

Expect more.

Kalmar DCG80 -110



Expect more from the world's most extensive range of Empty Container Handlers.



More for you.

Our extensive range of Kalmar empty container handlers offer you more than they ever have before, which means you get more for your money.

The market's largest range.

Choose from a range of single stackers in 8, 9, 10 and 11 tonne capacities and lifting heights from 4 to 8-high. Double stackers are available in 10 and 11 tonne capacities, with stacking heights from 4+1 to 8+1-high. Plus, a greater choice of drive lines and performance levels that you can match to your individual needs. More comfort for your drivers, as all of our new range comes with our state of the art EGO Cabin, which can be situated in either a high or low position on the chassis.

A more robust and efficient range, with the highest lifting and lowering rates and dramatically reduced running costs per move. Plus easier access for service and maintenance and more options across the whole range to choose from than ever before.

No matter what way you look at it, the new range of Kalmar empty container handlers give you more.




The operability and control of the Kalmar empty container handler is extremely good. It's agile, suitable for any empty container yard.

Zhang Lin, Operator at NingBo Beilun International Container Terminals Ltd.

To us, Kalmar offers the best machines. It's the safest truck we've used. Kalmar also offers excellent service support.

He Jianguo, Container Handler Unit leader, G-Fortune (Ningbo) Company.



90% of our customers would repurchase.

more for you.

Expect nothing less.

With nearly 10,000 empty container handlers built to our high standards over the last 30 years, it's no surprise that 1000's of them are still in operation today. In fact over 90% of our customers say they would repurchase a Kalmar empty container handler again, primarily for their superior durability and reliability and the local Kalmar support and service network.



You can expect more across the entire range.

more options.

Now more safety features and options to customise your machine than ever before. From reverse warning systems to a range of different drive lines and spreaders.

more return.

Higher productivity, lower fuel consumption and less emissions means a greener and lower cost per move. Longer servicing intervals with easier access for service and maintenance, saving you time and money. Plus, the highest re-sale values in the market.

more robust.

Built on our proven G-Generation platform you get a stronger chassis with high and rear mounted cylinder package for improved stability and toughness. You also get upgraded drive axles with oil-cooled wet disc brakes and a wider rear steer for greater stability when lifting heavy loads to heights.



Double stackers, up to 11 tonnes, high mounted cabin.



Single stackers, up to 11 tonnes, low mounted cabin.

more safety.

Kalmar smart controls include several important safety functions as standard. The overload protection system offers safety information with the container weight in the main display, including warnings and pop-up messages. There is also a mechanical mast tilt indicator on the tilt cylinder and a transport position striping in the mast for additional driver and operational safety.

more choice.

You can choose from our extensive range of either a single stacker with 4 lifting capacities or a double stacker with 2 lifting capacities. There are 4 different cabin offerings, with low or high mounting and the choice of single or dual access stairways. All machines can be equipped with mechanical or hydraulic side tilt or pile slope and there are 6 spreader choices.

more efficient.

Proven, powerful and efficient drive lines in both medium and high performance versions with 3 or 4 speed fully automatic transmissions and a choice of engines that meet current emission standards (EU stage 3-4-5 / EPA Tier 3 and 4F). The added efficiency of standard load sensing hydraulics (power-on-demand) and a choice of options for greater fuel efficiency including Eco Drive Modes, Stop/Start technology and a Tyre Pressure Monitoring System.

more comfort.

Our EGO cabin with multi-functional joystick or linear lift levers is ergonomically designed and provides a quiet working environment and improved visibility in all directions. Plus, a new tilt cylinder design for greater stability and control.

More choice.

Choose from six different machines depending on your needs.

The Kalmar DCG 80-110 Empty Container Handler range.

Kalmar offers you a larger range to choose from than any other manufacturer, you just need to choose the one that suits your business best. The single stackers are available in 8, 9, 10 and 11 tonne capacities and the double stackers in 10 and 11 tonne models. Both ranges share the same main components and performance.

A choice of lifting heights.

We have five different duplex mast heights (2-stage) to choose from, which give you the ability to stack from 4-high up to 8+1-high. You can choose from 4/4-high up to 8/7-high (stacking heights) for the containers sizes of 8'6" / 9'6" and you can handle one container higher with our double stacker as you are able to carry your containers "1 over 1".

Plus, we offer a low-built triplex mast (3-stage) which will allow you to operate in height restricted areas or when you need to drive inside a factory.

A choice of spreaders.

The first thing you need to do is know what sort of containers you will be handling, then you can decide what sort of lifting head / spreader version you will need on your single or double spreader.

For single stacker toplift spreaders you can choose from lifting heads with either a standard twistlock position (8ft wide) for ISO containers or a wide twistlock position (8ft6") and / or wide body containers (WBC / 8ft6" wide).

For double stacker sidelift spreaders there are four choices:

1. Side lift hooks and hydraulic side clamps for single lifting of 20-53ft or double lifting of 20-40ft containers
2. Lift head with hooks-n-clamps including additional safety wedge, that will lock single containers of 45-53ft length.
3. The C-shaped hook-n-clamp spreader from the DCF series
4. ELME 582 spreader with dual sidelift twistlocks, for tight stacking.

A choice of spreader and lift head levelling.

All machines, most designs and spreaders come with two different solutions for spreader carriage and lifting heads.

Choose from either:

1. A standard mechanical end beam levelling carriage (MPS, mechanical pile slope, stroke 0-250 mm)
2. Or the optional combined hydraulic pile slope (HPS \pm 5 deg) and mechanical pile slope functions.

These solutions are ideal for operating on uneven grounds and poor yard conditions or when loading handling containers onto tilting trailers.



Extra comfort, extra smart.

Every member of our complete empty container handler range comes fitted with our new EGO cabin, the ultimate operating environment for your driver.

With a more ergonomic design, smarter functions and an intuitive workspace than ever before, you can expect to get more from your operators.

More to see: With A-posts being replaced with slim B-posts you can expect greater visibility in all directions: forwards, backwards, to the side and upwards. Our new dual wiper system cleans a bigger area of the front windscreen than before so your forward view will stay extra clean and clear at all times.

Extra easy to operate: With a wide choice of joysticks or lifting levers, an electronically adjustable work console and side tilt steering wheel they are designed for ease of operation, making them more efficient to operate.

More comfortable: With a choice of comfortable driver seats, a fault safe pedal system and powerful Electronic Climate Control (ECC) system with smarter controls your operator will benefit from improved ventilation heating and cooling, plus a cabin with superior comfort and lowest noise level inside and outside.

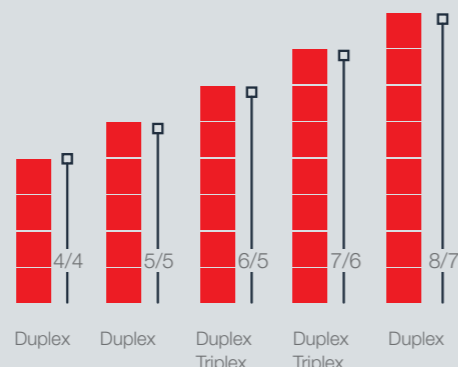
Extra smart: Our intuitive user interface combines visibility, sound and touch to create a perfectly balanced operating environment with an intelligent colour display at its heart. Advanced diagnostics and smart settings allow for improved operational control and safety.



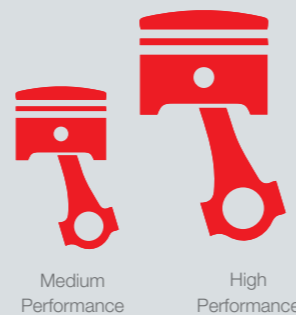
4 lifting capacities.



5 lifting heights.



2 performance alternatives.



More efficient.

More choice of drive lines.

You can choose from either Medium Performance (MP) or High Performance (HP) drive lines. The MP engine and transmission combination can handle most day-to-day applications. However, if you need that extra power and faster lifting speed, then the HP combination might be more suitable. Both options come with Eco Drive Modes with three different operating modes.



