

Expect
MORE



The Kalmar DCG80-110
Empty Container Handler range.



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 17600, 19800, 22000 and 24300 lbs capacities and lifting heights from 4 to 8-high. Double stackers are available in 22000 and 24300 lbs 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 gives you more.

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.

MORE
for you

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.

You can expect more across

ENTIRE RANGE

MORE
options

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

MORE
return

Higher productivity with 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.

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 fully automatic transmissions and a choice of engines that meet current emissions standards (EPA Tier 3 and Tier 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 Tire Pressure Monitoring.

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
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.



**Double stackers,
up to 24,300 lbs,
high mounted cabin.**

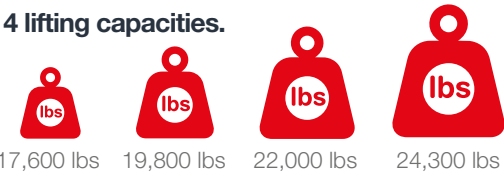


**Single stackers,
up to 24,300 lbs,
low mounted cabin.**

More CHOICE

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 17600, 19800, 22000 and 24300 lbs capacities and the double stackers in 22000 and 24300 lbs models. Both ranges share the same main components and performance.

4 lifting capacities.

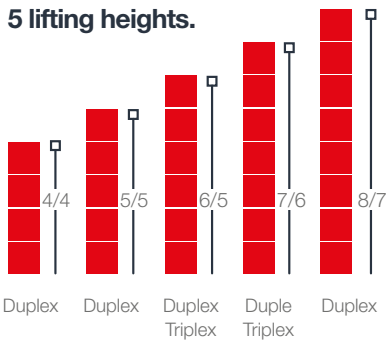


A choice of lifting heights.

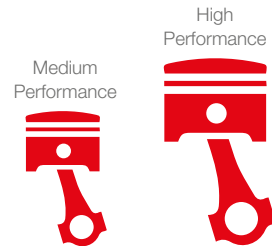
We have five different duplex mast heights (2-stage) to choose from, which give you the ability to stack from 4-high up to 8+1-high. You can choose from 4/4-high up to 8/7-high (stacking heights) for the containers sizes of 8'6" / 9'6" and you can handle one container higher with our double stacker as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

5 lifting heights.



2 performance alternatives.



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 (8' wide) for ISO containers or a wide twistlock position (8'6") and / or wide body containers (WBC / 8'6" 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 end beam levelers.

All machines, mast 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 ± 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 empty container handler range comes fitted with our 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: forward, backward, 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.



Easy to operate.

With a new joystick, electronically adjustable work console and side tilt steering wheel they are all designed to minimize driver fatigue and maximize operational efficiency.

More comfortable.

With an adjustable drivers seat, an ergonomic pedal system and Climate Control system with smarter controls, your operator will benefit from improved ventilation heating and cooling, plus a cabin with superior interior comfort.

Extra smart.

Our new user interface combines sight, sound and touch to create a perfectly balanced operating environment with a new color display at its heart. Advanced diagnostics allows for greater operational control and safety.





MORE
efficient

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:
220 hp

High Performance:
248 hp

Engine Torque

Medium Performance:
700 lb-ft

High Performance:
855 lb-ft

Transmission

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

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

Lift and lowering speeds

Medium Performance:
1.8-1.6 ↑ / 1.6-1.9 fps ↓

High Performance:
2.1-1.9 ↑ / 1.8-1.9 fps ↓

More performance on demand.

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

Power Mode: when speed is of the essence. With full engine speed you will be able to move quickly about the yard, lift and lower, 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 OPTIONS



Reverse Warning System. 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. To protect your operator and machine from fire you can fit a FSS to your machine. The system utilizes 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 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 breathalyzer.



Cabin options. Depending on your specific needs you can choose from a low or high mounted cabin (+23.6"). High cabins provide better visibility for the driver particularly when working with two containers or on high stacks.



Reverse Alarm System. When your staff are working side by side with moving vehicles there is always a safety risk. Installing a reverse alarm 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.



Tire Pressure Monitoring System. Helps to reduce wear and tear on tires which results in reduced fuel consumption. Bluetooth sensors keep the driver advised of the condition of the tires continually. Active care of your tires can result in a 10-40% increase in tire 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).



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.



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

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, backward and upward, 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
value

SUPPORT

when and where you need it.

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 more than 100 countries we will always have someone nearby to give you the support you need.

Kalmar Insight.

