

The Kalmar

GLORIA

range of reachstackers



DRG420-1300



MEET GLORIA

Our Gloria range of reachstackers is our most comprehensive to date and is available with a broad range of lifting capacities and attachments which can be fitted to suit your specific requirements. From moving fully laden containers to shifting 130 tonne wind generator segments, all can be accomplished safely, effectively, and efficiently - just as you would expect from a Kalmar Reachstacker.

What can you expect from Gloria?



Continuously improved performance and availability levels.



An ergonomically designed cabin that's more comfortable and safer for your operators.



A range of reachstackers and options that can help reduce your carbon emissions.



A more connected experience and a range of digital support services.

Kalmar, the home of the reachstacker.

Over thirty years ago, in Lidhult, Sweden, we built the world's first commercial reachstacker. Based on the idea that containers could be handled more flexibly, with higher stacking, deeper reach and improved storage capacity, the concept soon became a worldwide success. It marked a new standard in operational efficiency and reliability: one that continues to this day with one of the world's oldest operating reachstackers. Delivered in 1990, it's a machine that is still running strong in Guangzhou, China, after 40,000 hours on the job – and counting.

Now, with over 11,000 reachstackers operating in over 160 countries, we are known for designing and building reachstackers that are safe, reliable, highly efficient; and can stack higher and deeper than other machines. All while continually adapting and innovating to meet the changing needs of both material and container handlers around the globe.

With our range of Gloria Reachstackers, decades of innovative thinking and clever design is once again paying off for our customers, as this generation of reachstackers delivers a leap forward in productivity, ergonomics, and operational efficiency. Now you just need to work out which of our reachstackers is most suited to your operational needs. We are here to help.



Optimising UPTIME

With our latest generation of reachstackers, we've managed to boost performance once again with newly designed integrated components and improved operator interfaces. The result? Simplified maintenance, fewer faults, and a major increase in service intervals.

Improved component integration.

Kalmar's G-Generation reachstackers have taken a big leap forward in component integration and construction. For example, our new segmented wiring makes maintenance and replacement simpler and quicker. And with fewer exposed components there is less wear on wiring, hydraulics, and other connectors, improving the reliability and availability of your Kalmar Reachstacker.

Proactive monitoring.

Kalmar was the world's first manufacturer to use Can-bus technology as a standard, as it automatically locates failures, compensating with backup bus wires and connectors before the fault can affect your machine. Since an individual electrical component and its backup very rarely fail together, the result is a highly reliable self-correcting pro-active system.

Easier to service.

With all major service points accessible from the ground and an engine bay with removable top covers, you'll find it quicker and safer to perform routine checks and maintenance tasks on G-Generation reachstackers.

Longer service periods.

Our G-Generation reachstackers have longer service intervals than previous generations, elevating uptime and reducing costs. Combined with Kalmar's global service and after-sales network that is second to none, these improvements make our latest range of reachstackers a frontrunner in non-stop productivity.





SAFER

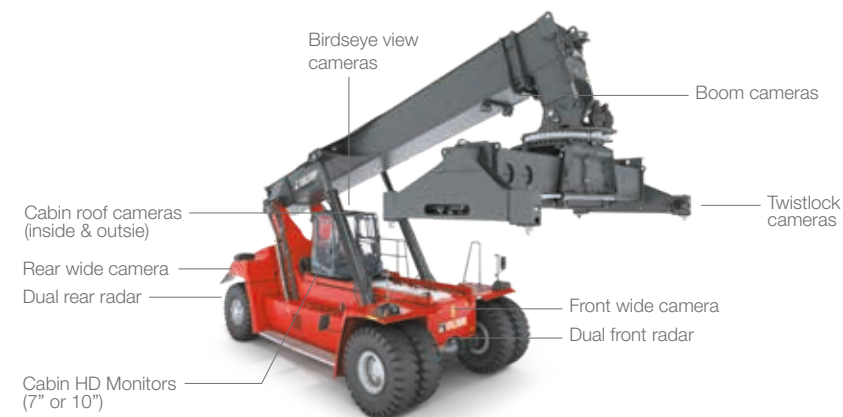
and more comfortable

Keeping your drivers safe and comfortable is not only good for your drivers, it's also good for business. Which is why each of our G-Generation reachstackers is fitted with our ergonomically designed EGO cabin, giving your drivers a safer and more comfortable work environment. Here are some of the key elements designed to improve safety and comfort.



Improved visibility.

An open cabin design for optimised visibility at all angles. Smart profiles and curved windows combine to give exceptionally strong forward, diagonal, and rearward visibility. A range of optional cameras are available that can be mounted in different positions on your reachstacker to improve the operator's visibility of their operating environment.



G-Generation joystick.

The G-Generation joystick with built-in gear knob is designed to improve driving efficiency. It is optimised for maximum lifting capacity and is ergonomically enhanced to reduce arm fatigue. There are also other optional joysticks available if required.

Adjustable multi-seat.

Fully integrated Kalmar seats have been carefully developed to ensure the best possible comfort and sitting posture for long shifts and demanding operations for your drivers. There are five seats to choose from so you will be sure to find one that suits your drivers' needs.

High-capacity wipers.

With over 90% curved windscreen drying surface, these wipers provide optimal visibility for higher productivity and safety when operating in the rain.

Comfort pedals.

A flexible and fail-safe pedal system with adjustable pedal angles is fitted as standard to minimise foot strain. It's a floor-based solution with a hanging pedal feel, so your drivers can drive a full shift and experience less foot and leg fatigue.

Climate package.

An electronic climate control system is fitted as standard to keep your operators as comfortable as possible in most conditions. Large air intakes mean easy filter replacement in the front, whilst a well-designed climate control system provides superior interior comfort.

Ergonomic steering wheel.

Our patented steering wheel has been specially engineered to reduce stress and increase productivity through careful testing. It is fully adjustable and can also be tilted at an angle to the side for comfortable manoeuvring in any situation.

Work console.

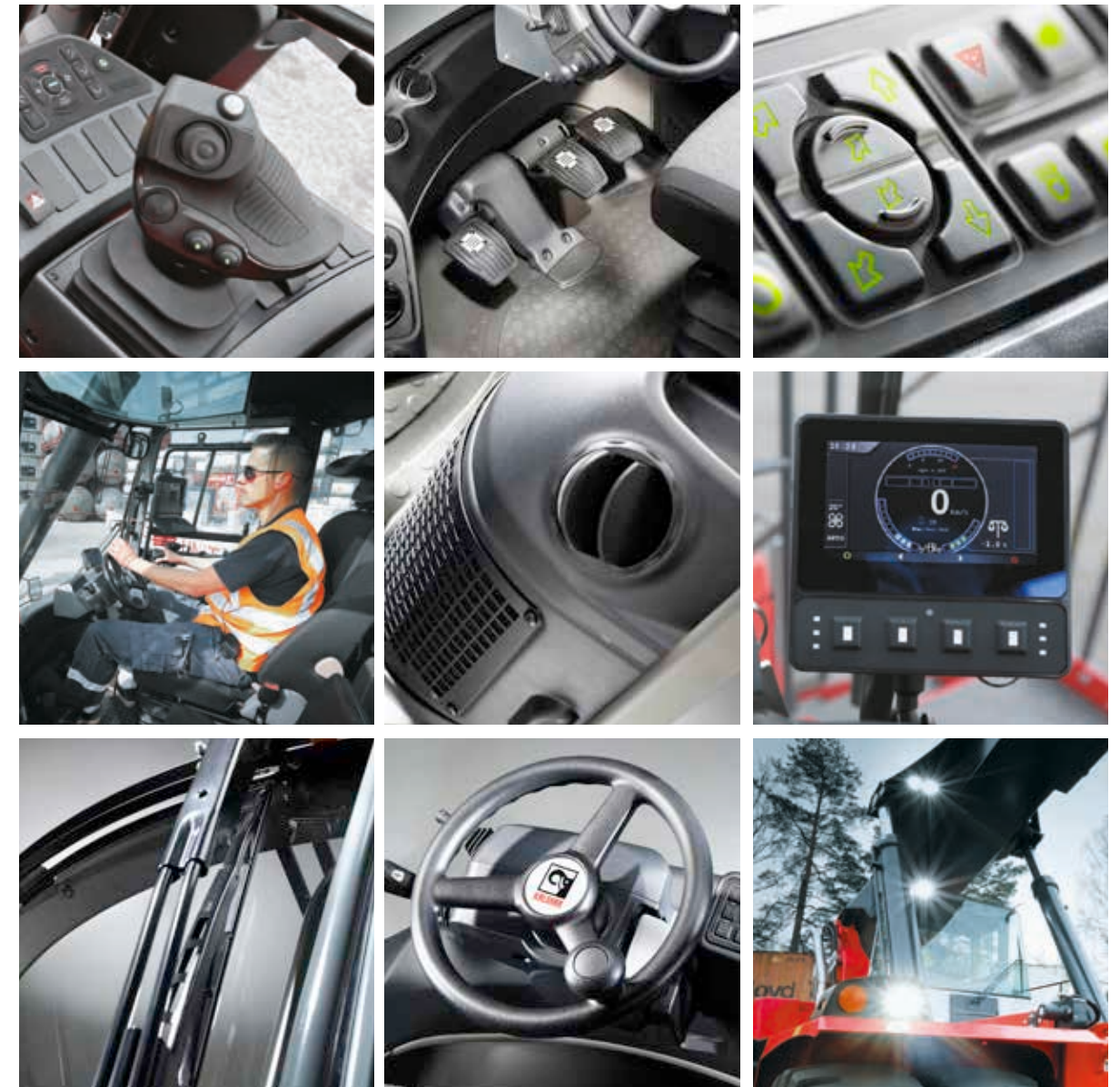
Your operator will find all the key controls, switches, and indicators within easy reach in our ergonomically designed cabin. Work consoles are also adjustable as we know that no two drivers are the same.