Engine Power

Medium Performance:
160-170 kW (max 2100 rpm)

High Performance:
180-190 kW (max 1800 rpm)



Engine Torque

Medium Performance:
900-1000 Nm

High Performance:
1100-1200 Nm



Transmission

Medium Performance:
3+3 gears (no lock-up)

High Performance:
4+4 gears (with lock-up)



Lift & lowering speeds

Medium Performance:
MP 0,55-0,50↑ / 0,50-0,60 m/sec↓

High Performance:
MP 0,65-0,60↑ / 0,55-0,60 m/sec↓

More performance on demand.

Our entire range of empty container handlers comes with ECO Drive Mode settings, giving you three different power modes to choose from.

Power Mode: when speed 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: when you need to retain some speed. With a slightly reduced engine speed you can expect 5-15% lower running and fuel costs.

Economy Mode: when you need the lowest running costs. With engine speed reduced even further you can expect 10-25% lower running and fuel costs.

Normal Mode.

Save **5-15%**
in running costs.

Economy Mode.

Save **10-25%**
in running costs.

more
efficient.



More 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.



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



Reverse Beeper System. When your staff are working side by side with moving vehicles there is always a safety risk. Installing a reverse beeper system provides a clear acoustic alert when the machine is reversing so personnel can make sure that they are out of harm's way at all times.



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 at all times. Active care of your tyres can result in a 10-40% increase in tyre life and up to a 10% decrease in fuel consumption.



Additional lighting. Extra lighting, particularly if you have to operate your machine at night, as you can bring greater operational visibility and safety for personnel working on the site. You can add up to 18 extra powerful LED working lamps (see Options page).



Safety cage. An additional safety cage can be fitted around the cabin to provide additional safety for your driver from falling cargo.



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 your components, this makes it possible to achieve up to 10% in fuel savings.



Cabin options. Depending on your specific needs you can choose from a low or high mounted cabin (+600mm). High cabins provide better visibility for the driver particularly when working with two containers or on high stacks.



more
value.

More value.

Being the most reliable and robust range of empty container handlers in the market can give you real advantages, like higher uptime and lower total running costs.

Safer to operate.

With a clearer view forward, backwards and upwards, a new ergonomically designed cabin, non-slip access surfaces with supporting handrails, plus numerous safety options to choose from including our Reverse Warning System, Alcolock and four overload alerts you can be sure that your operator is working in a safe environment.

Lowering operating costs.

You get longer servicing intervals than before so you can keep your machine hard at work for longer. Plus, with the addition of advanced diagnostic tools and monitoring systems, faults can be dealt with quickly, thereby reducing any downtime.

Higher resale values.

With over 10,000 machines built to the high standard you expect from us - Kalmar empty container handlers are known for their reliability and durability which is why they demand the highest resale values in the market.

Best lifetime value.

Higher uptime, improved productivity and lower costs per move coupled with high re-sale values means you can expect one thing; the best lifetime value you can expect of any empty container handler.

More support.

Our job doesn't stop once we deliver your new empty container handlers. We can also offer a range of support services that help keep your new equipment running at its optimal best. With a global network of over 1500 service and support staff, in 120 countries we will always have someone nearby to give you the support you need.

Kalmar Care, making sure your business never stops.

We can offer you four different types of service and maintenance contracts, for any brand of equipment, for you to choose from. Each is designed to help you improve your operational efficiency, drive productivity and secure financial predictability. Each contract type includes a set of standardised service modules to choose from to meet your business's needs. You just need to choose which one is right for you and your day-to-day operations. Here is an overview of the four different levels:



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
- Addition of 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.

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

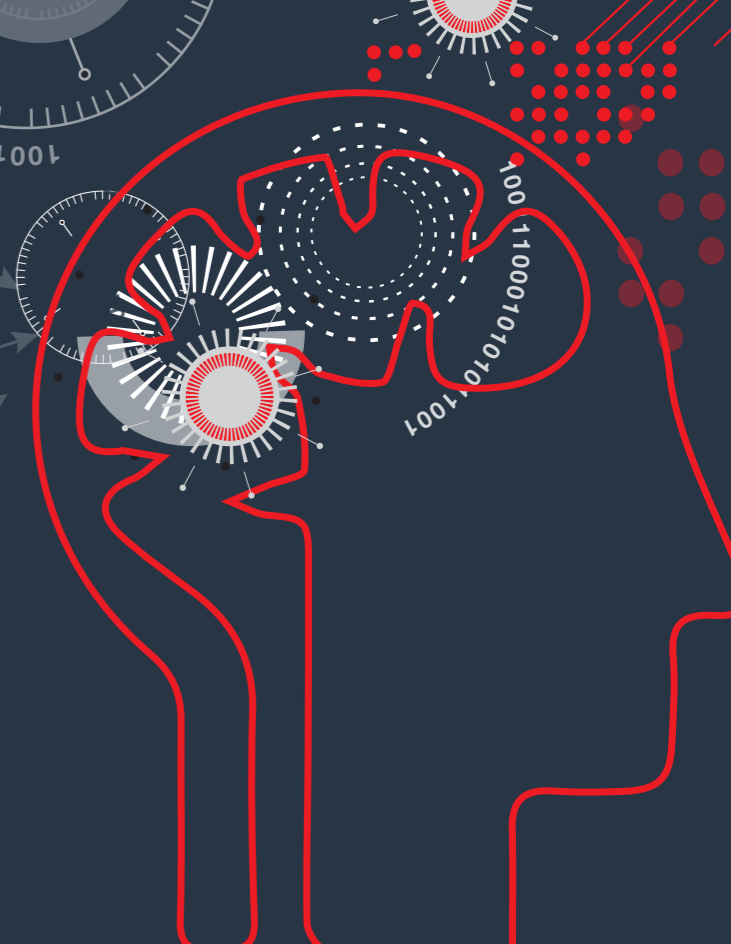
Kalmar Optimal Care

We optimise your business performance.

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

Optimise your operations with Insight.

Kalmar Insight* is a performance management tool for cargo handling, which gives you an easy to use overview of your fleet operations, by aggregating data from multiple sources, including equipment built by other manufacturers. This information is then accessed through an easy to use interface that is available on mobile, tablet or more traditional screens. You can review your entire fleet activities, schedule maintenance activities and order the required parts automatically. All enabling you to take action on real-time information, that will help improve your overall operations immediately. Kalmar Insight comes fitted and ready to be activated in all new Kalmar equipment, it can also be retro fitted into existing Kalmar equipment or those built by other manufacturers. Kalmar Insight, turning data into actionable, impactful insights.



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

Kalmar Genuine Parts.

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 you can do just that. Kalmar Parts Care can make 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 individual needs, so talk to us today and see how we can lift your parts availability, while reducing your inventory costs.



Financing options for you.

Lease or rent.

You may choose to buy your new empty container handler outright or consider leasing or renting your equipment. Kalmar offers a range of leasing and renting options that can give you the financial predictability you need and the option to upgrade your equipment after a fixed period. With our leasing packages you can focus on your core operations, while we perform all your service and maintenance needs required by your fleet. You just need to choose which leasing package and level of service and maintenance support is right for your business. Kalmar can also look at you trading-in your old equipment.

No matter what your service and support needs are, make sure that you speak to your local Kalmar team first.

Kalmar Training Centre.

Our training centre offers a range of courses for both your technicians and operators.

Technicians will be given the knowledge that they need to be able to maintain 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.

Operators will be shown how to get more from their equipment. They will be shown how to improve the efficiency of their driving, what needs to be checked daily before operating and how to get the most out of their new empty container handler.

Standard.