Turning data into actionable, impactful insights.

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.

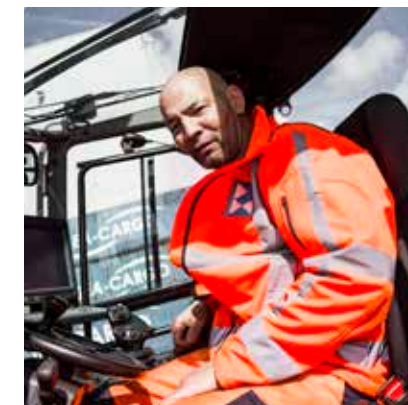
You can review your entire fleet activities, schedule maintenance and order the required parts automatically. All enabling you to take action on real-time information, that will help improve your overall operations immediately. Kalmar Insight comes fitted and ready to be activated in all new Kalmar equipment, and can be retrofitted into existing Kalmar equipment or those built by other manufacturers.



Financing options.

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.

Our training 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 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.



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.

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

Standard.

Kalmar DCG80-110

Kalmar DCG80-110, E4-E8 // Empty Container Handlers // 17,600 - 24,300 lbs Tier 3 / Tier 4F

Norms, standards and regulations according to:

- Safety Low & High Lift Trucks ANSI/ITSDF B56.1
- ANSI/ITSDF-marking for North America trucks

Chassis

- Strong, durable heavy-duty EC-Handlers chassis
- High and rear mounted heavy-duty tilt cylinders
- Left side single 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 achor points (front & rear)
- Towing pin (rear - incasted)

Body

- Steps with anti-slip protection
- Anti slip protection on fenders and tanks
- 2 x rear view mirrors on front fenders
- Strong and protective fenders (front & rear)
- Basic 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)
- Electric 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 157"
- DCG90ES44-87: D81-ND, width 161"
- DCG100ES44-87: D91-ND, width 161"
- DCG110ES44-87: D91-ND, width 161"
- DCG100ED44-65: D91-ND, width 161"
- DCG110ED44-65: D91-ND, width 161"
- DCG100ED76-87: D91-HD, width 181"
- DCG110ED76-87: D91-HD, width 181"

Wheels on Single stackers (ES)

- DCG80 ES: Tires 12.00x24" (4x + 2)
- DCG90-110 ES: Tires 14.00x24" (4x + 2)

Wheels on Double Stackers (ED)

- DCG100-110 ED: Tires 14.00x24" (4x + 2)

Drive Train

- Volvo and Cummins diesel engines 6 cylinder
- Emission approval Tier 3 / Tier 4F
- 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
- 100 gal. diesel tank with 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 µm)
- Servo filter for the work hydraulics (10 µm)
- Pressure filter for hydraulics / brakes (10 µm)
- Power steering, power brakes & ORFS-couplings
- 84 gal. hydraulic tank with 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° Fwd / -3° Bwd
- Mechanical tilt indicator on tilt cylinder
- Transport position striping (on lift mast)

Lift Carriage

- Automatic extension 20-40 incl 30 stop
- Carriage with strong wheels, bearings & guide pads
- Large sideshift of ±23.6" (total stroke 47.2")
- 2 fixed twistlocks with indication lamps
- Mechanical Pile Slope by gravity (MPS) 9.8"
- The carriage is connected by the 2 lift chains

Attachment Single Stacker

- Side lift with hydraulic extension 20'-40'
- 2 fixed twistlocks with indication lamps
- Spring loaded floating vertical heads (0-9.8")
- Safety locking, alignment pins & sensors (2x)
- Lowering interrupt sensors for safe handling

Attachment 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 (I)
- The 2 side clamps connect upper & bottom containers
- 20'-40' containers are locked by the side clamps
- Indication lamps for alignment / locked container (I+II)
- Spring loaded floating vertical heads (0-9.8")
- 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)
- 2 x 24V sockets and 2 x 12V sockets in cabin
- 1 rotating warning LED-beacon
- Buzzer when reversing (reverse alarm)

ECO Drive Modes (EDM):

- Power mode (highest productivity)
- Normal mode (high productivity - less fuel) - default setting
- ECO mode (good productivity - lower fuel)

Cabin (EGO)