Intuitive interfaces.

Kalmar's colour user interface [HMI] used across the range has been intuitively designed for ease of use, with information displayed clearly and logically to ensure that your drivers are kept fully informed.

Enhanced safety.

To further enhance safety, your reachstacker can be fitted with extra cameras to see what is going on behind, additional lights for operating in limited light or at night, a fire suppression system in case of fire on board, and an alco-lock to make sure your drivers are always in complete control of their machine.



Meet Gloria's

FAMILY

The reliability, robustness and success of Gloria's platform has allowed us to extend our initial offering to meet a variety of material handling needs. Initially designed as a top loader, Gloria now comes in models that have been specifically designed for industrial, intermodal and barge handling applications. Gloria's family has been further expanded with the addition of the Kalmar Eco Reachstacker and the Kalmar Electric Reachstacker.

Reachstacker
Product
Portfolio



Toplift Barge Intermodal Lift Hook Tool Carrier

Gloria Range*	DRG450S	DRG450S	DRG450C	DRG570-1300Z	DRG500-650A
Eco Range	DRG450SE	DRG450SE	DRG450CE	DRG570-700ZE	DRG500-600AE
Electric Range	ERG450S	ERG450S**	ERG450C		

* Including Super Gloria
** Available in 2023



The Kalmar Eco Reachstacker.

In comparison to older machines, Kalmar's Eco Reachstacker can reduce your fuel consumption by up to 40%, and by up to 25% when compared to more recent machines, cutting your fuel costs and emissions while matching the productivity levels of machines with much larger engines.

Find out how you can cut your fuel bills and emissions by up to 40% [here](#).



The Kalmar Electric Reachstacker.

Kalmar's electrically powered range of reachstackers produce zero emissions at source helping to improve the eco-efficiency of your operations while maintaining the highest levels of productivity and safety. With a choice of lifting capacities, attachments, modular battery options and charging solutions, we can work with you to design a solution that will deliver for your business.

Find out more about our range of Electric Reachstackers [here](#).



CUT COSTS

and lower carbon emissions

Whether you're striving to save on fuel or meet ever tougher emissions standards, your objectives are the same: to reduce costs and lower your carbon emissions. Thanks to our range of smart functions and driver training programmes, operators get all the assistance they need to minimise fuel costs while becoming more eco-efficient.

Use up to 20% less fuel.

Kalmar Eco Drive Modes can cut your fuel costs and emission by up to 20%. Kalmar's Eco Drive Mode solution has three different driving modes, each tailored to meet the needs of your business:

Power Mode:	for maximum performance.	
Normal Mode:	reduces fuel costs and emission by up to 10%.	Save up to 10%
Economy mode:	maximises your savings with up to a 20% reduction in fuel consumption and carbon emissions.	Save up to 20%

Cut carbon emissions by up to 90%.

HVO100 fuel is a fossil free diesel substitute made from vegetable oil that can be used across the range, cutting carbon emissions by up to 90%. HVO100 is produced by using sustainably sourced vegetable and animal matter to ensure its production does not have any negative impact on the environment and has a chemical structure like diesel fuel, allowing it to be substituted for diesel without any impact on the efficiency of your equipment. HVO100 that meets the EN15940 standard is seen as the best and easiest paraffinic option available to help reduce your carbon emissions immediately.



Options to cut fuel costs.

There are many small optional things you can do to reduce your fuel consumption and emissions even further.



Start/stop function.

This option can automatically activate and deactivate the machine. In addition to reducing unnecessary emissions and extending the lifespan of components, this makes it possible to achieve up to 10% in fuel savings.



Automatic engine shutdown.

This option, which can be programmed for any time interval you choose, allows you to decide exactly when your vehicle should shut down when not in motion. Set it for ten seconds, for example, and your engine will automatically turn off after ten seconds of idling. This allows you to effortlessly reduce fuel costs, component wear and carbon emissions.



Tyre pressure monitoring.

This option provides an integrated tyre pressure monitoring system that gives your driver constant updates on the pressure of each individually monitored tyre. It's an effective way to prevent blowouts and maintain the optimal tyre pressure, further reducing your fuel consumption and emissions by up to 10%.



More OPTIONS



BE SAFE

Kalmar solutions that help make operating your equipment even safer:



Fire Suppression System. To protect your operator and machine from fire you can fit a Fire Suppression System* 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.



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



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.



Kalmar Safety Cameras. There are a range of camera solutions available that will enhance the overall safety of your reachstacker when in operation. Cameras extend and enhance the drivers visibility range, record your reachstacker's movements and provide alerts if your reachstacker is at risk of hitting something by using radar. You can choose one solution or combine a number together.



Kalmar solutions that help make your equipment more eco-efficient and sustainable:



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 continually. Active care of your tyres can result in a 10-40% increase in tyre life.



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



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



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



Kalmar solutions that help make your equipment more productive:



ECO Drive Mode settings. Three drive mode settings will allow you to adapt equipment performance to the required productivity levels at any time. This will ensure maximum performance when needed and reduced fuel consumption and wear and tear at low productivity times.



Kalmar Insight. Complete overview and management of your fleet and individual equipment performance will allow you to optimise both overall performance and individual equipment and driver performance to ensure high and efficient productivity levels.

Kalmar Tracker.

Kalmar Tracker automates and manages the flow of containers efficiently and safely through your yard or terminal, is available for our entire range of G-Generation reachstackers and can be retrofitted on most existing Kalmar machines. Helping to streamline and automate your business processes - saving you time and money.



Container Weighing and Load Centricity. A SOLAS compliant solution that automatically weighs and records the container load your machine is handling.



Container ID Recognition. Automatic capture and registration of the container ID allows your drivers to focus on safe and productive container handling.



Container Locator. Ensures you always know where each individual container is in your yard, at any given time.**

** This option will be available soon.

* Cannot suppress a battery fire

MOVE

whatever you need

Based on your specific needs, the G-Generation reachstacker is available with a complete range of standard and customised features, attachments making it suitable for many different applications.

Guaranteed to deliver.

With a choice of:

- wheelbases from 6,0 up to 9,25 metre
- lifting capacities from 42 to 130 tonnes
- powerful and fuel efficient drivelines combinations to choose from
- attachments which include hooks, magnets, coil rams and a tool carrier which can have a variety of tools fitted.

