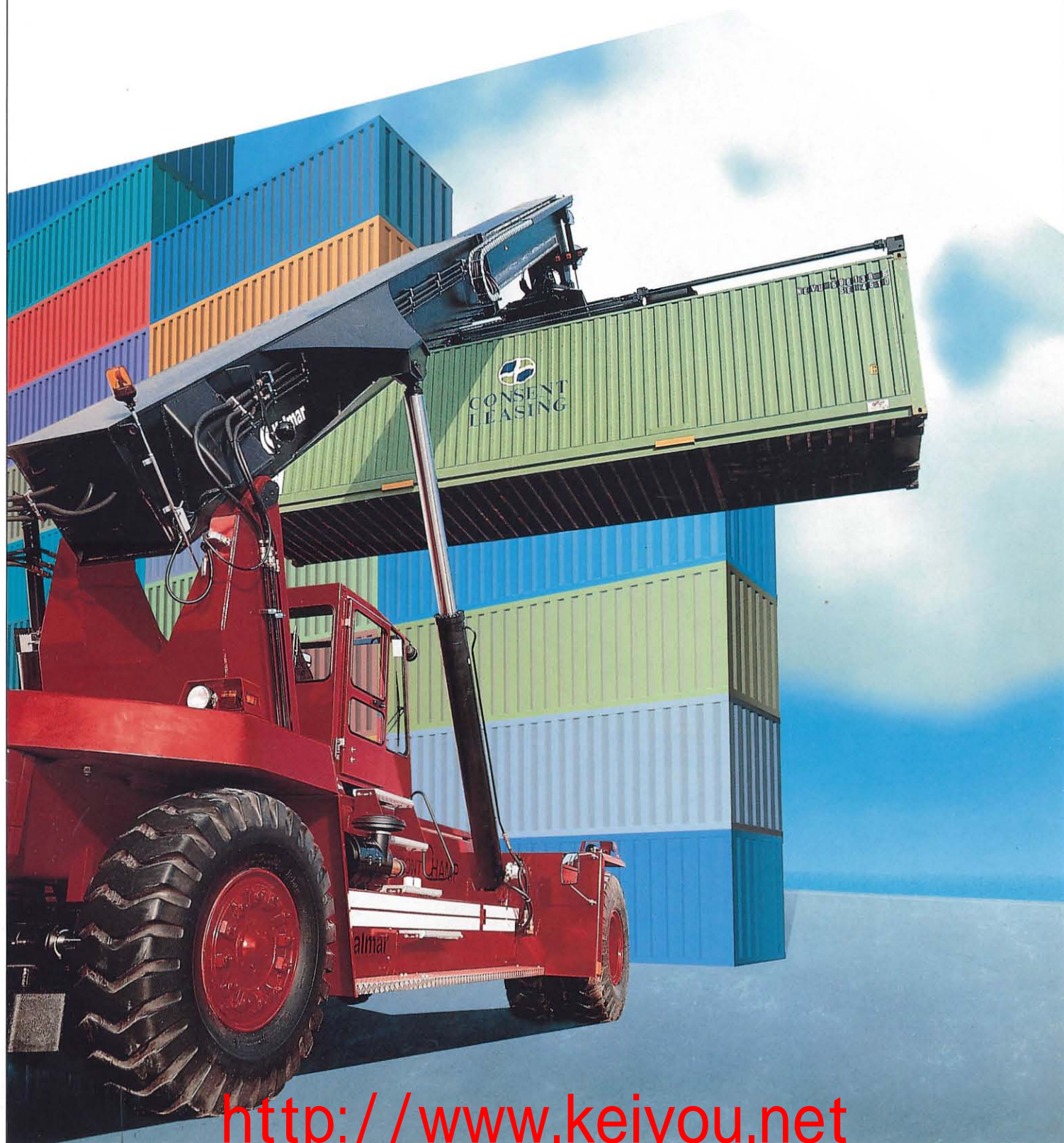




Reach stackers for efficient handling of containers and trailers

Kalmar LMV ContChamp DC 4160/DC 4590

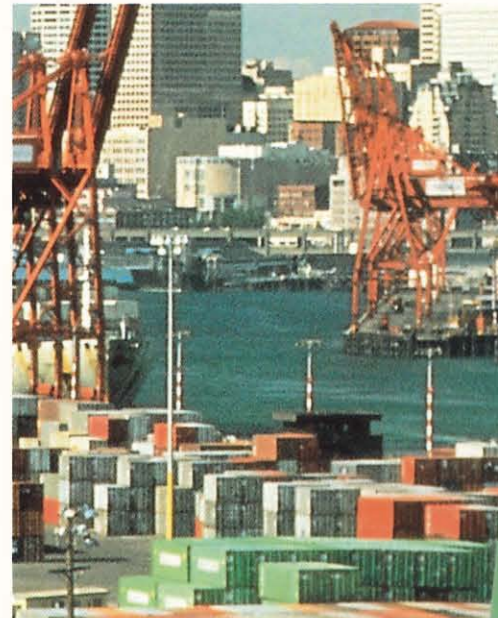


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For maximum productivity in demanding environments



The Kalmar LMV ContChamp has revolutionised the handling of containers and trailers in ports and terminals.



A ContChamp can stack up to five high in the first row.

The handling of containers and trailers in ports, marine and rail terminals is a constant battle against time. Space is limited and must be used as effectively as possible.

This environment demands special machines and equipment able to cope with intensive load handling cycles, be highly manoeuvrable, totally flexible and yet have the minimum of maintenance requirements.

Opening up new possibilities

A ContChamp from Kalmar easily meets such demands. The telescopic boom and rotator provide excellent reach and precision control, whether handling trailers or containers – loaded or empty.

In a container stack, this versatility enables reachstackers in the ContChamp range to comfortably pick up or place a container in the second or third row while it is also possible to handle rail waggons on the adjacent track as well as the track behind that.

Greater flexibility with the Combi-Attachment

The increasing use of intermodal transport calls for flexible handling solutions and Kalmar offers the perfect solution with its range of ContChamp reach stackers. These can be equipped with a combi-attachment able to handle both containers and trailers with no need to switch between different attachments – thereby saving both time and money.

Decades of experience and dedicated development

Extensive design and manufacturing experience plus close user contact worldwide through an extensive network of subsidiaries and distributors have given Kalmar its leading market position in the reachstacker market.

Kalmar is also a leading designer and supplier of both container top lift spreaders and combi-attachments – allowing customers to source a complete container and trailer handling truck from one supplier.

Three base models – yet enormous flexibility

The standard ContChamp reachstackers are based around a single basic design available in three models; the DC 4160, DC 4170 and DC 4180 capable of stacking containers four or five high respectively, plus the DC 4560, DC 4570 and DC 4580 equipped with a combi-attachments allowing them to handle trailers as well as containers. Kalmar's DC 845 is designed for empty container handling.