Structure

- Spacious, modern cabin with good ergonomy level
- Large windows, good visibility, in all directions
- Globetrotter cabin, +200 mm, ledge mount windows
- 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 right side & 2-point safety belt
- Inside rear view mirror (right side)
- Interior lights with fade away function
- Fully adjustable steering wheel with tilt function
- Fully adjustable color display
- Electric adjustable operational console with joystick, operational buttons & armrest right side
- 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 left side (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)
- Color 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 mph)
- 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 DEF)
- 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 (with DEF level)
- Hydraulic and brake oil temperature
- Low washer fluid level

Indicator lamps:

- Head beam
- Direction indication
- Parking brake

Fleet Management

- Equipped with telemetric hardware for Kalmar Insight

Color

- 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 with load chart
- Warning, tire pressure & oil pressure stickers
- Information & levers/joystick stickers
- Fuse diagram
- Instruction manual
- Maintenance manual
- Spare parts catalog

Optional.

Kalmar DCG80-110

Kalmar DCG80-110, E4-E8 // Empty Container Handlers // 17,600 - 24,300 lbs Tier 3 / Tier 4F

Chassis

Chassis - ES Empty Single Stacker

- DCG 80-45 ES (L3=179")
- DCG 90-45 ES (L3=179")
- DCG 100-45 ES (L3=179")
- DCG 110-45 ES (L3=179")

Chassis - ED Empty Double Stacker

- DCG 100-45 ED (L3=179")
- DCG 110-45 ED (L3=179")

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-high of 8'6" / 5-high of 9'6") max 22000 lbs
- Triplex E7 (7-high of 8'6" / 6-high of 9'6") max 22000 lbs
- Container checker device in carriage

Cabin

Structure

- Low mounted cabin (LCM) with dual access stairways & upper platforms
- High mounted cabin (HCM), +23.6", improved visibility, dual access stairways & upper platforms
- Hydraulic tilting cabin (stroke 10°)
- Safety cage to protect cabin from falling cargo

Comfort

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

Controls

- Lever steering with switch for forward/reverse
- Mini-wheel steering with 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 (with 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 Tier 3, 220 hp, 700 lb-ft, 6.7 L,

High Performance (HP)

- DANA LTE-14400 (4+4 gears + Lock-Up) for all HP drive lines
- Volvo TAD-851-VE Tier 3, 248 hp, 855 lb-ft, 7.7 L,
- Volvo TAD-871-VE Tier 4F, 248 hp, 855 lb-ft, 7.7 L,
- Auto engine & ignition stop, after 5 min idle
- Air intake filter, with Pre-Cleaner, raised air intake
- Start/stop function (for Volvo engine only)

Hydraulics

- Hydraulic mast accumulator (shock dampening)
- Mast tilt angles +3° Fwd / -6° Bwd
- Mast tilt angles +2° Fwd / -3° Bwd
- Hydraulic longlife fine filter with by-pass (3 µm)
- Block valve mounted on lift cylinders

Body

- 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
- 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 5V / USB sockets in cabin
- Electric air pressure horn

Lift Carriage / Attachment

- Soft landing by inductive sensor (on twistlocks only)
- Hydraulic Pile Slope by cylinders (HPS ±5°), the MPS with 0-9.8" mm end beam levelling is included
- All trucks have 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 8' / 8'6" wide
- 2 lift heads with Wide Twistlock Position (WTP)
- Hydraulic moveable twistlocks (stroke 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 45-53' single containers
- 45-53ft containers are locked by safety wedge (SW)

C-hook spreader with optimized visibility

- Dedicated Hydraulic Pile Slope (HPS) is included, no mechanical end-beam leveling is included
- Side lift with hydraulic extension 20'-40'
- 20'-40' containers are locked by the side clamps
- Indication lamps for alignment / locked container (I+II)
- Large sideshift of ±23.6" mm (total stroke 47.2")
- Safety locking, alignment pins & sensors (4x)
- Lowering interrupt sensors for safe handling

Steer Axle (rear)