The G-Generation reachstacker is available for container, intermodal, barge and industrial handling. Whatever your application, our aim is to help adapt your reachstacker for the best possible lifetime utilisation.

Container Handling



Industrial Handling



Intermodal Handling



Trimodal/Barge Handling



When you need to handle really heavy loads.

Kalmar's Super Gloria Reachstacker has a top lifting capacity of 130 tonnes or when working in tandem can lift loads of over 200 tonnes, up to 13 metres high. Initially developed for the wind industry to move wind turbine - lifting hubs, blades, towers and nacelles, which are large, heavy and bulky - Super Gloria has proven that it can handle the heaviest of loads efficiently and safely for any application.



Kalmar Super Gloria lifting cable reels weighing over 75 tonnes for Quality Tubing, Houston.

KEEP MOVING

with Kalmar Service

To keep your business moving Kalmar Services offers a range of services that can help you keep your equipment moving optimally.

Kalmar Care, making sure your business never stops.

Our job doesn't stop once we deliver your new machine, as Kalmar Care offers a range of service and maintenance contracts. Each of our Service Contracts are designed to meet your exact needs and will help you improve your operational efficiency, productivity and financial predictability. You just need to decide what you require to keep your day-to-day operations moving optimally.

MyKalmar.

Keeping your cargo moving.

The MyKalmar portal brings together many of Kalmar's digital services into one place. With a single point of access and a user-friendly design you'll benefit from greater visibility and control over your maintenance activities, parts ordering and equipment performance - helping you improve your operational performance, safety and efficiency across your entire fleet.

Kalmar MyParts.

A smarter way to order your parts.

Kalmar MyParts is your one stop shop for all the parts you need which is accessible through MyKalmar. Open 24/7, accessible on any screen and available in different languages, MyParts stocks 100s of thousands of Kalmar Genuine Parts at any given time and we can have them delivered quickly to you, no matter where you are in the world. You can search, order and then track your order all through the same application. MyParts has been designed to make your life easier.

Kalmar Insight.

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.

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 retrofitted into existing Kalmar equipment or those built by other manufacturers.

Kalmar Training.

Enhance your skills.

To get the most out of your new machine our training centre offers a range of courses for both your technicians and operators. Operators can be taught how to drive the machine for optimum performance and minimum waste, and to learn what needs to be checked daily for optimal safety. Technicians can be educated with the knowledge they need to keep your new equipment in top condition in a safe way. Courses are a mix of theory and hands-on experience.

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

STANDARD

Kalmar DRG 420S-450S (S = Top Lift)
Kalmar DRG 450C-450C (C = Combi Lift)
Kalmar DRG 500A-650A (A = Tool Carrier)
Kalmar DRG 570Z-1300Z (Z = Lift Hook)

Norms, Standards and Regulations

- Machinery Directive 2006/42/EC
- Safety Variable Reach Trucks EN 1459+A3
- Safety Low & High Lift Trucks ANSI/ B56.1
- Stability Variable Reach Trucks EN 1459+A3
- CE-marking for trucks within EU/EEA
- ANSI/ITSDF-marking for North America trucks

Chassis

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

Body

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

Steer Axle (Rear)

- Kalmar steer axle mounted dual pivot bearings
- Orbitrol power steering with double acting cylinder
- Wheel nut protection on steer tyres

Drive Axle (Front)

- Kessler planetary axle with differential drive
- Wide axle for high side stability (4150 mm)
- Oil-cooled Wet Disc Brakes (WDB)
- High pressure filter (10 mμ) for the brakes
- Brake oil tank (140 lit), cooling & breather filter

Wheels (Tyres & Rims)

- Strong wheels (tyres and rims) in 18.00x25", 18.00x33", 21.00x35" and 24.00x35" (6x)

Drivetrain

- Volvo D11, EU Stage 3/4/5 (EPA Tier 3 & 4F)
- Cummins QSM-11, EU Stage 3 (EPA Tier 3)
- 6-cylinder diesel engines with pre-heater
- High power & torque with low fuel consumption
- Engine monitoring and protection systems
- Automatic ZF transmissions 5WG-261/5WG-311 or Dana TE-30510
- Precise, soft and efficient shifting of both gears and directions with 5 + 3 gears (F/R)
- Transmission monitoring and reverse protection
- Heavy-duty radiators for engine, transmission, brakes & hydraulics

Load-Sensing Hydraulics

- Load-sensing variable piston pumps
- Pumps for boom, spreader, brakes & steering
- Vane pumps for brake & oil cooling (2x)
- Return filters for the work hydraulics (2x/10 mμ)
- Hydraulic long-life fine filter with bypass (5 mμ)
- Servo filter for the work hydraulics (10 mμ)
- Pressure filter for the brakes (10 mμ)
- Regeneration high-speed lifting & extension
- Boom end-damping (in-out/up-down/20-40")
- Hydraulic tank (600 lit), cooling, breather filter & ORFS-couplings

Lifting Boom

- Strong, durable box-type boom with guide pads
- Boom with 2 lift cylinders & 1 extension cylinder

Attachment

- Top Lift (S), 45 tonnes, 20-40', MPS, TWL, 4 lift hooks, sideshift and rotation
- Combi Lift (C), 45 tonnes, 20-30-40', HPS, TWL, 4 lift legs, 4 hooks, end tilt+lock, sideshift & rotation
- Tool Carrier (A), max 65 tonnes, MPS, TWL (2,50 x 0,76 m), 4 lift eyes, sideshift and rotation
- Lift Hook (Z), max 130 tonnes, dual hook, free pivot, free rotation and 4 lift eyes (no rotation)
- S-C-A = 4 floating twistlocks, LED indication lamps and 2 LED work lamps
- S-C-A = Safety locking, alignment pins (4x) and sensors (4x)
- S-C-A = Rotation +195/-105 deg (2 motors and 2 brakes)
- S-C-A = Lift hooks for slings on end beams (4x)
- S-A = Mechanical Pile Slope MPS ±5 deg
- C = Hydraulic HPS ±5 deg
- Large sideshift (S-C = ±800 mm / A = ±450 mm)

Electrical System 24V

- Battery box 2x12V (24V) & main power switch
- Electric service box on chassis (LHS)
- 2 LED head lights on front fenders (one beam)
- 2 LED working lights on boom
- 2 LED working lights on front edge cabin
- 2 LED rear lights on fenders (when reversing)
- 2 LED working lights on attachment (S + C + A)
- 2 LED position lights on each side
- 2 LED tail lights / brake LED-lights
- 4 LED blinker lights (front-rear/left-right)
- 2 LED flashing brake lights (when reversing)
- 1 LED rotating warning beacon
- 1 acoustic signal / reverse alarm (in reverse)

Cabin (EGO)

Structure

- Spacious, modern cabin with good ergonomics
- Large windows, good visibility, in all directions
- Manual moveable cabin (stroke 2375 mm)
- Step for roof access
- Instep handle (left side)
- Sliding window on both sides
- Doors with air damper and key lock (L + R)
- Tinted laminated windows

Comfort

- Comfort seat Kalmar, mechanical 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

- Joystick for boom, spreader & forward / reverse
- Auto rev-up accelerator at lifting/extension
- Electric accelerator for driving
- Double brake pedals (L + R)
- Button for electronic hand brake (on/off)
- Safety override for hydraulic functions (by code)
- Multi-function lever (LHS) horn, gear/direction switch, high/low beam
- Warning - hand brake (on/off) leaving seat
- Hour meter

Climate

- ECC, electronic climate control, powerful cooler, heater and ventilator
- Air-condition incl. fresh air and recirculation filter
- Wipers/washers; dual wipers on front window, single wipers on rear and roof windows
- Interval wiper functions on front, rear and roof

Information Systems

- Colour display & automatic fault analysis
- Menu control with toggle wheel & push buttons
- Electronic safety, overload, scale & synchronized lift functions
- Longitudinal Load Moment Indicator (Pop-Up Menu)
- Longitudinal Load Moment Control (Pop-Up Menu)