Each ContChamp truck is tailored to suit individual user requirements with an extensive range of optional equipment available to suit all applications and user specifications.

Quality and rugged construction ensures excellent long term economy

The simple yet effective design of the ContChamp range, combined with ease of servicing, ensures reliable, trouble-free operation and excellent overall economy. A Kalmar truck always gets the job done – a feature that has meant that ContChamp reachstackers provide the benchmark that other machines are judged on.



Flexibility, large outreach and lifting capacity characterises the ContChamp.

Everything an operator can ask for

The truck is the operator's place of work – a fact that Kalmar knows very well and how vital it is for the driver to not only be comfortable but also confident and in full control.

Kalmar puts particular emphasis on safety, visibility and ergonomic design with no effort spared to ensure the operator has the optimum environment to carry out his tasks efficiently, comfortably and safely.

Advanced operating environment

A sturdy stairway with large non-slip treads leads to the operator's cab. Mounted on rubber bushings to ensure minimum noise and vibration, the cab is equipped with a climate control unit with fan and heater as standard and AC as option.

Optimum driving position to suit all drivers

A good driving position is essential if a driver is to perform well throughout the shift. The fully sprung seat, steering wheel and associated control functions are all fully adjustable to suit individual requirements.



Clear view for efficient operation and maximum safety.

Deep panoramic windows ensure excellent all-round visibility. The low built chassis also contributes to good visibility, with especially good forward vision while blind spots have been reduced to a minimum.

All ContChamp reachstackers are equipped with sliding cabs for easier service access while an option is available for a longitudinally moving cab operated through hydraulic rams. When this cab is in the rear position, the operator has optimum visibility for container stacking and driving while when it is moved to the front, the operator is in the best position for handling trailers.

Power assisted steering for total control

All ContChamps are equipped with full hydraulic power steering to ensure minimum operator effort when manoeuvring and at the same time providing a tight turning circle. Boom extension, retraction, rotation and side-shift is controlled through the joystick, while the combi-attachment has a number of switches within easy reach of the driver.