Kalmar DCG80-110

Kalmar DCG80-110, E4-E8 // Empty Container Handlers // 8 - 11 tonnes (EU3 / Tier 3, EU4 / Tier 4 or EU5)

Norms, standards and regulations according to:

- Machinery Directive 2006/42/EC
- Safety Industrial Trucks ISO 3691-1 & EN 16307-1
- Safety Low & High Lift Trucks ANSI/ITSDF B56.1
- Stability of EC-Handlers ISO 22915-9
- CE-marking for trucks within EU/EEA
- ANSI/ITSDF-marking for North America trucks

Chassis

- Strong, durable heavy-duty EC-Handler chassis
- High and rear mounted heavy-duty tilt cylinders
- LHS access stairway, with steps and a wide platform
- Low cabin mounting (LCM) at the rear of the truck
- Very good rear end visibility of the truck
- Chassis with full access to the drive line
- Easy-to-open drive line cover plates (low noise)
- Lifting eyes and anchor points (front & rear)
- Towing pin (rear - incasted)

Body

- Steps with anti-slip protection
- 2x Rear view mirrors - rear on front mudguards
- Strong and protective mudguards (front & rear)
- Noise insulation kit for the complete truck

Steer Axle (rear)

- Kalmar steer axle mounted dual pivot bearings
- Wide track axle with mechanical stops (±3 deg)
- El-servo power steering with double acting cylinder
- Steer axle with narrow turning radius

Drive Axle (front)

- Kessler planetary axle with differential drive
- Wide track axle for high side stability
- Oil-cooled Wet Disc Brakes (WDB)
- High pressure filter (10 my) for the brakes
- DCG80ES44-87: D81-ND, width 4,0 m.
- DCG90ES44-87: D81-ND, width 4,1 m.
- DCG100ES44-87: D91-ND, width 4,1 m.
- DCG110ES44-87: D91-ND, width 4,1 m.
- DCG100ED44-65: D91-ND, width 4,1 m.
- DCG110ED44-65: D91-ND, width 4,1 m.
- DCG100ED76-87: D91-HD, width 4,6 m.
- DCG110ED76-87: D91-HD, width 4,6 m.

Wheels (tyres & rims)

- DCG80: Tyres 12.00x24" (4+2)
- DCG90-110: Tyres 14.00x24" (4+2)

Drive Train

- Volvo and Cummins diesel engines 6 cylinder
- Emission approval EU3 / Tier 3, EU4 / Tier 4 or EU5
- High power & torque with low fuel consumption
- Engine with preheater, monitoring and protection system
- Fully automatic transmission DANA TE-14000
- Transmission monitoring and reverse protection
- Declutch function activated by the brake pressure
- Strong radiators for engine, transmission & brakes
- Diesel tank 380 litre incl. breather filter
- Muffler and exhaust pipe in stainless steel

Load-Sensing Hydraulics

- Load-sensing variable piston pumps (2x)
- Power-on-demand with high lift & lowering speeds
- Pumps for mast, spreader, brakes & steering
- Vane pumps for brake pressure & oil cooling (2x)
- Return filters for the work hydraulics (2x/10 my)
- Servo filter for the work hydraulics (10 my)
- Pressure filter for hydraulics / brakes (10 my)
- Power steering, power brakes & ORFS-couplings
- Hydraulic tank 320 litre incl. breather filter

Lift Mast

- Mast design for up to 8-high single & double stacking
- Duplex 2-stage mast with high mounted tilt cylinder
- Strong, durable lift mast, 1 pair of cylinders & chains
- Heavy-duty mast profiles and strong cross members
- Mast with strong mast wheels, bearings & guide pads
- Large diameter shafts / bearing for mast / tilt fixations
- Only 2 oil hoses + 1 electrical cable over the mast
- Mast tilt angles +3 / -3 deg (FW / BW)
- Mechanical tilt indicator on tilt cylinder
- Transport position striping (on lift mast)

Lift Carriage

- Carriage with strong wheels, bearings & guide pads
- Large sideshift of ±600 mm (total stroke 1200 mm)
- 2 fixed twistlocks with indication lamps
- Mechanical Pile Slope by gravity (MPS) 250 mm
- The carriage is connected by the 2 lift chains

Attachment (DCG80-110 Single Stacker)

- Side lift with hydraulic extension 20'-40'
- 2 fixed twistlocks with indication lamps
- Large sideshift of ±600 mm (total stroke 1200 mm)
- Spring loaded floating vertical heads (0-250 mm)
- Safety locking, alignment pins & sensors (2x)
- Lowering interrupt sensors for safe handling

Attachment (DCG80-110 Double Stacker)

- Side lift with hydraulic extension 20'-40'
- 2 mechanical lift hooks with 2 hydraulic side clamps
- The 2 lift hooks connects the bottom container (l)
- The 2 side clamps connect upper & bottom containers
- 20ft-40ft containers are locked by the side clamps
- Indication lamps for alignment / locked container (l+l)
- Large sideshift of ±600 mm (total stroke 1200 mm)
- Spring loaded floating vertical heads (0-250 mm)
- Safety locking, alignment pins & sensors (4x)
- Lowering interrupt sensors for safe handling

Electronic System

- OLS1, Over Loading System, monitoring lift with speed limit (pop-up)
- Electronic weight scale in main display
- Speed limit outside drive position (ED)
- Dynamic speed limits on 2 load levels (ED)

Electrical System 24V

- Battery box 2x12V & main power switch
- Electric service box on chassis (LHS)
- 2 working LED-lights on spreader carriage (lift head)
- 2 working LED-lights on spreader on end beams
- 2 working LED-lights on mast
- 2 working LED-lights front on fenders (head beam)
- 2 working LED-lights rear below cabin (in reverse)
- 2 position LED-lights on each side of the truck
- 2 tail / brake LED-lights rear in counter weight
- 4 blinker LED-lights (front - rear / left - right)
- 2 flashing LED-brake lights (when reversing)
- 1 rotating warning LED-beacon
- Buzzer when reversing (reverse alarm)

Cabin (EGO)

Structure

- Spacious, modern cabin with good ergonomY level
- Large windows, good visibility, in all directions
- Instep handle (left side)
- Sliding window on both sides
- Doors with air damper and key lock (L + R)
- Tinted laminated windows

Comfort

- Seat Kalmar, mech. spring, high back
- Adjustable armrest (RHS) & 2-point safety belt
- Inside rear view mirror (right side)
- Interior lights with fade away function
- Fully adjustable steering wheel incl tilt function
- Fully adjustable colour display
- Electric adjustable operational console with joystick, operational buttons & armrest (RHS)
- Power steering wheel with steer knob
- Electric horn
- LED background light for buttons & switches

Controls

- Electronic lift levers for mast & spreader functions
- Button for forward-neutral-reverse on 1st lift lever
- Auto rev-up accelerator at lifting / tilting / spreader
- Electric accelerator pedal
- Double brake pedals (L + R)
- Gear lever with electronic hand brake (on/off)
- Automatic gear shifting (P1)
- Multi-function lever LHS (parking brake and gear/direction switch)
- Combined horn and blinker lever
- Warning - hand brake (on/off) leaving seat
- Hour meter

Climate

- ECH, electronic controlled heating/ventilation
- Fresh air and recirculation filter
- Wipers/washers on front, rear and roof windows
- Interval wiper functions on front, rear and roof
- Tinted windows

Information systems

- CECS 2.0 Kalmar intelligent control system
- HMI based on TFT-display 4,3" (109 mm)
- Colour display DM430E (automatic fault analysis)
- Menu control with toggle wheel & push buttons

ECO Drive Modes (EDM):

- Power mode
- Normal mode (default setting)
- Economy mode

Operator menu:

- System voltage
- Actual gear
- Engine rpm
- Travelling speed (km/h or m/h)
- Combined hydraulic and brake oil temperature
- Transmission oil temperature
- Engine oil pressure (Volvo)
- Engine oil pressure only (Cummins)
- Engine coolant temperature
- Clock and date
- Operating time (hours)
- Service time indicator (hours)
- Electronic weight scale functions
- Status of heating system & AC system
- Fuel level (diesel and optional AdBlue)
- Est. operating time before empty tank (hour/min)
- Service indicator
- Container counter with reset function
- Trip computer / statistics