ECO Drive Modes

- Power mode
- Normal mode
- Eco mode

Operator menu:

- System voltage
- Engine rpm
- Travelling speed (km/h or mph)
- Hydraulic oil temperature
- Transmission oil temperature
- Engine oil pressure & coolant level
- Engine oil level
- Clock and date
- Load info (tonnes) & Load Centre info (mm)
- Boom extension & Boom angle
- Operating time (hours)
- Service time indicator (hours)
- Boom angle and Boom extension
- Electronic weight scale functions
- Status of Heating, Ventilation and AC system (HVAC)
- Fuel level (diesel and optional AdBlue)
- Estimated operating time before empty tank (hour/min)
- Service indicator
- Container counter with reset function
- Trip computer / statistics

Various warning lights & signals:

- Charging battery
- Low brake pressure
- Failure indicator
- Safety system disconnected
- High engine coolant temperature
- Low engine coolant level
- Low engine oil pressure
- Preheating engine
- Transmission oil temperature
- Low fuel level
- Hydraulic oil temperature

Indicator lamps:

- 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 & joystick stickers
- Fuse diagram
- Instruction manual
- Maintenance manual
- Spare parts catalogue

Warranty

- 24 months / 4000 hours

OPTIONS

Kalmar DRG 420S-450S (S = Top Lift)
Kalmar DRG 450C-450C (C = Combi Lift)
Kalmar DRG 500A-650A (A = Tool Carrier)
Kalmar DRG 570Z-1300Z (Z = Lift Hook)

Chassis

- DRG ranges in Toplift (S), Intermodal (C), Tool Carrier (A) and Lift Hook (Z)
- Wheelbases; 6,00 - 7,50 m (Gloria range)
- Wheelbases; 8,25 - 9,25 m (Super Gloria range)

Body

- Anti slip protection on fenders and tanks
- External rear view mirrors (2x)
- Noise insulation kit for the entire truck
- Storage boxes (2x) left and right tank

Steer Axle (Rear)

- Steer cylinder spacer (less tyre wear)

Wheels (Tyres & Rims)

- Spare wheels, tires and rims for 18.00x25", 18.00x33", 21.00x35" and 24.00x35"

Drivetrain

- ZF 5WG-261 (lock-up)*
- Volvo TAD-1171-VE (265 kW, EU4)
- ZF 5WG-261 (lock-up)* / Dana TE-30510 (no lock-up)
- Volvo TAD-1151-VE (265 kW, EU3)
- Volvo TAD-1181-VE (265 kW, EU5)
- Dana TE-30510 (no lock-up)
- Cummins QSM11-330 (246 kW, EU3)
- Volvo TAD-1181-VE (265 kW, KMOE5)
- ZF 5WG-311 (lock-up)
- Volvo TAD-1152-VE (285 kW, EU3)
- Volvo TAD-1172-VE (285 kW, EU4)
- Volvo TAD-1182-VE (285 kW, EU5)

Load-Sensing Hydraulics

- High pressure filter

Lifting boom

- Duplex 2-stage S5 (5/5, H4 = 15,1-15,2 m)
- Duplex 2-stage S6 (6/5, H4 = 16,1-16,2 m)
- Duplex 2-stage S6H (6/6, H4 = 17,7-17,8 m)
- Duplex 2-stage C5 (5/5, H4 = 14,9-15,0 m)
- Duplex 2-stage A5 (5/5, H4 = 15,0-15,1 m)
- Duplex 2-stage Z (-/-, H4 = 13,0 m)
- Lifting boom outreach cylinder stroke, S5=7,00, S6=7,70 and S6H=8,50 m.

Attachment

- Tilt function F/R ±5 deg, tilt lock, speed 5 km/h
- Hydraulics Pile Slope, HPS ±5 deg (side tilt), incl tilt lock and speed 5 km/h
- Rotation stop at ±25 deg (incl override switch)
- Automatic extension 20'-40' incl 30' stop
- Barge: Overhigh Folding Legs (L=1.6/2.0 m)
- Barge: extended boom nose (L=1.0/1.6/2.0 m)
- 2 extra lift eyes, centre of spreader (2 x 22.5 T)
- 4 extra lift eyes, middle of spreader (4 x 11.2 T)
- Soft landing with ultrasonic sensor (less noise)
- Twistlock rubber damper (100 mm longer)
- Extended twistlocks 300 mm (250 mm longer)
- Cylinder extension 20'-40' on standard/Tilt/HPS
- WTP Top Lift (Wide Twt Pos), HPS ±5 deg, 30'-35' stop, TWL = 2260-2448 mm
- Big Tilt 0-55 deg, 45 / 32 tonnes, sideways
- Big Tilt 0-55 deg, 45 / 32 tonnes, lengthways
- Big Tilt with hydraulic door opener
- Coil ram, 35 tonnes, coil ID/OD = 500/3000 mm, slave attachment for 20ft or Tool Carrier
- Lift hook (1x) + lift eyes (4x), max 50 tonnes, slave attachment for 20ft or Tool Carrier
- Various industrial lift units, mounted in slave attachments for 20ft or Tool Carrier

Electrical System 24V

- Radio with CD / MP3 / Bluetooth
- Extra sockets 2x24V+2x12V (in door columns)
- Extra sockets 2x24V+2x5V USB (door columns)
- Electric air pressure horn
- Height limitation system for lifting boom
- Load centre limitation for lifting boom
- Speed limitation, please specify km/h
- Various speed limitations (with/without load)
- Speed warning at 15km/h
- Speed limitation outside transport mode
- Extra working light, LED 2x, on front mudguards
- Extra working light, LED 4x, on front mudguards
- Extra working light, LED 2x, on spreader
- Extra working light, LED 2x, middle of boom
- Extra working light, LED 4x, front of boom
- Extra reverse light, LED 2x, on rear light bracket
- Extra rotating beacon, LED, in boom nose front
- Extra rotating beacon, LED, right side on CW
- Extra rotating beacon, LED, left side on CW (flash light replacing STD beacon on boom)
- Nato starter socket 24V (1x)
- Colour display TFT-7" (17 cm), inside cabin - choose type of camera(s) below:

- Reverse camera, 1x, rear on counter weight
- Front chassis camera, 1x, above drive axle
- Front of outer boom, 1x, facing forward
- Below inner boom, 1x, facing forward
- Twistlock cameras, 2x, in spreader end beams
- Combi legs camera, 2x, facing down on trailer
- Reverse warning system, TFT-7" display, reverse camera, 4 rear sensors
- Forward warning system, TFT-7" display, reverse camera, 4 rear sensors
- Electric heated mirrors, front fender/standard position
- Electric heated and adjustable mirrors, on front fenders (standard position)
- Remote control unit for spreader and boom
- Tyre pressure monitoring system (Bluetooth)
- Cabin heater incl 220V outlet
- Diesel powered cabin heater 5 kW
- Alcolock Draeger in cabin

Cabin

Structure

- Hydraulic sliding cabin (stroke 2375 mm), anti-collision function, avoid load hitting cabin
- Hydraulic elevating cab (stroke 2300 mm) position forward on right side
- Speed limitation depending on cabin position
- Extended rear cabin window 100mm

Comfort

- Seat with air-cushion, heating & 3-p belt
- Seat cover in vinyl
- Head rest for the seat
- Armrest with adjustment (LHS)
- Horizontal dampening/suspension of seat
- Grammer Actimo XL, air-cushion, heat, 3-p belt
- Isringhausen 6830KA/870, air-cush, heat, 3-p belt
- Extra trainer seat incl 2-p safety belt (LHS)
- Bracket for terminal and monitor (RHS)
- Write pad, A4 paper box & reading lamp (RHS)
- Extra rear-view mirror inside cabin

Controls

- Lever steering incl switch for forward/reverse
- Mini-wheel steering incl F-N-R switch
- Joystick Caldaro Cobra (model F/T generation)
- Override key switch

Climate

- Sun visor front-roof-rear windows (of black net)
- Sun visor roof window (of reflecting film)
- Microfilter in additional to standard filter
- AC/ECC switched off when door is open
- Post-heating (break heater function)