Ease of maintenance

Kalmar's ContChamp is not only easy to operate but also easy to work on when required. Daily maintenance is minimised while daily checks are straightforward and require no tools. Essential check points are closely grouped together and lubricating and hydraulic oils topped up via a special service hatch.

Long working hours – without a break

ContChamp design is rugged yet simple, with a minimum of service points. All components are selected for their reliability, long-term

durability and easy availability worldwide.

The engine, transmission and hydraulic systems are easily accessible through removable panels. Moving parts have been kept to a minimum to reduce maintenance even further with components such as the steering axle suspensions and wet disc brakes being virtually maintenance-free.

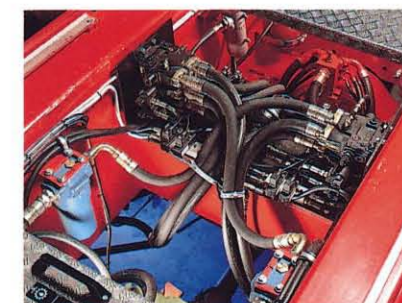
The overall result provides a safe working environment with excellent reliability and unsurpassed long-term economy.



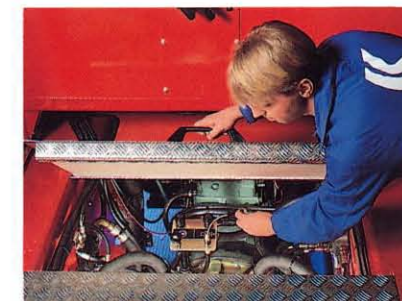
The hydraulic controls, steering wheel and driver's seat are individually adjustable.



The batteries are well placed to allow easy access and maintenance.



The engine and hydraulic controls are easily accessible through removable panels.



Oil checking and topping up is carried out via special service covers.



The instrument panel is placed to the left in the cab and offers the driver an immediate indication of all main operational functions.

Thoroughly engineered for lasting strength

The Kalmar ContChamp is designed to provide safe and trouble-free operations over its extended life cycle. Well-proven engineered solutions have been combined with advanced technology to create machines which provides efficient and reliable container and trailer handling.

Rugged construction for greater safety

All Kalmar trucks are designed to a high standard of safety and meet the stringent stability requirements of FEM 4.001q and ISO 10525. The chassis is a fully welded structure incorporating box section members for maximum strength. This design is the result of extensive computer calculations to ensure immense structural rigidity.

Toplift spreader and combi-attachment

The RS4 and RS5 are equipped with a fully telescopic top lift spreader able to handle 20-40 containers and other container sizes with pick-up points at the ordinary ISO-position. Operated electro-hydraulically from the cab, the spreader is equipped with contact pins to ensure container lifting can only take place when all four twistlocks are fully engaged.

The combi-attachment of the RC4 performs the same duties as the top lift container spreader but is additionally equipped with two pairs of legs to bottom pick containers.

The attachment can be rotated from the cab while the trailer legs hydraulically fold into frame profile and do not interfere with conventional container handling operations.

Guaranteed braking

All ContChamp reachstackers are fitted with hydraulically actuated wet disc brakes able to cope with heavy loads over long periods with no fading. The fully enclosed oil cooled brakes are self adjusting and require minimal maintenance – even under the most arduous operational conditions.

Automatically safe

In the event of an overload condition, all lifting, lowering and boom extension motions are suspended and an indicator panel in the cab identifies the source of the overload to enable the operator to take the correct action.

Additionally, sensors on the hydraulic system prevent the boom from being retracted too quickly with a loaded container or trailer under the spreader attachment. The combination of these factors, coupled with the ContChamp's rugged construction, makes the machines exceptionally safe to operate.

Reliable power train

The transmission comprises a well proven combined torque converter and gearbox providing four forward and four reverse gears with gear selection achieved through an electric power-shift. Gearbox output speed is reduced through the differential and hub and gives low stress, since maximum torque is attained first at the drive wheels.

The hydraulic system consists of hydraulic units, operation of trailer legs and service brake system. The hydraulics are controlled by a servo-assisted electrohydraulic system.

Operational features

Kalmar trucks are designed around a flexible configuration to enable the operator to select the optimum layout to suit individual requirements. Tell us how you want to use the machine and we will come up with a customised solution to suit your needs.

A ContChamp for every handling application

The Kalmar ContChamp DC 4160 to DC 4570 range covers the majority of trailer and container handling requirements. However, for certain applications, even higher capacity machines are necessary.