Head-Up display for twistlock indication:

- LED indicators for alignment & container(s)

Various warning lights & signals:

- Charging battery
- Low brake pressure
- Failure indicator
- High engine coolant temperature
- Low engine coolant level (not on Cummins)
- Low engine oil pressure
- Preheating engine
- Transmission oil temperature
- Low fuel level (incl AdBlue)
- Hydraulic and brake oil temperature
- Low washer fluid level
- Head beam
- Direction indication
- Parking brake

Fleet Management

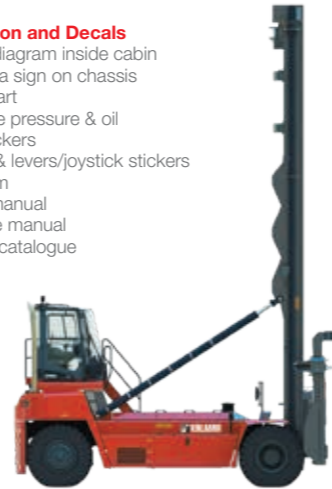
- Equipped with telemetric hardware for Kalmar Insight

Colour

- Cabin: Iron-Grey RAL 7011
- Chassis, tanks & mudguards: Red RAL 3000
- Boom, attachment & axles: Black RAL 7021
- Rims: Iron-Grey RAL 7011

Documentation and Decals

- Load chart diagram inside cabin
- Machine data sign on chassis incl. load chart
- Warning, tyre pressure & oil pressure stickers
- Information & levers/joystick stickers
- Fuse diagram
- Instruction manual
- Maintenance manual
- Spare parts catalogue



Optional.

Kalmar DCG80-110

Kalmar DCG80-110, E4-E8 // Empty Container Handlers // 8 - 11 tonnes (EU3 / Tier 3, EU4 / Tier 4 or EU5)

Chassis

Chassis - ES Empty Single Stacker

- DCG 80-45 ES (L3=4550 mm)
- DCG 90-45 ES (L3=4550 mm)
- DCG 100-45 ES (L3=4550 mm)
- DCG 110-45 ES (L3=4550 mm)

Chassis - ED Empty Double Stacker

- DCG 100-45 ED (L3=4550 mm)
- DCG 110-45 ED (L3=4550 mm)

Lift Mast

- Duplex E4 (4-high 8'6" / 4-high 9'6")
- Duplex E5 (5-high 8'6" / 5-high 9'6")
- Duplex E6 (6-high 8'6" / 5-high 9'6")
- Duplex E7 (7-high 8'6" / 6-high 9'6")
- Duplex E8 (8-high 8'6" / 7-high 9'6")
- Triplex E6 (6 of 8'6" / 5 of 9'6") max 10 T
- Triplex E7 (7 of 8'6" / 6 of 9'6") max 10 T
- Container checker device in carriage

Cabin

Structure

- Low mounted cabin (LCM) with dual access stairways & upper platforms
- High mounted cabin (HCM), +600 mm, improved visibility, dual access stairways & upper platforms
- Hydraulic tilting cabin (stroke 10 degrees)
- Globetrotter cabin, +200 mm, ledge mount windows
- Safety cage to protect cabin from falling cargo

Comfort

- Various seat alternatives
- Head rest for the seat
- Armrest with adjustment (LHS)
- Horizontal dampening/suspension of seat
- Extra trainer seat incl 2-p safety belt (LHS)
- Bracket for terminal and monitor (RHS)
- Writing pad, A4 paper box and reading lamp (RHS)
- Extra rear view mirror (inside cabin / left side)

Controls

- Lever steering incl switch for forward/reverse
- Mini-wheel steering incl switch for forward/reverse
- Only second gear activated (P3)
- Safety override for hydraulic functions (by code)

Climate

- Electronic Climate Control (ECC)
- Microfilter in additional to std filter
- AC/ECC switched off when door is open
- Sun visor front window (black net)
- Sun visor roof window (black net)
- Sun visor rear window (black net)
- Sun visor roof window (reflective film)
- Extra cabin heater (incl. 1 x 220V outlet)
- Postheating

Drive Trains

Medium Performance (MP)

- DANA TE-14300 (3+3 gears) for all MP drive lines
- Cummins QSB-6.7-C220 (EU3 / Tier 3, 164 kW, 949 Nm, 6.70 l, 6-cyl)

High Performance (HP)

- DANA LTE-14400 (4+4 gears + Lock-Up) for all HP drive lines
- Volvo TAD-851-VE (EU3 / Tier 3, 185 kW, 1160 Nm, 7.70 l, 6-cyl)
- Volvo TAD-871-VE (EU4 / Tier 4F, 185 kW, 1160 Nm, 7.70 l, 6-cyl)
- Volvo TAD-881-VE (EU5, 185 kW, 1160 Nm, 7.70 l, 6-cyl)

- Auto engine & ignition stop, after 5 min idle
- Air intake filter, with Pre-Cleaner, raised air intake
- Start/stop function (for Volvo engine only)
- Stronger/wider drive axle, Kessler D91, 4500 mm

Hydraulics

- Hydraulic mast accumulator (shock dampening)
- Mast tilt angles +3 / -6 deg (FW / BW)
- Mast tilt angles +2 / -3 deg (FW / BW)
- Hydraulic longlife fine filter with by-pass (3 my)
- Block valve mounted on lift cylinders

Body

- Anti slip protection on fenders and tanks
- Mud flaps in steel + rubber (front)
- Mud flaps in rubber (rear)
- Noise insulation kit for complete truck (1-3 dB)

Electronic System and Settings

- OLS3, Over Loading System, cut lift with speed limit (pop-up)
- Lift height limitation
- Lift height warning over defined height (specify height)
- Speed limitation (specify speed)
- Speed limit over defined lift height (specify height)
- Speed limit outside drive position (ES)
- Dynamic speed limit depending of lift height
- Dynamic speed limit on 2 load levels (ES)

Electrical System 24V

- 2 extra working LED-lights on mudguard
- 4 extra working LED-lights on mudguard
- 2 extra working LED-lights on cabin roof
- 4 extra working LED-lights on cabin roof
- 6 extra working LED-lights on cabin roof
- 8 extra working LED-lights on cabin roof
- 2 extra working LED-lights on mast
- 2 extra working LED-lights on carriage
- 2 extra reverse LED-lights on counter weight
- 1 extra warning LED-beacon the top of the mast
- 1 extra entrance LED-lights on left stairway + button
- 2 el. heated mirrors on front mudguards (std pos.)
- 2 el. heated & adjustable mirrors on front mudguards
- Radio with MP3, Bluetooth, speakers (24V)
- DAB-Radio with CD, MP3, Bluetooth, speakers (24V)
- 2 x 24V sockets and 2 x 12V sockets in cabin
- 2 x 24V sockets and 2 x 5V / USB sockets in cabin
- Electric air pressure horn

Lift Carriage

- Automatic extension 20-40 incl 30 stop
- Soft landing by inductive sensor (on twistlocks only)
- Hydraulic Pile Slope by cylinders (HPS ±5 deg), the MPS with 0-250 mm end beam levelling is included
- All trucks has full lifting capacity with MPS & HPS
- Available for both single and double stackers

Attachment (Single Stacker)

- Twistlock spreader for wide body (TWL-WTP)
- Spreader standard / wide body container
- Standard / wide body containers are 8ft / 8,5ft wide
- 2 lift heads with Wide Twistlock Position (WTP)
- Hydraulic moveable twistlocks (stroke 76 mm/3")

Attachment (Double Stacker)

- **Hook, clamp & safety wedge double spreader**
- Lift heads with lift hook and hydraulic side clamp
- Hydraulic safety wedge for bottom container lock
- Active safety locking of 45-53ft single containers
- 45-53ft containers are locked by safety wedge (SW)