Additional Equipment

- Enhanced Safety Package including:
 - Speed limitation outside transport mode
 - Reverse warning system including sensors, camera and displays in cab
 - Tyre pressure monitoring system
 - Adjustable speed limiter (default 15 km/h)
 - Seat belt interlock (machine will not go in gear if seat belt is off)
- Semi-automatic fire suppression system
- Fire extinguisher 6 kg, powder
- Tool kit
- Extra sound insulation - reduction 3 dB(A)
- Lockable fuel cap
- Central greasing (base truck + steering)
- Central greasing (entire spreader)
- Filter kit 2000 - 4000 hrs

Information Systems

- VDI - Vehicle Data Interface

Fleet Management

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

Kalmar Load Measurement System

- Semi-automatic weight checking and recording system including time, date and load
- SOLAS compliant (VGM - Verified Gross Mass)

Colour

- Other RAL colour than standard, chassis
- Special and multiple colours, chassis
- Other colour than standard, striping foil
- Reinforced anti-corrosion protection

Documentation and Decals

- Extra set of documentation
- Workshop manuals
- Volvo trouble shooting and repair kit
- Load chart lbs/inch in cab & sign "no riders"
- Documentation on CD or memory stick

Training

- Various training packages, for drivers, service, maintenance, software etc
- Contact Kalmar Training Centre for more information and planning

Warranty

- Extended warranty packages available - please contact your local Kalmar Sales representative

* End of delivery of ZF 5WG-261 as of 31 December 2022 for 6,0-7,5 m wheelbase

SPECIFICATIONS

				DRG420-60S5	DRG450-60S5	DRG450-60S5M
MAIN DATA	Type of handling			Container Handling		
	Lift capacity, row 1-2-3-4	Q1 - Q2 - Q3 - Q4	(t)	42 - 25 - 12	45- 27 - 13	45 - 30 - 15
	Lift capacity, row 1-2-3-4 (with support jacks)	Q1 - Q2 - Q3 - Q4	(t)	-	-	-
	Load centre, from front face of tyres, row 1-2-3-4	L4 - L5 - L6 - L7	(mm)	1965 - 3815 - 6315	1965 - 3815 - 6315	1965 - 3815 - 6315
	Stacking capacity, in container row 1-2-3-4 of 8'6" / 9'6"			5/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3
	Lost load centre, to front face of tyres	X	(mm)	835	835	835
	Wheelbase	L3	(mm)	6000	6000	6000

WEIGHTS	Service weight, standard truck		(kgs)	65500	67400	69400
	Axle load, front at load centre L4, unloaded - loaded	(without support jacks)	(kgs)	34500 - 96100	34600 - 100600	34600 - 100600
	Axle load, front at load centre L5, unloaded - loaded	(without support jacks)	(kgs)	38900 - 83300	39000 - 86900	39000 - 92200
	Axle load, rear at load centre L4, unloaded - loaded		(kgs)	31000 - 11400	32800 - 11800	34800 - 13800
	Axle load, rear at load centre L5, unloaded - loaded		(kgs)	26600 - 7200	28400 - 7500	30400 - 7200

WHEELS	Tyres, dimension, PLY rating, star rating ¹			18 x 25", PR40, E4	18 x 25", PR40, E4	18 x 25", PR40, E4
	Tyre pressure (front - rear)		(MPa)	1,0 - 1,0	1,0 - 1,0	1,0 - 1,0
	Track width (front - rear)	S1 - S2	(mm)	3030 - 2600	3030 - 2600	3030 - 2600

DIMENSIONS	Boom angle, min - max		(deg)	0 - 60	0 - 60	0 - 60
	Boom height, min - max	H3 - H5	(mm)	4600 - 18200	4600 - 18200	4600 - 18200
	Chassis height - top of boom fixation, max	H2	(mm)	3925	3925	3925
	Lift height, max	H4	(mm)	15100	15100	15100
	Boom reach stroke		(mm)	7000	7000	7000
	Truck height - seat height	H6 - H8	(mm)	4600 - 2575	4600 - 2575	4600 - 2575
	Overall truck length, with boom	L	(mm)	11200	11200	11200
	Truck width over drive axle	B	(mm)	4150	4150	4150
	Spreader sideshift	V1	(mm)	+/-800 (1600)	+/-800 (1600)	+/-800 (1600)
	Spreader rotation		(deg)	+195/-105	+195/-105	+195/-105
	Ground clearance		(mm)	250	250	250
	Aisle width with 20'-40' container	A1 - A2	(mm)	11200 - 13600	11200 - 13600	11200 - 13600
	Turning radius, outer with 20'-40' container (at 90 degree turn)	R1 - R3	(mm)	8100 - 9400	8100 - 9400	8100 - 9400

POWERTRAIN	Max travel speed, fw unloaded - rated load / rw unloaded - rated load		(km/h)	26 - 24 / 20 - 18	26 - 24 / 20 - 18	26 - 24 / 20 - 18
	Lifting speed, unloaded - 70% of rated load		(m/s)	0,42 - 0,25	0,42 - 0,25	0,42 - 0,25
	Lowering speed, unloaded - rated load		(m/s)	0,36 - 0,36	0,36 - 0,36	0,36 - 0,36
	Drawbar pull / towing capacity		(kN)	295	295	295

OTHER	Tank volumes of working oil & brake oil	(l)	740 (600 + 140)	740 (600 + 140)	740 (600 + 140)
	Working hydraulic pressure boom / spreader, max	(MPa)	23 / 16	23 / 16	23 / 16
	Noise level LpAZ (EN12053), inside cabin²	(dB(A))	69 - 71	69 - 71	69 - 71
	Noise level LWAZ (EN12053), outside cabin²	(dB(A))	105 - 108	105 - 108	105 - 108

DRG450-60S5X	DRG450-65S5	DRG450-65S5X	DRG450-65S5XS	DRG450-65S6	DRG420-65S6X	DRG450-65S6H
Container Handling						
45 - 35 - 18	45 - 32 - 16	45 - 38 - 21	45 - 38 - 21	45 - 32 - 16 - 9	45 - 38 - 21 - 12	45 - 33 - 18 - 10
-	-	-	45 - 41 - 29	-	-	-
1865 - 3815 - 6315	1965 - 3815 - 6315	1865 - 3815 - 6315	1865 - 3815 - 6315	2265 - 3815 - 6315 - 8815	2165 - 3815 - 6315 - 8815	2965 - 3815 - 6315 - 8815
5/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3	6/5 - 5/5 - 4/4 - 2/2	6/5 - 5/5 - 4/4 - 2/2	6/6 - 6/5 - 5/4 - 4/3
935	835	935	935	835	935	835
6000	6500	6500	6500	6500	6500	6500

77500	69500	77300	80300	70500	77500	73500
35600 - 101600	35000 - 99400	36000 - 100400	38500 - 102900	36000 - 102500	36500 - 103000	39000 - 110300
40200 - 102900	39000 - 93900	40300 - 106000	42800 - 108600	39500 - 94400	40200 - 105900	41000 - 97600
41900 - 20900	34500 - 15100	41300 - 21900	41800 - 22400	34500 - 13000	41000 - 19500	34500 - 8200
37300 - 9600	30500 - 7600	37100 - 9300	37500 - 9700	31000 - 8100	37300 - 9600	32500 - 8900

18 x 33", PR36, E4	18 x 25", PR40, E4	18 x 33", PR36, E4	18 x 33", PR36, E4	18 x 25", PR40, E4	18 x 33", PR36, E4	18 x 25", PR40, E4
1,0 - 1,0	1,0 - 1,0	1,0 - 1,0	1,0 - 1,0	1,0 - 1,0	1,0 - 1,0	1,0 - 1,0
3030 - 2800	3030 - 2600	3030 - 2800	3030 - 2800	3030 - 2600	3030 - 2800	3030 - 2600