- Wheel nut protection on steer tires
- Steer cylinder spacer



TECHNICAL INFORMATION

MANDATES	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	
	3	Type of handling			Single Stackers					Single Stackers					Single Stackers					
	4	Lifting capacity, with MPS or with HPS (1")		Q1	(lbs)	17600	17600	17600	17600	17600	19800	19800	19800	19800	19800	22000	22000	22000	22000	22000
	5	Stacking height, no. of containers (8'6" / 9'6")				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
	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, 20' + 40' stops, alignment & interrupt sensors					Sidelift, 20' + 40' stops, alignment & interrupt sensors					Sidelift, 20' + 40' stops, alignment & interrupt sensors				
	8	Wheelbase		L3	(in)	179					179					179				
	9	Load center, front of tires, with MPS or HPS (2")		L4	(in)	48 or 50					48 or 50					48 or 50				
	10	Lost load center, to front face of tires		x	(in)	28					28					28				
WEIGHTS	11	Service weight, with MPS / HPS (2")			(lbs)	73410 / 75840	76500 / 78930	77820 / 80250	81130 / 83560	84440 / 86860	77820 / 80250	80910 / 83330	82230 / 84660	85540 / 87960	88850 / 91270	83780 / 86200	86860 / 89290	88190 / 90610	91490 / 93920	94800 / 97220
	12	Axle load, front unloaded / rated load MPS			(lbs)	46080 / 72970	49380 / 76500	50930 / 77820	54450 / 81570	58200 / 85100	47180 / 77600	50490 / 80910	52030 / 82450	55560 / 85980	59300 / 89730	49160 / 83110	52470 / 86420	54010 / 87960	57760 / 91490	61290 / 95240
	13	Axle load, front unloaded / rated load HPS (2")			(lbs)	48940 / 75840	52250 / 79370	53790 / 80910	57540 / 84660	61070 / 88190	50040 / 80690	53350 / 84000	54900 / 85540	58420 / 88850	62170 / 92590	52030 / 86200	55340 / 89510	56880 / 90830	60630 / 94580	64150 / 98110
	14	Axle load, rear unloaded / rated load MPS			(lbs)	27340 / 18080	27120 / 17640	26900 / 17420	26680 / 17200	26240 / 16760	30640 / 20060	30420 / 19840	30200 / 18960	29980 / 19400	27340 / 18960	34610 / 22930	34390 / 22490	34170 / 22490	33950 / 22050	33510 / 21830
	15	Axle load, rear unloaded / rated load HPS (2")			(lbs)	26900 / 17420	26680 / 16980	26460 / 16760	26010 / 16530	25790 / 16090	30200 / 19400	29980 / 19180	29760 / 18960	29540 / 18960	29100 / 18520	34170 / 22270	33950 / 21830	33730 / 21830	33290 / 21380	33070 / 21160
WHEELS	16	Tires, type, design, thread depth			Pneumatic / Diagonal / E4					Pneumatic / Diagonal / E4					Pneumatic / Diagonal / E4					
	17	Tires, dimension (front + rear)			(in)	Standard: 12.00x24" / Optional: 14.00x24"					14.00x24"					14.00x24"				
	18	Rims, dimension (front + rear)			(in)	Standard: 8.50x24" / Optional: 10.00x24"					10.00x24"					10.00x24"				
	19	No. of wheels, front - rear (*driven) / pressure			(psi)	4* - 2 / 145					4* - 2 / 145					4* - 2 / 145				
	20	Track width (front - rear)		S1 - S2	(in)	Standard: 129 - 96 / Optional: 129 - 94					Standard: 129 - 94 / Optional: 149 - 94					Standard: 129 - 94 / Optional: 149 - 94				
	21	Truck width drive axle, standard / optional		B / B	(in)	Standard: 159 (12.00x24") / Optional 161 (14.00x24")					Standard: 161 / Optional: 181					Standard: 161 / Optional: 181				
DIMENSIONS	22	Drive axle (ND = Normal Duty / HD = Heavy Duty)			D81-ND					Standard: D81-ND / Optional: D91-HD					Standard: D91-HD					
	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 / Optional: 3-6 or 2-3					Standard: 3-3 / Optional: 3-6 or 2-3				
	25	Lift mast height, min - max		H3 - H5	(in)	277 - 474	336 - 592	356 - 631	405 - 730	454 - 828	280 - 476	339 - 594	358 - 634	407 - 732	457 - 831	280 - 476	339 - 594	358 - 634	407 - 732	457 - 831
	26	Lift height, min - max in twistlocks / lift hooks		H10 - H4	(in)	88 - 482	88 - 600	88 - 639	88 - 738	88 - 836	91 - 484	91 - 602	91 - 642	91 - 740	91 - 839	91 - 484	91 - 602	91 - 642	91 - 740	91 - 839
	27	Height cabin roof, standard / optional		H6	(in)	Standard: 155 / Optional: 179					Standard: 157 / Optional: 181					Standard: 157 / Optional: 181				
	28	Seat index point (height)		H8	(in)	Standard: 110 / Optional: 134					Standard: 113 / Optional: 136					Standard: 113 / Optional: 136				
	29	Truck length with spreader, MPS / HPS		L	(in)	272 / 274					272 / 274					272 / 274				
	30	Spreader width, twistlocks / hooks, min - max		Va - Vb	(in)	240 - 480					240 - 480					240 - 480				
	31	Spreader sideshift,stroke both directions (total)		V1	(in)	± 23.6 (47.2)					± 23.6 (47.2)					± 23.6 (47.2)				
	32	Spreader levelling, MPS / HPS, standard / optional			(in/deg)	Standard: 0 - 9.8 / Optional HPS: ± 5 (incl MPS)					Standard: 0 - 9.8 / Optional HPS: ± 5 (incl MPS)					Standard: 0 - 9.8 / Optional HPS: ± 5 (incl MPS)				
	33	Ground clearance, steer axle - middle - front			(in)	9.8					11.8					11.8				
	34	Aisle width, with 20' - 40' container		A1 - A2	(in)	417 - 559					427 - 565					427 - 565				
	35	Turning radius, inner / outer 20' / outer 40'		R1 - R2 - R3	(in)	45 / 266 / 368					49 / 276 / 382					49 / 276 / 382				
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			(hp / lb-ft)	220 / 700			248 / 855		220 / 700			248 / 855		220 / 700			248 / 855	
	39	Fuel consumption, average diesel / DEF (3*)			(gal/h / %)	1.3 - 3.9 / 1 - 5			1.3 - 3.9 / 1 - 5		1.3 - 3.9 / 1 - 5			1.3 - 3.9 / 1 - 5		1.3 - 3.9 / 1 - 5			1.3 - 3.9 / 1 - 5	
	40	Travel speed, fwd / rev (unloaded - at rated load)			(mph)	14.9 - 14.9 / 13.7 - 13.7			15.5 - 15.5 / 15.5 - 15.5		14.9 - 14.9 / 13.7 - 13.7			15.5 - 15.5 / 15.5 - 15.5		14.9 - 14.9 / 13.7 - 13.7			15.5 - 15.5 / 15.5 - 15.5	
	41	Gradeability, max / 1.2 mph (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			(fps)	1.8 - 1.6			2.1 - 1.9		1.8 - 1.6			2.1 - 1.9		1.8 - 1.6			2.1 - 1.9	
	43	Lowering speed, unloaded - at rated load			(fps)	1.6 - 1.9			1.8 - 1.9		1.6 - 1.9			1.8 - 1.9		1.6 - 1.9			1.8 - 1.9	
	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				
OTHERS	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					
	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 / DEF (3*) / hyd. oil			(gal)	100 / 3.9 / 84					100 / 3.9 / 84					100 / 3.9 / 84				
51	Noise, inside LpAZ / outside LwAZ (EDM's)				(dB(A))	63 - 66 / 106 - 108					63 - 66 / 106 - 108					63 - 66 / 106 - 108				
52	Over Load System with warning OLS1 + OLS3					Standard: OLS1 (lift monitor) / Optional: OLS3 (lift cut-off + tilt monitor)					Standard: OLS1 (lift monitor) / Optional: OLS3 (lift cut-off + tilt monitor)					Standard: OLS1 (lift monitor) / Optional: OLS3 (lift cut-off + tilt monitor)				

