
- Failure indicator
- Safety system disconnected
- High engine coolant temperature
- Low engine coolant
- Low engine oil pressure
- Pressure
- Transmission oil temperature
- Low fuel level
- Hydraulic oil temperature

Indicator lamps:
- High_beam
- Direction indication
- Parking brake

Colour
- Cab: Iron-Grey RAL 7031
- Chassis: Tank-grey & Yellow RAL 3000
- Engine & transmission: Black RAL 9005
- Rims: Iron-Grey RAL 7031

Documentation and decals
- Load chart diagram inside cab
- Machine data sign on chassis incl load chart
- Warning, fire protection & oil pressure
- Information & joystick stickers
- Machine data sign on chassis incl load chart
- Load chart diagram inside cabin

Calibration
- Service indicator
- Estimated operating time before empty tank
- Postheating
- Start/stop function to save fuel
- Automatic engine and ignition stop at idle
- Preheating engine incl cold air intake
- Spaid limitation
- Automatic functions voltage on steer tyres
- Auto-Therm TLX (Fry Life Extension) Drive heat

Hydraulics
- Hydraulic unit

Body
- Anti slip protection on fenders and tanks
- Mirror (front/side)
- External rear view mirror 2/pc

Wheels
- 2x4V el. connection in door columns
- Heavy-duty radial tyres (2x)
- Comfort XL el. connection in door columns
- Twin-axle el. connection in door columns
- Electric heated & adjustable mirrors, front fenders/std pos

Optional

Wheels
- Spare wheel & rim 14.00x24 PR2 (RHD)

Colour
- Other colour than std, chassis
- Reinforced anti-corrosion protection

Documentation and decals
- Extra set of documentation
- Workshop manual
- Voice trouble shooting and repair kit
- Load chart & manual incl table “no brakers"
- Documentation on cd or memory stick

Optional

- Camera with monitor in cab direction rearward (6-7 m)
- Rear view warning system, incl 4x sensors, TV-camera & monitor
- Personal proximity safety (1 base/3 charger, 5 tape)
- Tyre pressure monitoring system (Budrich)
- Diesel powered cab heater 5 kW
- Alcoholdrager or Foroguard in cabin
- Semi-automatic fire suppression system (Forsex)
- Fire extinguisher 6 kg powder
- Tool kit
- Extra sound insulation - reduction 3 dB (A)
- Lockable fuel cap
- Cabin heater incl 220V outlet
- Engine heater incl cab heater
- Engine heater incl cab heater US std
- Hydraulic/oil heater incl cab heater
- Hydraulic/oil heater incl cab heater US std
- Central gearing base machine
- Centrally greasing
- Filter kit 2000 hrs
- SmartLink remote monitoring

Attachment (liftpill)
- Lift function x4 (degrees), incl lift to top & speed limit
- Robustness stop spreader x2 90 deg + overview switch
- Automatic extension 20°–40° incl 30° stop

Training
- Contact Kalmar Training Center for training programs
- Working ECO driving

Various warning lights & signals:
- Service indicator
- Estimated operating time before empty tank
- Boom angle and boom extension
- Service time indicator (hours)
- Operating time (hours)
- Boom extension & Boom angle
- Engine oil level
- Transmission oil temperature
- Travelling speed (km/h or m/h)

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Kalmar offers the widest range of cargo handling solutions and services to ports, terminals, distribution centres and to the heavy industry. Kalmar is the industry forerunner in terminal automation and in energy efficient container handling, with one in four container movements around the globe being handled by a Kalmar solution. Through its extensive product portfolio, global service network and ability to enable a seamless integration of different terminal processes, Kalmar improves the efficiency of every move. www.kalmarglobal.com

Kalmar is part of Cargotec. Cargotec’s sales totalled approximately EUR 3.2 billion in 2013 and it employs approximately 11,000 people. Cargotec’s class B shares are quoted on NASDAQ OMX Helsinki under symbol CGCBV. www.cargotec.com

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