0 - 60	0 - 60	0 - 60	0 - 60	0 - 62	0 - 62	0 - 63
4700 - 18300	4600 - 18200	4700 - 18300	4700 - 18300	4500 - 19250	4600 - 19350	4600 - 20800
4025	3925	4025	4025	3925	4025	3925
15200	15100	15200	15100	16200	16300	17700
7000	7000	7000	7000	7700	7700	8500
4700 - 2675	4600 - 2575	4700 - 2675	4700 - 2675	4500 - 2575	4600 - 2675	4600 - 2575
11200	11700	11700	11700	12000	12000	12700
4150	4150	4150	4150	4150	4150	4150
+/-800 (1600)	+/-800 (1600)	+/-800 (1600)	+/-800 (1600)	+/-800 (1600)	+/-800 (1600)	+/-800 (1600)
+195/-105	+195/-105	+195/-105	+195/-105	+195/-105	+195/-105	+195/-105
300	250	300	300	250	300	250
11200 - 13600	11600 - 13600	11600 - 13600	11600 - 13600	11900 - 13900	11900 - 13900	12200 - 14200
8100 - 9400	8500 - 9400	8500 - 9400	8500 - 9400	8500 - 9450	8500 - 9450	8500 - 9450

26 - 24 / 20 - 18	26 - 24 / 20 - 18	26 - 24 / 20 - 18	26 - 24 / 20 - 18	26 - 24 / 20 - 18	26 - 24 / 20 - 18	26 - 24 / 20 - 18
0,42 - 0,25	0,42 - 0,25	0,42 - 0,25	0,42 - 0,25	0,42 - 0,25	0,42 - 0,25	0,42 - 0,25
0,36 - 0,36	0,36 - 0,36	0,36 - 0,36	0,36 - 0,36	0,36 - 0,36	0,36 - 0,36	0,36 - 0,36
295	295	295	295	295	295	295

[illegible]

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

SPECIFICATIONS

MAIN DATA				DRG450-65S6HX	DRG450-65S6HXS	DRG450-70S5X
	Type of handling			Container Handling		
	Lift capacity, row 1-2-3-4	Q1 - Q2 - Q3 - Q4	(t)	45 - 39 - 21 - 13	45 - 39 - 21 - 13	45 - 41 - 23
	Lift capacity, row 1-2-3-4 (with support jacks)	Q1 - Q2 - Q3 - Q4	(t)	-	45 - 41 - 29 - 18	-
	Load centre, from front face of tyres, row 1-2-3-4	L4 - L5 - L6 - L7	(mm)	2865 - 3815 - 6315 - 8815	2865 - 3815 - 6315 - 8815	1865 - 3815 - 6315
	Stacking capacity, in container row 1-2-3-4 of 8'6" / 9'6"			6/6 - 6/5 - 5/4 - 4/3	6/6 - 6/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3
	Lost load centre, to front face of tyres	X	(mm)	935	935	935
	Wheelbase	L3	(mm)	6500	6500	7000

WEIGHTS	Service weight, standard truck		(kgs)	82500	83500	78800
	Axle load, front at load centre L4, unloaded - loaded	(without support jacks)	(kgs)	41500 - 112800	42500 - 113800	37500 - 100500
	Axle load, front at load centre L5, unloaded - loaded	(without support jacks)	(kgs)	43800 - 111300	44800 - 112300	41500 - 110300
	Axle load, rear at load centre L4, unloaded - loaded		(kgs)	41000 - 14700	41000 - 14700	41300 - 23300
	Axle load, rear at load centre L5, unloaded - loaded		(kgs)	38700 - 10200	38700 - 10200	37300 - 9500

WHEELS	Tyres, dimension, PLY rating, star rating ¹			18 x 33", PR36, E4	18 x 33", PR36, E4	18 x 33", PR36, E4
	Tyre pressure (front - rear)		(MPa)	1,0 - 1,0	1,0 - 1,0	1,0 - 1,0
	Track width (front - rear)	S1 - S2	(mm)	3030 - 2800	3030 - 2800	3030 - 2800

DIMENSIONS	Boom angle, min - max		(deg)	0 - 63	0 - 63	0 - 60
	Boom height, min - max	H3 - H5	(mm)	4700 - 20900	4700 - 20900	4700 - 18300
	Chassis height - top of boom fixation, max	H2	(mm)	4025	4025	4025
	Lift height, max	H4	(mm)	17800	17800	15100
	Boom reach stroke		(mm)	8500	8500	7000
	Truck height - seat height	H6 - H8	(mm)	47000 - 2675	4700 - 2675	4700 - 2675
	Overall truck length, with boom	L	(mm)	12700	12700	12200
	Truck width over drive axle	B	(mm)	4150	4150	4150
	Spreader sideshift	V1	(mm)	+/-800 (1600)	+/-800 (1600)	+/-800 (1600)
	Spreader rotation		(deg)	+195/-105	+195/-105	+195/-105
	Ground clearance		(mm)	250	300	250
	Aisle width with 20'-40' container	A1 - A2	(mm)	12200 - 14200	12200 - 14200	12100 - 13600
	Turning radius, outer with 20'-40' container (at 90 degree turn)	R1 - R3	(mm)	8500 - 9450	8500 - 9450	9000 - 9400

POWERTRAIN	Max travel speed, fw unloaded - rated load / rw unloaded - rated load		(km/h)	26 - 24 / 20 - 18	26 - 24 / 20 - 18	26 - 24 / 20 - 18
	Lifting speed, unloaded - 70% of rated load		(m/s)	0,42 - 0,25	0,42 - 0,25	0,42 - 0,25
	Lowering speed, unloaded - rated load		(m/s)	0,36 - 0,36	0,36 - 0,36	0,36 - 0,36
	Drawbar pull / towing capacity		(kN)	295	295	295

OTHER						
	Tank volumes of working oil & brake oil		(l)	740 (600 + 140)	740 (600 + 140)	740 (600 + 140)
	Working hydraulic pressure boom / spreader, max		(MPa)	23 / 16	23 / 16	23 / 16
	Noise level LpAZ (EN12053), inside cabin ²		(dB(A))	69 - 71	69 - 71	69 - 71
	Noise level LWAZ (EN12053), outside cabin ²		(dB(A))	105 - 108	105 - 108	105 - 108

DRG450-70S5XS	DRG450-70S6HXS	DRG450-75S5SX	DRG420-75S6HXS	DRG450-82S5X	DRG450-82S5XS	DRG450-92S5XS
Container Handling						
45 - 41 - 23	45 - 41 - 23 -14	45 - 45 - 26	45 - 45 - 27 - 17	45 - 45 - 37 - 24	45 - 45 - 37 - 24	45 - 45 - 41 - 28
45 - 41 - 31	45 - 41 - 31 -19	45 - 45 - 34	45 - 45 - 35 - 23	-	45 - 45 - 45 - 32	45 - 45 - 45 - 35
1865 - 3815 - 6315	2865 - 3815 - 6315 - 8815	1865 - 3815 - 6315	2865 - 3815 - 6315 - 8815	2765 - 3915 - 6415 - 8915	2765 - 3915 - 6415 - 8915	2765 - 3915 - 6415 - 8915
5/5 - 5/4 - 4/3	6/6 - 6/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3	6/6 - 6/5 - 5/4 - 4/3	5/5 - 5/5 - 5/5 - 4/4	5/5 - 5/5 - 5/5 - 4/4	5/5 - 5/5 - 5/5 - 4/4
935	935	935	935	1035	1035	1035
7000	7000	7500	7500	8250	8250	9250

80300	84400	82400	86400	104200	105200	107200
39000 - 102000	42600-112000	40000 - 101800	43900 - 111700	52600 - 118300	53600 - 119300	54600 - 120300
43000 - 111800	44700-113500	43800 - 117300	46000 - 119500	54900 - 126900	55900 - 127900	56900 - 128900
41300 - 23300	41800-17400	42400 - 25600	43300 - 20500	51600 - 30900	51600 - 30900	51600 - 33100
37300 - 9500	39700-11900	38600 - 10100	41300 - 12800	49500 - 22300	49500 - 22300	49500 - 25400