C-hook spreader with optimised visibility

- Dedicated Hydraulic Pile Slope (HPS) is included, no mechanical end-beam leveling is included
- Side lift with hydraulic extension 20'-40'
- 20ft-40ft containers are locked by the side clamps
- Indication lamps for alignment / locked container (l+l)
- Large sideshift of ±600 mm (total stroke 1200 mm)
- Safety locking, alignment pins & sensors (4x)
- Lowering interrupt sensors for safe handling

Steer Axle (rear)

- Wheel nut protection on steer tires
- Steer cylinder spacer

Wheels

- Spare wheel & rim 12.00x24" of various brands
- Spare wheel & rim 14.00x24" of various brands

Additional equipment

- Reverse display inside cabin (7"/17 cm)
- Reverse camera connected to display in cabin
- Spreader cameras (2x) connected to display in cabin
- Reverse warning system (camera, display & sensors)
- Tyre pressure monitoring system (Bluetooth)
- Diesel powered cabin heater 5 kW
- Alcolock Draeger in cabin
- Semi-automatic fire suppression system (DAFO)
- Fire extinguisher 5-6 kg, powder
- Lockable fuel cap
- Cabin heater incl 220V outlet
- Engine heater incl cab heater
- Engine/hydraulic oil heater incl cab heater
- Central greasing base machine
- Central greasing spreader
- Chain greaser with replaceable cartridge
- Kalmar Insight solutions
- Tool kit or filter kit 2000 hrs
- Soft landing function with ultrasonic sensor (only for single stacking spreader)

Fleet Management

- Kalmar Insight licence (only in certified countries)
- Kalmar Insight Driver Monitor (RFID reader + 10 unique driver tags)
- Kalmar Insight extra monitoring tags

Colour (specify RAL number)

- Other colour than standard - on chassis
- Other colour than standard - on cabin
- Other colour than standard - on rims
- Reinforced anti-corrosion protection (extra primer)

Training

- Contact Kalmar Training Centre for training programs



Technical information.

	1 Truck Model			DCG80-45ES					DCG90-45ES					DCG100-45ES							
	2 Stacking model and height			ES4/4	ES5/5	ES6/5	ES7/6	ES8/7	ES4/4	ES5/5	ES6/5	ES7/6	ES8/7	ES4/4	ES5/5	ES6/5	ES7/6	ES8/7			
MANDATES	3 Type of handling			Single Stackers					Single Stackers					Single Stackers							
	4 Lifting capacity, with MPS or with HPS (1*)			Q1	(kgs)	8000	8000	8000	8000	8000	9000	9000	9000	9000	9000	10000	10000	10000	10000	10000	
	5 Stacking height, no. of containers (8ft6" / 9ft6")			4/4	5/5	6/5	7/6	8/7	4/4	5/5	6/5	7/6	8/7	4/4	5/5	6/5	7/6	8/7	4/4	5/5	
	6 Spreader locking type, standard / optional			Standard: Twistlocks / optional: Twistlocks + WTP (76 mm)					Standard: Twistlocks / optional: Twistlocks + WTP (76 mm)					Standard: Twistlocks / optional: Twistlocks + WTP (76 mm)							
	7 Spreader type, extension stops, sensors			Sidelift, 20ft + 40ft stops, alignment & interrupt sensors					Sidelift, 20ft + 40ft stops, alignment & interrupt sensors					Sidelift, 20ft + 40ft stops, alignment & interrupt sensors							
	8 Wheelbase			L3	(mm)	4550					4550					4550					
	9 Load centre, front of tyres, with MPS or HPS (2*)			L2	(mm)	1210 to 1280					1210 to 1280					1210 to 1280					
	10 Lost load centre, to front face of tyres			X	(mm)	700					700					700					
	WEIGHTS	11 Service weight, with MPS or HPS (2*)				(kgs)	33300/34400	34700/35800	35300/36400	36800/37900	38300/39400	35300/36400	36700/37800	37300/38400	38800/39900	40300/41400	38000/39100	39400/40500	40000/41100	41500/42600	43000/44100
		12 Axle load, front unloaded - rated load MPS				(kgs)	20900/33100	22400/34700	23100/35300	24700/37000	26400/38600	21400/35200	22900/36700	23600/37400	25200/39000	26900/40700	22300/37700	23800/39200	24500/39900	26200/41500	27800/43200
13 Axle load, front unloaded - rated load HPS (2*)				(kgs)	22200/34500	23700/36000	24400/36700	26100/38400	27700/40000	22700/36600	24200/38100	24900/38800	26500/40300	28200/42000	23600/39100	25100/40600	25800/41200	27500/42900	29100/44500		
14 Axle load, rear unloaded - rated load MPS				(kgs)	12400/8100	12300/8000	12200/7900	12100/7800	11900/7600	13900/9100	13800/9000	13700/8600	13600/8800	12400/8600	15700/10400	15600/10200	15500/10200	15400/1000	15200/9900		
15 Axle load, rear unloaded - rated load HPS (2*)				(kgs)	12200/7800	12100/7700	12000/7600	11800/7500	11700/7300	13700/8800	13600/8700	13500/8600	13400/8600	13200/8400	15500/10000	15400/9900	15300/9900	15100/9700	15000/9600		
WHEELS	16 Tyres, type, design, thread depth			Pneumatic / Diagonal / E4					Pneumatic / Diagonal / E4					Pneumatic / Diagonal / E4							
	17 Tyres, dimension (front + rear)				(in)	12,00x24"	12,00x24"	12,00x24"	12,00x24"	12,00x24"	14,00x24"	14,00x24"	14,00x24"	14,00x24"	14,00x24"	14,00x24"	14,00x24"	14,00x24"	14,00x24"	14,00x24"	14,00x24"
	18 Rims, dimension (front + rear)				(in)	8,50x24"	8,50x24"	8,50x24"	8,50x24"	8,50x24"	10,00x24"	10,00x24"	10,00x24"	10,00x24"	10,00x24"	10,00x24"	10,00x24"	10,00x24"	10,00x24"	10,00x24"	10,00x24"
	19 No. of wheels, front - rear (*driven), pressure				(MPa)	4* - 2	4* - 2	4* - 2	1.0	4* - 2	4* - 2	4* - 2	1.0	4* - 2	4* - 2	4* - 2	1.0	4* - 2	4* - 2	4* - 2	1.0
	20 Track width (front - rear)			S1 - S2	(mm)	3270-2450	3270-2450	3270-2450	3270-2450	3270-2450	3270-2400	3270-2400	3270-2400	3270-2400	3270-2400	3270-2400	3270-2400	3270-2400	3270-2400	3270-2400	3270-2400
	21 Truck width drive axle, standard / optional			B / B	(mm)	4050/4100	4050/4100	4050/4100	4050/4100	4050/4100	4100/4600	4100/4600	4100/4600	4100/4600	4100/4600	4100/4600	4100/4600	4100/4600	4100/4600	4100/4600	4100/4600