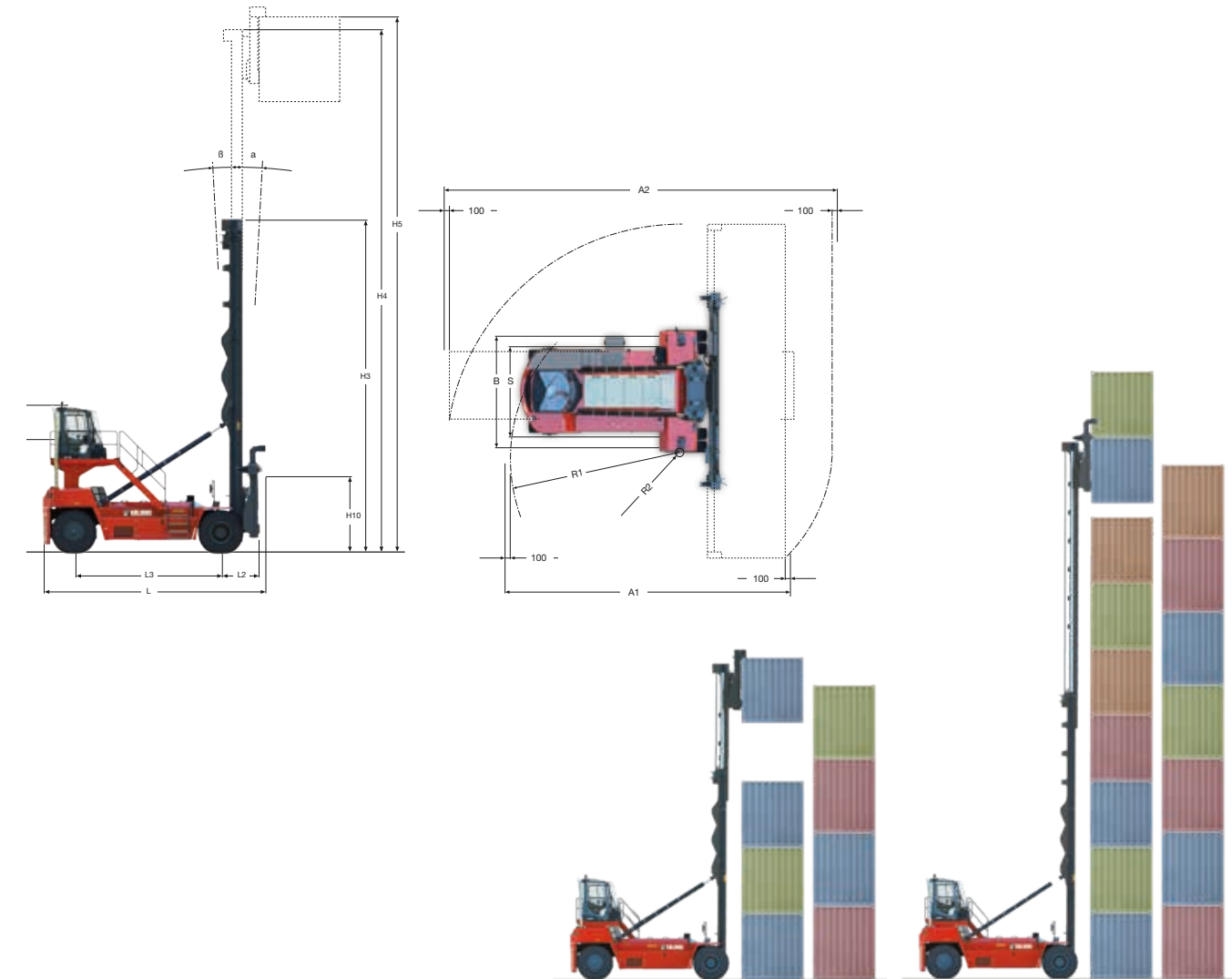
TECHNICAL INFORMATION

	1 Truck Model			DCG 100-45 ED					DCG 110-45 ES					DCG 110-45 ED						
	2 Stacking model and height			ED4/4	ED5/5	ED6/5	ED7/6	ED8/7	ES4/4	ES5/5	ES6/5	ES7/6	ES8/7	ED4/4	ED5/5	ED6/5	ED7/6	ED8/7		
MANDATES	3 Type of handling			Double Stackers					Single Stackers					Double Stackers						
	4 Lifting capacity, with MPS or with HPS (1*)			Q1	(lbs)	22000	22000	22000	22000	22000	24300	24300	24300	24300	24300	24300	24300	22000		
	5 Stacking height, no. of containers (8'6" / 9'6")					4+1 / 4+1	5+1 / 5+1	6+1 / 5+1	7+1 / 6+1	8+1 / 7+1	4 / 4	5 / 5	6 / 5	7 / 6	8 / 7	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					Standard: Twistlocks / Optional: Twistlocks + WTP (76 mm)					Standard: Hooks + Clamps / Optional: STD + Safety Wedge						
	7 Spreader type, extension stops, sensors			Sidelift, 20' + 40' stops, alignment & interrupt sensors					Sidelift, 20' + 40' stops, alignment & interrupt sensors					Sidelift, 20' + 40' stops, alignment & interrupt sensors						
	8 Wheelbase			L3	(in)	179					179					179				
	9 Load center, front of tires, with MPS or HPS (2*)			L4	(in)	48 or 50					48 or 50					48 or 50				
	10 Lost load center, to front face of tires			x	(in)	28					28					28				
WEIGHTS	11 Service weight, with MPS / HPS (2*)			(lbs)	84660 / 87080	87740 / 90170	89070 / 91490	92370 / 94800	95680 / 98110	87520 / 89950	90830 / 93040	91930 / 94360	95240 / 97660	98550 / 100970	88410 / 90830	91490 / 93920	92810 / 95240	96120 / 98550	99430 / 101850	
	12 Axle load, front unloaded / rated load MPS			(lbs)	50270 / 84000	53570 / 87520	55120 / 88850	58640 / 92590	62390 / 96560	48940 / 86200	52470 / 89510	53790 / 91050	57540 / 94580	61070 / 98330	50040 / 87300	53350 / 90610	54900 / 92150	58420 / 95680	62170 / 99430	
	13 Axle load, front unloaded / rated load HPS (2*)			(lbs)	53130 / 87080	56440 / 90610	57980 / 92150	61510 / 95680	65260 / 99430	51810 / 89290	55340 / 92590	56660 / 94140	60410 / 97660	63930 / 101410	52910 / 90390	56220 / 93700	57760 / 95240	61510 / 98770	65040 / 102520	
	14 Axle load, rear unloaded / rated load MPS			(lbs)	34390 / 22710	34170 / 22270	33950 / 22270	33730 / 21830	33290 / 21380	38580 / 25570	38360 / 25350	38140 / 25130	37700 / 24910	37480 / 24470	38360 / 25350	38140 / 25130	37920 / 24910	37700 / 24690	37260 / 24470	