18 x 33", PR36, E4	18 x 33", PR36, E4	18 x 33", PR36, E4	18 x 33", PR36, E4	21 x 35", PR40, E3	21 x 35", PR40, E3	21 x 35", PR40, E3
1,0 - 1,0	1,0 - 1,0	1,0 - 1,0	1,0 - 1,0	1,0 - 1,0	1,0 - 1,0	1,0 - 1,0
3030 - 2800	3030 - 2800	3030 - 2800	3030 - 2800	3245 - 3300	3245 - 3300	3245 - 3300

0 - 60	0 - 63	0 - 58	0 - 61	0 - 47	0 - 47	0 - 47
4700 - 18300	4700 - 20900	4750 - 18400	4750 - 21000	5250 - 19400	5250 - 19400	5250 - 19400
4025	4025	4025	4025	4300	4300	4300
15100	17800	15200	17800	15800	15800	15800
7000	8500	7000	8500	8500	8500	8500
4700 - 2675	4700 - 2675	4750 - 2675	4750 - 2675	5250 - 2950	5250 - 2950	5250 - 2950
12200	13200	12700	13700	14700	14700	15700
4150	4150	4150	4150	4600	4600	4600
+/-800 (1600)	+/-800 (1600)	+/-800 (1600)	+/-800 (1600)	+/-800 (1600)	+/-800 (1600)	+/-800 (1600)
+195/-105	+195/-105	+195/-105	+195/-105	+195/-105	+195/-105	+195/-105
300	300	300	300	350	300	300
12100 - 13600	12700 - 14200	12500 - 13600	13100 - 14200	15100	15100	16150
9000 - 9400	9000 - 9450	9400 - 9400	9400 - 9450	11400	11400	12450

26 - 24 / 20 - 18	26 - 24 / 20 - 18	26 - 24 / 20 - 18	26 - 24 / 20 - 18	28 - 26 / 19 - 18	28 - 26 / 19 - 18	28 - 26 / 19 - 18
0,42 - 0,25	0,42 - 0,25	0,42 - 0,25	0,42 - 0,25	0,40 - 0,20	0,40 - 0,20	0,40 - 0,20
0,36 - 0,36	0,36 - 0,36	0,36 - 0,36	0,36 - 0,36	0,35 - 0,35	0,35 - 0,35	0,35 - 0,35
295	295	295	295	330	330	330
740 (600 + 140)	740 (600 + 140)	740 (600 + 140)	740 (600 + 140)	840 (700 + 140)	840 (700 + 140)	740 (600 + 140)
23 / 16	23 / 16	23 / 16	23 / 16	23 / 16	23 / 16	23 / 16
69 - 71	69 - 71	69 - 71	69 - 71	66 - 67	66 - 67	66 - 67
105 - 108	105 - 108	105 - 108	105 - 108	105 - 108	105 - 108	105 - 108

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

SPECIFICATIONS

MAIN DATA				DRG450-60CS	DRG450-60C5X	DRG450-65C5
	Type of handling			Intermodal Handling		
	Lift capacity, row 1-2-3-4	Q1 - Q2 - Q3 - Q4	(t)	45 - 25 - 10	45 - 32 - 15	45 - 28 - 13
	Lift capacity, row 1-2-3-4 (with support jacks)	Q1 - Q2 - Q3 - Q4	(t)	-	-	-
	Load centre, from front face of tyres, row 1-2-3-4	L4 - L5 - L6 - L7	(mm)	1965 - 3815 - 6315	1865 - 3815 - 6315	1965 - 3815 - 6315
	Stacking capacity, in container row 1-2-3-4 of 8'6" / 9'6"			5/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3
	Lost load centre, to front face of tyres	X	(mm)	835	935	835
	Wheelbase	L3	(mm)	6000	6000	6500

WEIGHTS	Service weight, standard truck		(kgs)	73500	81800	74100
	Axle load, front at load centre L4, unloaded - loaded	(without support jacks)	(kgs)	41000 - 107000	42000 - 108000	41600 - 106000
	Axle load, front at load centre L5, unloaded - loaded	(without support jacks)	(kgs)	46700 - 91100	48000 - 105400	46900 - 94900
	Axle load, rear at load centre L4, unloaded - loaded		(kgs)	32500 - 11500	39800 - 18800	32500 - 13100
	Axle load, rear at load centre L5, unloaded - loaded		(kgs)	26800 - 7400	33800 - 8400	27200 - 7200

WHEELS	Tyres, dimension, PLY rating, star rating ¹			18 x 25", PR40, E4	18 x 33", PR40, E4	18 x 25", PR40, E4
	Tyre pressure (front - rear)		(MPa)	1,0 - 1,0	1,0 - 1,0	1,0 - 1,0
	Track width (front - rear)	S1 - S2	(mm)	3030 - 2600	3030 - 2800	3030 - 2600

DIMENSIONS	Boom angle, min - max		(deg)	0 - 60	0 - 60	0 - 60
	Boom height, min - max	H3 - H5	(mm)	4600 - 18200	4700 - 18300	4600 - 18200
	Chassis height - top of boom fixation, max	H2	(mm)	3925	4025	3925
	Lift height, max	H4	(mm)	14900	15000	14900
	Boom reach stroke		(mm)	7000	7000	7000
	Truck height - seat height	H6 - H8	(mm)	4600 - 2575	4700 - 2675	4600 - 2575
	Overall truck length, with boom	L	(mm)	11200	11200	11700
	Truck width over drive axle	B	(mm)	4150	4150	4150
	Spreader sideshift	V1	(mm)	+/-800 (1600)	+/-800 (1600)	+/-800 (1600)
	Spreader rotation		(deg)	+195/-105	+195/-105	+195/-105
	Ground clearance		(mm)	250	300	250
	Aisle width with 20'-40' container	A1 - A2	(mm)	11200 - 13600	11200 - 13600	11600 - 13600
	Turning radius, outer with 20'-40' container (at 90 degree turn)	R1 - R3	(mm)	8100 - 9400	8100 - 9400	8500 - 9400

POWERTRAIN	Max travel speed, fw unloaded - rated load / rw unloaded - rated load		(km/h)	26 - 24 / 20 - 18	26 - 24 / 20 - 18	26 - 24 / 20 - 18
	Lifting speed, unloaded - 70% of rated load		(m/s)	0,42 - 0,25	0,42 - 0,25	0,42 - 0,25
	Lowering speed, unloaded - rated load		(m/s)	0,36 - 0,36	0,36 - 0,36	0,36 - 0,36
	Drawbar pull / towing capacity		(kN)	295	295	295

OTHER	Tank volumes of working oil & brake oil		(l)	740 (600 + 140)	740 (600 + 140)	740 (600 + 140)
	Working hydraulic pressure boom / spreader, max		(MPa)	23 / 16	23 / 16	23 / 16
	Noise level LpAZ (EN12053), inside cabin ²		(dB(A))	69 - 71	69 - 71	69 - 71
	Noise level LWAZ (EN12053), outside cabin ²		(dB(A))	105 - 108	105 - 108	105 - 108

DRG450-65C5X	DRG450-65C5XS	DRG450-70C5X	DRG450-70C5XS	DRG450-75C5XS	DRG450-82CSX	DRG450-82C5XS	DRG450-92C5XS
Intermodal Handling							
45 - 34 - 17	45 - 34 - 17	45 - 38 - 20	45 - 38 - 20	45 - 43 - 24	45 - 45 - 34 - 21	45 - 45 - 34 - 21	45 - 45 - 38 - 25
-	45 - 38 - 24	-	45 - 38 - 27	45 - 45 - 32	-	45 - 45 - 45 - 29	45 - 45 - 45 - 33
1865 - 3815 - 6315	1865 - 3815 - 6315	1865 - 3815 - 6315	1865 - 3815 - 6315	2765 - 3915 - 6415 - 8915	2765 - 3915 - 6415 - 8915	2765 - 3915 - 6415 - 8915	2765 - 3915 - 6415 - 8915
5/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3	5/5 - 5/4 - 4/3	5/5 - 5/5 - 5/5 - 4/4	5/5 - 5/5 - 5/5 - 4/4	5/5 - 5/5 - 5/5 - 4/4
935	935	935	935	935	1035	1035	1035
6500	6500	7000	7000	7500	8250	8250	9250