22 Drive axle (ND = Normal Duty / HD = Heavy Duty)					D81-ND	D81-ND	D81-ND	D81-ND	D81-ND	D81-ND	D81-ND	D81-ND	D81-ND	D81-ND	D91-ND	D91-ND	D91-ND	D91-ND	D91-ND	D91-ND	
DIMENSIONS	23 Lift mast, type, stage, cylinders and chains			Duplex / 2-stage / 2 cylinders / 2 lift chains					Duplex / 2-stage / 2 cylinders / 2 lift chains					Duplex / 2-stage / 2 cylinders / 2 lift chains							
	24 Mast tilt, forward – backward, standard / optional			alfa-beta	(deg)	Standard: 3-3 / optional: 3-6 or 2-3					Standard: 3-3 / OPT: 3-6 or 2-3					Standard: 3-3 / optional: 3-6 or 2-3					
	25 Lift mast height, min - max			H3 - H5	(mm)	7050-12050	8540-15040	6330-15530	7230-18230	11540-21040	7100-12100	8600-15100	6390-15590	7290-18290	11600-21100	7100-12100	8600-15100	6390-15590	7290-18290	11600-21100	
	26 Lift height, min - max in twistlocks / lift hooks			H10 - H4	(mm)	2240-12250	2240-15200	2240-15590	2240-18690	2240-21200	2300-12300	2300-15260	2300-16050	2300-18750	2300-21260	2300-12300	2300-15260	2300-16050	2300-18750	2300-21260	
	27 Height cabin roof, standard / optional			H6	(mm)	Standard: 3940 / optional: 4540					Standard: 4000 / optional: 4600					Standard: 4000 / optional: 4600					
	28 Seat index point (height)			H8	(mm)	Standard: 2800 / optional: 3400					Standard: 2860 / optional: 3460					Standard: 2860 / optional: 3460					
	29 Truck length with spreader, MPS / HPS			L	(mm)	6900/6950					6900/6950					6900/6950					
	30 Spreader width, twistlocks / hooks, (min - max))			Va - Vb	(mm)	6085-12220					6085-12220					6085-12220					
	31 Spreader sideshift, stroke both directions (total)			V1	(mm)	± 600 (1200)					± 600 (1200)					± 600 (1200)					
	32 Spreader levelling, MPS / HPS, standard / optional				(mm/deg)	Standard: 0 - 250 / optional: HPS: ± 5 (incl MPS)					Standard: 0 - 250 / optional: HPS: ± 5 (incl MPS)					Standard: 0 - 250 / optional: HPS: ± 5 (incl MPS)					
	33 Ground clearance, steer axle - middle - front				(mm)	250					300					300					
	34 Aisle width, with 20ft - 40ft container			A1 - A2	(mm)	10600/14200					10850/14350					10850/14350					
	35 Turning radius, inner / outer 20ft / outer 40ft			R1-R2-R3	(mm)	1150 / 6750 / 9350					1150 / 6750 / 9350					1150 / 6750 / 9350					
DRIVE LINE	36 Engine type, design			Diesel / 4-stroke / turbo / intercooler					Diesel / 4-stroke / turbo / intercooler					Diesel / 4-stroke / turbo / intercooler							
	37 Drive line - performance levels					MP Medium Performance		HP High Performance			MP Medium Performance		HP High Performance			MP Medium Performance		HP High Performance			
	38 Engine, power / torque, (min - max)				(kW/Nm)	160 - 172 / 949 - 1060			185 / 1160			160 - 172 / 949 - 1060		185 / 1160			160 - 172 / 949 - 1060		185 / 1160		
	39 Fuel consumption, average diesel / AdBlue ³				(L/h-%)	5 - 15 / 1 - 5			5 - 15 / 1 - 5			5 - 15 / 1 - 5		5 - 15 / 1 - 5			5 - 15 / 1 - 5		5 - 15 / 1 - 5		
	40 Travel speed, fwd / rev (unloaded - at rated load)				(km/h)	24 - 24 / 22 - 22			25 - 25 / 25 - 25			24 - 24 / 22 - 22		25 - 25 / 25 - 25			24 - 24 / 22 - 22		25 - 25 / 25 - 25		
	41 Gradeability, max / 2 km/h (unloaded - at rated load)				(%)	29 - 22 / 24 - 19			37 - 30 / 33 - 27			29 - 22 / 24 - 19		37 - 30 / 33 - 27			29 - 22 / 24 - 19		37 - 30 / 33 - 27		
	42 Lifting speed, unloaded - at 70% of rated load				(m/s)	0,55 - 0,50			0,65 - 0,60			0,55 - 0,50		0,65 - 0,60			0,55 - 0,50		0,65 - 0,60		
	43 Lowering speed, unloaded - at rated load				(m/s)	0,50 - 0,60			0,55 - 0,60			0,50 - 0,60		0,55 - 0,60			0,50 - 0,60		0,55 - 0,60		
	44 Transmission, gears forward / reverse					3 + 3			4 + 4 with Lock-Up			3 + 3		4 + 4 with Lock-Up			3 + 3		4 + 4 with Lock-Up		
	45 Transmission type, function, safety					Automatic powershift / reverse protection					Automatic powershift / reverse protection					Automatic powershift / reverse protection					
	46 Drive axle type, service brakes (drive wheels)					Differential / hub reduction / oil-cooled wet disc brakes					Differential / hub reduction / oil-cooled wet disc brakes					Differential / hub reduction / oil-cooled wet disc brakes					
	47 Drive axle, parking brake, brake release					Single big dry disc / hydraulic release					Single big dry disc / hydraulic release					Single big dry disc / hydraulic release					
	48 Steer axle type, design, function					Heavy-duty / single cylinder / power steering					Heavy-duty / single cylinder / power steering					Heavy-duty / single cylinder / power steering					
	OTHERS	49 Hydraulic system, type			Load-sensing (power-on-demand)/working & brake oil tank					Load-sensing (power-on-demand)/working & brake oil tank					Load-sensing (power-on-demand)/working & brake oil tank						
50 Tank volumes, diesel - AdBlue* - oil				(dm ³)	380 / 15 ³ / 320					380 / 15 ³ / 320					380 / 15 ³ / 320						
51 Noise, inside LpAZ / outside LwAZ (EDM's)				(dB(A))	63 - 66 / 104 - 108					63 - 66 / 104 - 108					63 - 66 / 104 - 108						
52 Overload System with warning OLS1 + OLS2				Standard/ Optional	Standard: Over Load System OLS-1 Lift monitoring / Optional: OLS-3 Lift cut-off / tilt monitoring					Standard: Over Load System OLS-1 Lift monitoring / Optional: OLS-3 Lift cut-off / tilt monitoring					Standard: Over Load System OLS-1 Lift monitoring / Optional: OLS-3 Lift cut-off / tilt monitoring						