	15 Axle load, rear unloaded / rated load HPS (2*)			(lbs)	33950 / 22050	33730 / 21610	33510 / 21380	33290 / 21160	32850 / 20720	38140 / 24910	37700 / 24690	37700 / 24470	37700 / 24250	37040 / 24470	37920 / 24690	37700 / 24470	37480 / 24250	37040 / 24030	36820 / 23590	
WHEELS	16 Tires, type, design, thread depth			Pneumatic / Diagonal / E4					Pneumatic / Diagonal / E4					Pneumatic / Diagonal / E4						
	17 Tires, dimension (front + rear)			(in)	14.00x24"					14.00x24"					14.00x24"					
	18 Rims, dimension (front + rear)			(in)	10.00x24"					10.00x24"					10.00x24"					
	19 No. of wheels, front - rear (*driven) / pressure			(psi)	4* - 2 / 145					4* - 2 / 145					4* - 2 / 145					
	20 Track width (front - rear)			S1 - S2	(in)	Standard: 129 - 94 / Optional: 149 - 94			Standard: 149 - 94		Standard: 129 - 96 / Optional: 129 - 94			Standard: 129 - 96 / Optional: 129 - 94						
	21 Truck width drive axle, standard / optional			B / B	(in)	Standard: 161 / Optional: 181			Standard: 181		Standard: 161 / Optional: 181			Standard: 161 / Optional: 181		Standard: 181				
	22 Drive axle (ND = Normal Duty / HD = Heavy Duty)			Standard: D91-HD					Standard: D91-HD					Standard: D91-HD						
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 / OPT: 3-6 or 2-3					Standard: 3-6 / OPT: 3-3 or 2-3					Standard: 3-6 / Optional: 3-3 or 2-3				
	25 Lift mast height, min - max			H3 - H5	(in)	277 - 474	339 - 594	358 - 634	407 - 732	457 - 831	280 - 476	339 - 594	358 - 634	407 - 732	457 - 831	277 - 474	339 - 594	358 - 634	407 - 732	457 - 831
	26 Lift height, min - max in twistlocks / lift hooks			H10 - H4	(in)	88 - 482	91 - 602	91 - 642	91 - 740	91 - 839	91 - 484	91 - 602	91 - 642	91 - 740	91 - 839	88 - 482	91 - 602	91 - 642	91 - 740	91 - 839
	27 Height cabin roof, standard / optional			H6	(in)	Standard: 157 / OPT: 181					Standard: 157 / OPT: 181					Standard: 157 / Optional: 181				
	28 Seat index point (height)			H8	(in)	Standard: 113 / OPT: 136					Standard: 113 / OPT: 136					Standard: 113 / Optional: 136				
	29 Truck length with spreader, MPS / HPS			L	(in)	272 / 274					272 / 274					272 / 274				
	30 Spreader width, twistlocks / hooks, min - max			Va - Vb	(in)	260 - 502					240 - 480					260 - 502				