81300	83500	83300	84800	88400	110000	111000	111000
42400 - 106800	44500 - 108900	43500 - 106500	45000 - 108000	46000 - 107800	59000 - 124700	60000 - 125700	61000 - 126700
48000 - 106800	50200 - 109000	48800 - 112600	50300 - 114100	51000 - 121200	62000 - 134000	63000 - 135000	64000 - 136000
38900 - 19500	39000 - 19600	39800 - 21800	39800 - 21800	42400 - 25600	51000 - 30300	51000 - 30300	51000 - 32500
33300 - 8500	33300 - 8500	34500 - 8700	34500 - 8700	37400 - 10200	48000 - 21000	48000 - 21000	48000 - 24300

18 x 33", PR40, E4	18 x 33", PR40, E4	18 x 33", PR40, E4	18 x 33", PR40, E4	18 x 33", PR40, E4	21 x 35", PR40, E3	21 x 35", PR40, E3	21 x 35", PR40, E3
1,0 - 1,0	1,0 - 1,0	1,0 - 1,0	1,0 - 1,0	1,0 - 1,0	1,0 - 1,0	1,0 - 1,0	1,0 - 1,0
3030 - 2800	3030 - 2800	3030 - 2800	3030 - 2800	3030 - 2800	3245 - 3300	3245 - 3300	3245 - 3300

0 - 60	0 - 60	0 - 60	0 - 60	0 - 58	0 - 47	0 - 47	0 - 47
4700 - 18300	4700 - 18300	4700 - 18300	4700 - 18300	4750 - 18400	5250 - 19400	5250 - 19400	5250 - 19400
4025	4025	4025	4025	4025	4300	4300	4300
15000	14900	14900	14900	15000	15600	15600	15600
7000	7000	7000	7000	7000	8500	8500	8500
4700 - 2675	4700 - 2675	4700 - 2675	4700 - 2675	4750 - 2675	5250 - 2950	5250 - 2950	5250 - 2950
11700	11700	12200	12200	12700	14700	14700	15700
4150	4150	4150	4150	4150	4600	4600	4600
+/-800 (1600)	+/-800 (1600)	+/-800 (1600)	+/-800 (1600)	+/-800 (1600)	+/-800 (1600)	+/-800 (1600)	+/-800 (1600)
+195/-105	+195/-105	+195/-105	+195/-105	+195/-105	+195/-105	+195/-105	+195/-105
300	300	300	300	300	400	300	300
11600 - 13600	11600 - 13600	12100 - 13600	12100 - 13600	12500 - 13600	15100	15100	16150
8500 - 9400	8500 - 9400	9000 - 9400	9000 - 9400	9400 - 9400	11400	11400	12450

26 - 24 / 20 - 18	26 - 24 / 20 - 18	26 - 24 / 20 - 18	26 - 24 / 20 - 18	26 - 24 / 20 - 18	28 - 26 / 19 - 18	28 - 26 / 19 - 18	28 - 26 / 19 - 18
0,42 - 0,25	0,42 - 0,25	0,42 - 0,25	0,42 - 0,25	0,42 - 0,25	0,40 - 0,20	0,40 - 0,20	0,40 - 0,20
0,36 - 0,36	0,36 - 0,36	0,36 - 0,36	0,36 - 0,36	0,36 - 0,36	0,35 - 0,35	0,35 - 0,35	0,35 - 0,35
295	295	295	295	295	330	330	330

740 (600 + 140)	740 (600 + 140)	740 (600 + 140)	740 (600 + 140)	740 (600 + 140)	840 (700 + 140)	840 (700 + 140)	840 (700 + 140)
23 / 16	23 / 16	23 / 16	23 / 16	23 / 16	23 / 16	23 / 16	23 / 16
69 - 71	69 - 71	69 - 71	69 - 71	69 - 71	66 - 67	66 - 67	66 - 67
105 - 108	105 - 108	105 - 108	105 - 108	105 - 108	105 - 108	105 - 108	105 - 108

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

DRIVETRAIN

DRG420-1300

		EU3 / Tier 3	EU3 / Tier 3	EU3 / Tier 3
Engine emission brand		Cummins	Volvo	Volvo
Engine model		QSM-11-C330	TAD-1151-VE	TAD-1152-VE
Engine after treatment type		-	-	-
AdBlue/DEF/Urea		-	-	-
Particle filter		-	-	-
HVO100 (EN15940) compatible		Yes	Yes	Yes
Engine type		6-inline	6-inline	6-inline
Engine displacement	(dm3)	10,80	10,84	10,84
Rated and max power (Dana / ZF)	(kW)	248 / 277	265 / 265	285 / 285
Max torque (Dana / ZF)	(Nm)	1674 / 1830	1785 / 1785	1938 / 1938
Max engine speed (Dana / ZF)	(rpm)	1900 / 2000	1900 / 2000	1900 / 2000
Fuel consumption - average diesel	(l/h)	14 - 20	14 - 20	14 - 20
Fuel consumption - average AdBlue	%	-	-	-
ECO Drive Modes (EDM) / modes		3 modes / Power - Normal - Eco		
Transmission brand / shift type / gears		ZF ErgoPower / Automatic powershift / fw 5 + rv 3 gears** Dana / Automatic powershift / fw 5 + rv 3 gears		
Transmission clutch type		Torque converter		
Transmission model		Dana TE-30510	ZF 5WG-261-LU**	ZF 5WG-311-LU
Transmission clutch type		ZF: Lock-up Dana: No lock-up		
Drive axle brand / series		Kessler D102 / D111 (WDB)***		
Service brake / cooling		Wet Disc Brakes with oil cooling		
Steer axle brand / series		Kalmar / single cylinder / extra wide		
Alternator, power	(W)	AC - 2800	AC - 4200	AC - 4200
Alternator, voltage x current	(V x Amp)	28 x 100	28 x 150	28 x 150

DRG420-1300

EU4 / Tier 4F	EU4 / Tier 4F	EU5	EU5	Korea Stage V
Volvo	Volvo	Volvo	Volvo	Volvo
TAD-1171-VE*	TAD-1172-VE*	TAD-1181-VE	TAD-1182-VE	TAD-1181-VE
SCR	SCR	DOC, DPF, SCR, ASC	DOC, DPF, SCR, ASC	DOC, DPF, SCR, ASC
Yes	Yes	Yes	Yes	Yes
-	-	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes
6-inline	6-inline	6-inline	6-inline	6-inline
10,84	10,84	10,84	10,84	10,84
265 / 265	285 / 285	265 / 265	285 / 285	265 / 265
1785 / 1785	1938 / 1938	1795 / 1795	1938 / 1938	1795 / 1795
1900 / 2000	1900 / 2000	1900 / 2000	1900 / 2000	1900 / 2000
14 - 20	14 - 20	14 - 20	14 - 20	14 - 20
1 - 5	1 - 5	3 - 7	3 - 7	3 - 7
3 modes / Power - Normal - Eco				
ZF ErgoPower / Automatic powershift / fw 5 + rv 3 gears** Dana / Automatic powershift / fw 5 + rv 3 gears				
Torque converter				
ZF 5WG-261-LU**	ZF 5WG-311-LU	Dana TE-30510	ZF 5WG-311-LU	Dana TE-30510
ZF: Lock-up Dana: No lock-up				
Kessler D102 / D111 (WDB)***				
Wet Disc Brakes with oil cooling				
Kalmar / single cylinder / extra wide				
AC - 4200	AC - 4200	AC - 4200	AC - 4200	AC - 4200
28 x 150	28 x 150	28 x 150	28 x 150	28 x 150

* Will not be offered with Dana transmission
** End of delivery of ZF 5WG-261 as of 31 December 2022 for 6,0-7,5 m wheelbase
*** Wheelbases 6,00-7,50 m have D102, wheelbases 8,25-9,25 m have D111



Top Lifter



Magnet for thick slabs



Pipe Handler



Gripper



Barge handler



CombiLift



Lift Hook



Tool Carrier



KALMAR

Making your every move count

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