Notes:
1) MPS = Full lifting capacity with MPS (8-9-10 tons).
HPS = Full lifting capacity with HPS incl MPS (8-9-10 tons).
2) MPS = Mechanical Pile Slope in end beams - by gravity.
HPS = Hydraulic Pile Slope by 2 cylinders incl. MPS.
3) On EU3 (EPA T3) engines there is no AdBlue package included.
On EU4 (EPA T4F) engines AdBlue package is included.
On EU5 (EPA T5) engines AdBlue and DPF (Diesel Particle Filter) are included.

Technical information.

	1 Truck Model		DCG100-45ED							
	2 Stacking model and height		ED4/4	ED5/5	ED6/5	ED7/6	ED8/7			
MANDATES	3 Type of handling		Double Stackers							
	4 Lifting capacity, with MPS or with HPS (1*)		Q1	(kgs)	10000	10000	10000	10000	10000	
	5 Stacking height, no. of containers (8ft6" / 9ft6")				4+1/4+1	5+1/5+1	6+1/5+1	7+1/6+1	8+1/7+1	
	6 Spreader locking type, standard / optional		Standard: Hooks + Clamps / optional: STD + Safety Wedge							
	7 Spreader type, extension stops, sensors		Sidelift, 20ft + 40ft stops, alignment & interrupt sensors							
	8 Wheelbase		L3	(mm)	4550					
	9 Load centre, front of tyres, with MPS or HPS (2*)		L2	(mm)	1210 to 1280					
	10 Lost load centre, to front face of tyres		X	(mm)	700					
	WEIGHTS	11 Service weight, with MPS or HPS (2*)			(kgs)	38400/39500	39800/40900	40400/41500	41900/43000	43400/44500
		12 Axle load, front unloaded - rated load MPS			(kgs)	22800/38100	24300/39700	25000/40300	26600/42000	28300/43800
13 Axle load, front unloaded - rated load HPS (2*)			(kgs)	24100/39500	25600/41100	26300/41800	27900/43400	29600/45100		
14 Axle load, rear unloaded - rated load MPS			(kgs)	15600/10300	15500/10100	15400/10100	15300/9900	15100/9700		
15 Axle load, rear unloaded - rated load HPS (2*)			(kgs)	15400/10000	15300/9800	15200/9700	15100/9600	14900/9400		
WHEELS	16 Tyres, type, design, thread depth		Pneumatic / Diagonal / E4							
	17 Tyres, dimension (front + rear)			(in)	14,00x24"	14,00x24"	14,00x24"	14,00x24"	14,00x24"	
	18 Rims, dimension (front + rear)			(in)	10,00x24"	10,00x24"	10,00x24"	10,00x24"	10,00x24"	
	19 No. of wheels, front - rear (*driven), pressure			(MPa)	4* - 2			1.0		
	20 Track width (front - rear)		S1 - S2	(mm)	3270-2400	3270-2400	3270-2400	3780-2400	3780-2400	
	21 Truck width drive axle, standard / optional		B / B	(mm)	4100/4600	4100/4600	4100/4600	4600	4600	
22 Drive axle (ND = Normal Duty / HD = Heavy Duty)				D91-ND	D91-ND	D91-ND	D91-ND	D91-HD		
DIMENSIONS	23 Lift mast, type, stage, cylinders and chains		Duplex / 2-stage / 2 cylinders / 2 lift chains							
	24 Mast tilt, forward – backward, standard / optional		alfa-beta	(deg)	Standard: 3-3 / optional: 3-6 or 2-3					
	25 Lift mast height, min - max		H3 - H5	(mm)	7040-12040	8600-15100	6390-15590	7290-18290	11600-21100	
	26 Lift height, min - max in twistlocks / lift hooks		H10 - H4	(mm)	2240-12240	2300-15300	2300-16050	2300-18750	2300-21300	
	27 Height cabin roof, standard / optional		H6	(mm)	Standard: 4000 / optional: 4600					
	28 Seat index point (height)		H8	(mm)	Standard: 2860 / optional: 3460					
	29 Truck length with spreader, MPS / HPS		L	(mm)	6900/6950					
	30 Spreader width, twistlocks / hooks, min - max		Va - Vb	(mm)	6615-12750					
	31 Spreader sideshift, stroke both directions (total)		V1	(mm)	± 600 (1200)					
	32 Spreader levelling, MPS / HPS, standard / optional			(mm/deg)	Standard: 0 - 250 / optional: HPS: ± 5 (incl MPS)					
	33 Ground clearance, steer axle - middle - front			(mm)	300					
34 Aisle width, with 20ft - 40ft container		A1 - A2	(mm)	10850/14350						
35 Turning radius, inner / outer 20ft / outer 40ft		R1-R2-R3	(mm)	1150 / 6750 / 9350						
DRIVE LINE	36 Engine type, design		Diesel / 4-stroke / turbo / intercooler							
	37 Drive line - performance levels				MP Medium Performance		HP High Performance			
	38 Engine, power - torque, min / max			(kW/Nm)	160 - 172 / 949 - 1060			185 / 1160		
	39 Fuel consumption, average diesel / AdBlue ³			(L/h-%)	5 - 15 / 1 - 5			5 - 15 / 1 - 5		
	40 Travel speed, fwd / rev (unloaded - at rated load)			(km/h)	24 - 24 / 22 - 22			25 - 25 / 25 - 25		
	41 Gradeability, max / 2 km/h (unloaded - at rated load)			(%)	29 - 22 / 24 - 19			37 - 30 / 33 - 27		
	42 Lifting speed, unloaded - at 70% of rated load			(m/s)	0,55 - 0,50			0,65 - 0,60		
	43 Lowering speed, unloaded - at rated load			(m/s)	0,50 - 0,60			0,55 - 0,60		
	44 Transmission, gears forward / reverse				3 + 3			4 + 4 with Lock-Up		
	45 Transmission type, function, safety				Automatic powershift / reverse protection					
	46 Drive axle type, service brakes (drive wheels)				Differential / hub reduction /oil-cooled wet disc brakes					
	47 Drive axle, parking brake, brake release				Single big dry disc / hydraulic release					
	48 Steer axle type, design, function				Heavy-duty / single cylinder / power steering					
	OTHERS	49 Hydraulic system, type		Load-sensing (power-on-demand)/working & brake oil tank						
50 Tank volumes, diesel - AdBlue* - oil			(dm ³)	380 / 15 ³ / 320						
51 Noise, inside LpAZ / outside LwAZ (EDM's)			(dB(A))	63 - 66 / 104 - 108						
52 Overload System with warning OLS1 + OLS2			Standard/ Optional	Standard: Over Load System OLS-1 Lift monitoring / Optional: OLS-3 Lift cut-off / tilt monitoring						

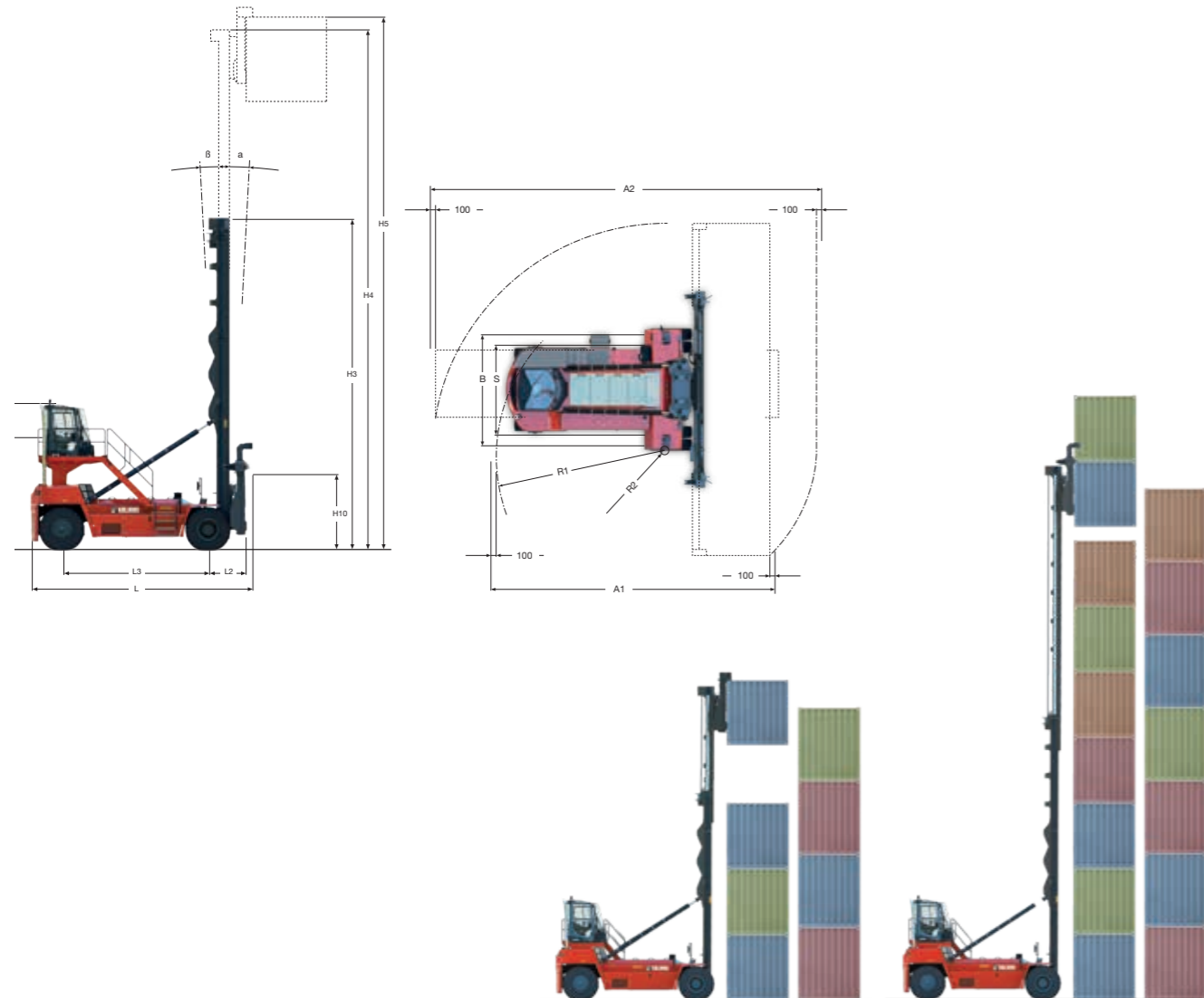
DCG110-45ES				
ES4/4	ES5/5	ES6/5	ES7/6	ES8/7
Single Stackers				
11000	11000	11000	11000	11000
4/4	5/5	6/5	7/6	8/7
Standard: Twistlocks / optional: Twistlocks + WTP (76 mm)				
Sidelift, 20ft + 40ft stops, alignment & interrupt sensors				
4550				
1210 to 1280				
700				
39700/40800	41200/42200	41700/42800	43200/44300	44700/45600
22200/39100	23800/40600	24400/41300	26100/42900	27700/44600
23500/40500	25100/42000	25700/42700	27400/44300	29000/46000
17500/11600	17400/11500	17300/11400	17100/11300	17000/11100
17300/11300	17100/11200	17100/11000	16900/11000	16800/10800
Pneumatic / Diagonal / E4				
14,00x24"	14,00x24"	14,00x24"	14,00x24"	14,00x24"
10,00x24"	10,00x24"	10,00x24"	10,00x24"	10,00x24"
4* - 2	4* - 2	4* - 2	1.0	
3270-2400	3270-2400	3270-2400	3270-2400	3270-2400
4100/4600	4100/4600	4100/4600	4100/4600	4100/4600
D91-HD	D91-HD	D91-HD	D91-HD	D91-HD
Duplex / 2-stage / 2 cylinders / 2 lift chains				
Standard: 3-6				
7100-12100	8600-15100	9100-16100	10350-18600	11600-21100
2300-12300	2300-15260	2300-16260	2300-18760	2300-21260
Standard: 4000 / optional: 4600				
Standard: 2860 / optional: 3460				
6900/6950				
6085-12220				
± 600 (1200)				
Standard: 0 - 250 / optional: HPS: ± 5 (incl MPS)				
300				
10850/14350				
1250 / 7000 / 9700				
Diesel / 4-stroke / turbo / intercooler				
HP High Performance				
185 / 1160				
5 - 15 / 1 - 5				
25 - 25 / 25 - 25				
37 - 30 / 33 - 27				
0,56 - 0,56				
0,55 - 0,55				
4 + 4 with Lock-Up				
Automatic powershift / reverse protection				
Differential / hub reduction /oil-cooled wet disc brakes				
Single big dry disc / hydraulic release				
Heavy-duty / single cylinder / power steering				
Load-sensing (power-on-demand)/working & brake oil tank				
380 / 15 ³ / 320				
64 - 67 / 105 - 107				
Standard: Over Load System OLS-1 Lift monitoring / Optional: OLS-3 Lift cut-off / tilt monitoring				