	31 Spreader sideshift,stroke both directions (total)			V1	(in)	± 23.6 (47.2)					± 23.6 (47.2)					± 23.6 (47.2)				
	32 Spreader levelling, MPS / HPS, standard / optional				(in/deg)	Standard: 0 - 9.8 / OPT HPS: ± 5 (incl MPS)					Standard: 0 - 9.8 / OPT HPS: ± 5 (incl MPS)					Standard: 0 - 9.8 / Optional HPS: ± 5 (incl MPS)				
	33 Ground clearance, steer axle - middle - front				(in)	11.8					11.8					11.8				
	34 Aisle width, with 20' - 40' container			A1 - A2	(in)	427 - 565					427 - 565					427 - 565				
	35 Turning radius, inner / outer 20' / outer 40'			R1 - R2 - R3	(in)	49 / 276 / 382					49 / 276 / 382					49 / 276 / 382				
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		HP High Performance			HP High Performance						
	38 Engine, power / torque, min - max				(hp / lb-ft)	220 / 700			248 / 855		248 / 855			248 / 855						
	39 Fuel consumption, average diesel / DEF (3*)				(gal/h / %)	1.3 - 3.9 / 1 - 5			1.3 - 3.9 / 1 - 5		1.3 - 3.9 / 1 - 5			1.3 - 3.9 / 1 - 5						
	40 Travel speed, fwd / rev (unloaded - at rated load)				(mph)	14.9 - 14.9 / 13.7 - 13.7			15.5 - 15.5 / 15.5 - 15.5		15.5 - 15.5 / 15.5 - 15.5			15.5 - 15.5 / 15.5 - 15.5						
	41 Gradeability, max / 1.2 mph (unloaded - at rated load)				(%)	29 - 22 / 24 - 19			37 - 30 / 33 - 27		37 - 30 / 33 - 27			37 - 30 / 33 - 27						
	42 Lifting speed, unloaded - at 70% of rated load				(fps)	1.8 - 1.6			2.1 - 1.9		1.8 - 1.8			1.8 - 1.8						
	43 Lowering speed, unloaded - at rated load				(fps)	1.6 - 1.9			1.8 - 1.9		1.8 - 1.8			1.8 - 1.8						
	44 Transmission, gears forward + reverse					3 + 3			4 + 4 with Lock-Up		4 + 4 with Lock-Up			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 / DEF (3*) / hyd. oil			(gal)	100 / 3.9 / 84					100 / 3.9 / 84					100 / 3.9 / 84					
	51 Noise, inside LpAZ / outside LwAZ (EDM's)			(dB(A))	63 - 66 / 106 - 108					63 - 66 / 103 - 106					63 - 66 / 103 - 106					
	52 Over Load System with warning OLS1 + OLS3					Standard: OLS1 (lift monitor) / Optional: OLS3 (lift cut-off + tilt monitor)					Standard: OLS1 (lift monitor) / Optional: OLS3 (lift cut-off + tilt monitor)					Standard: OLS1 (lift monitor) / Optional: OLS3 (lift cut-off + tilt monitor)				