DCG110-45ED				
ED4/4	ED5/5	ED6/5	ED7/6	ED8/7
Double Stackers				
11000	11000	11000	11000	11000
4+1/4+1	5+1/5+1	6+1/5+1	7+1/6+1	8+1/7+1
Standard: Hooks + Clamps / optional: STD + Safety Wedge				
Sidelift, 20ft + 40ft stops, alignment & interrupt sensors				
4550				
1210 to 1280				
700				
40100/41200	41500/42600	42100/43200	43600/44700	45100/46200
22700/39600	24200/41100	24900/41800	26500/43400	28200/45100
24000/41000	25500/42500	26200/43200	27900/44800	29500/46500
17400/11500	17300/11400	17200/11300	17100/11200	16900/11100
17200/11200	17100/11100	16900/11000	16800/10900	16700/10700
Pneumatic / Diagonal / E4				
14,00x24"	14,00x24"	14,00x24"	14,00x24"	14,00x24"
10,00x24"	10,00x24"	10,00x24"	10,00x24"	10,00x24"
4* - 2			1.0	
3270-2400	3270-2400	3270-2400	3780-2400	3780-2400
4100	4100	4100	4600	4600
D91-HD	D91-HD	D91-HD	D91-HD	D91-HD
Duplex / 2-stage / 2 cylinders / 2 lift chains				
Standard: 3-6				
7040-12040	8600-15100	9100-16100	10350-18600	11600-21100
2240-12240	2300-15300	2300-16300	2300-18800	2300-21300
Standard: 4000 / optional: 4600				
Standard: 2860 / optional: 3460				
6900/6950				
6615-12750				
± 600 (1200)				
Standard: 0 - 250 / optional: HPS: ± 5 (incl MPS)				
300				
10850/14350				
1250 / 7000 / 9700				
Diesel / 4-stroke / turbo / intercooler				
HP High Performance				
185 / 1160				
5 - 15 / 1 - 5				
25 - 25 / 25 - 25				
37 - 30 / 33 - 27				
0,56 - 0,56				
0,55 - 0,55				
4 + 4 with Lock-Up				
Automatic powershift / reverse protection				
Differential / hub reduction /oil-cooled wet disc brakes				
Single big dry disc / hydraulic release				
Heavy-duty / single cylinder / power steering				
Load-sensing (power-on-demand)/working & brake oil tank				
380 / 15 ³ / 320				
64 - 67 / 105 - 107				
Standard: Over Load System OLS-1 Lift monitoring / Optional: OLS-3 Lift cut-off / tilt monitoring				

Notes:
1) MPS = Full lifting capacity with MPS (8-9-10 tons).
HPS = Full lifting capacity with HPS incl MPS (8-9-10 tons).
2) MPS = Mechanical Pile Slope in end beams - by gravity.
HPS = Hydraulic Pile Slope by 2 cylinders incl. MPS.
3) On EU3 (EPA T3) engines there is no AdBlue package included.
On EU4 (EPA T4F) engines AdBlue package is included.
On EU5 (EPA T5) engines AdBlue and DPF (Diesel Particle Filter) are included.

Drive lines.

Truck Models		Medium Performance (MP)	High Performance (HP)		
Engine emission approvals		EU3A / EPA Tier 3	EU3A / EPA Tier 3	EU4 / EPA Tier 4F	EU5
Engine emission brand/series		Cummins QSB	Volvo / D-8	Volvo / D-8	Volvo / D-8
Engine model		QSB-6.7-C220	TAD-851-VE	TAD-871-VE	TAD-881-VE
Engine after treatment type		No SCR / no AdBlue	No SCR / no AdBlue	SCR / AdBlue	SCR / AdBlue
		No particle filter	No particle filter	No particle filter	With particle filter
Engine design / cylinders		6-inline / common rail	6-inline / common rail		
Engine displacement	(dm3)	6.700	7.700		
Max power @ engine speed	(kW)	164 - 172	185		
Max torque @ engine speed	(Nm)	949	1.160		
Max engine speed	(rpm)	2.100	1.800		
Fuel consumption – average diesel	(L/h)	5–15	5–15		
Fuel consumption – average adblue	(%)	-	-	1 - 5	1 - 5
Alternator type - power (VxAmp)	(W)	AC - 1,680 (28x60)	AC - 3,640 (28x130)		
Transmission model (gears FWD + RVS)		Dana TE-14300 (3+3)	Dana TE-14400-L (4+4 / Lock-Up)		
Transmission gear shift type		Automatic powershift	Automatic powershift		
Transmission clutch type		Torque converter	Torque converter with Lock-Up		
Drive axle brand / series		Kessler / D81 - D91 (WDB)	Kessler / D81 - D91 (WDB)		
Service brake / cooling		Wet Disc Brakes with oil cooling	Wet Disc Brakes with oil cooling		
Steer axle brand / series		Kalmar / single cylinder / extra wide	Kalmar / single cylinder / extra wide		





KALMAR

Making your every move count

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