DRIVE LINES.

Truck Models		Medium Performance (MP)	High Performance (HP)	
Engine emission approvals		EU3 / Tier 3*	EU3 / Tier 3*	EU4 / Tier 4F
Engine emission brand/series		Cummins QSB	Volvo / D8	Volvo / D8
Engine model		QSB-6.7-C220	TAD-851-VE	TAD-871-VE
Engine after treatment type		No SCR / no DEF	No SCR / no DEF	With SCR / with DEF
		No particle filter	No particle filter	No particle filter
Engine design / cylinders		6-inline / common rail	6-inline / common rail	
Engine displacement	(in³ / L)	408 / 6.70	470 / 7.70	
Max power @ engine speed	(hp)	220 @ 2.000	248 @ 1.500-2.100	
Max torque	(lb-ft)	700	855	
Max engine speed	(rpm)	2.100	1.800	
Fuel consumption – average diesel	(gal/h)	1.3 - 3.9	1.3 - 3.9	
Fuel consumption – average DEF	(%)	-	-	1 - 5
Transmission model (gears FWD + REV)		Dana TE-14300 (3+3)	Dana LTE-14400 (4+4) with 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	
Alternator power	(W (V x Amp))	AC, 1680 (28 x 60)	AC, 3640 (28 x 130)	

*Tier 3 engines are not for sale nor use in US/Canada nor territories thereof.



Information correct at time of publication and is subject to change.





Making your every move count

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