Kalmar has accordingly developed a new generation of reachstackers with longer wheelbases to provide greater capacities.

The DC 4180 and DC 4580 therefore have an extended wheelbase of eight metres while the DC 4590 has a nine metre wheelbase. This makes these designs particularly suitable for intermodal applications and provide the ability to handle trailers and containers on rail waggons on not only the adjacent but also the second rail track.

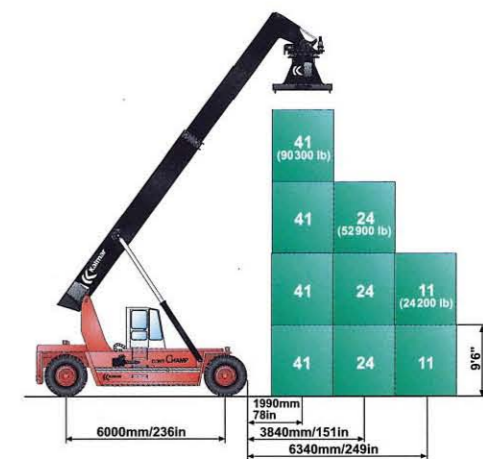
The "over-centre" valve prevents the boom from retracting too fast

An indicator in the cab shows when an overload situation has occurred.

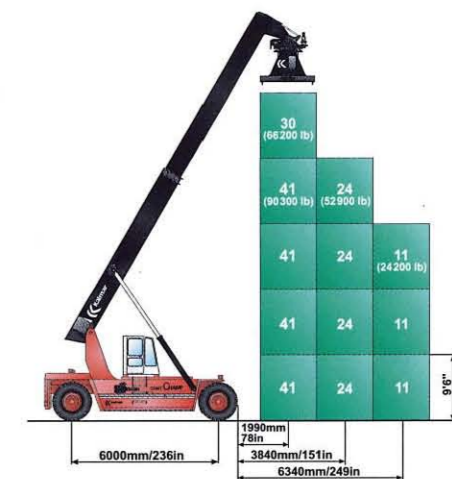
A set of lights on the boom indicate when all twistlocks are locked and only then can lifting operations take place.

The telescopic boom, with rotator, excellent visibility.

The rotator enables the attachment to revolve through a total of 280 degrees.



DC 4160 RS4 able to stack up to four 41 tonne containers high in the first row, three 24 tonne containers in the second row and two 11 tonne containers in the third row. Wheelbase, six metres.



DC 4160 RS5 able to stack up to four 41 tonne containers high in the first row, three 35 tonne containers in the second row and two 18 tonne containers in the third row. Wheelbase, six metres.

Reliable power train

The transmission comprises a well proven combined torque converter and gearbox providing four forward and four reverse gears with gear selection achieved through an electric power-shift. Gearbox output speed is reduced through the differential and hub and gives low stress, since maximum torque is attained first at the drive wheels.

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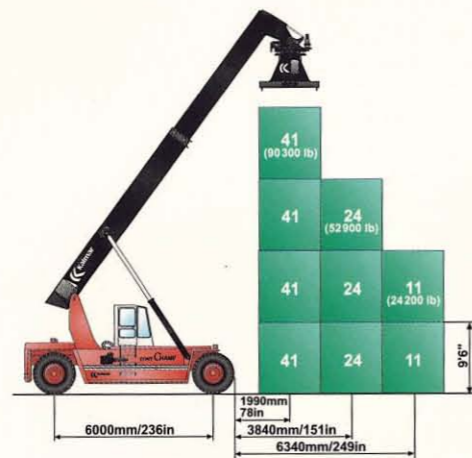
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A ContChamp for every handling application

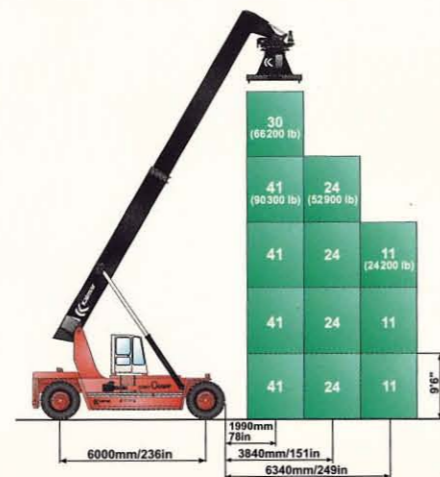
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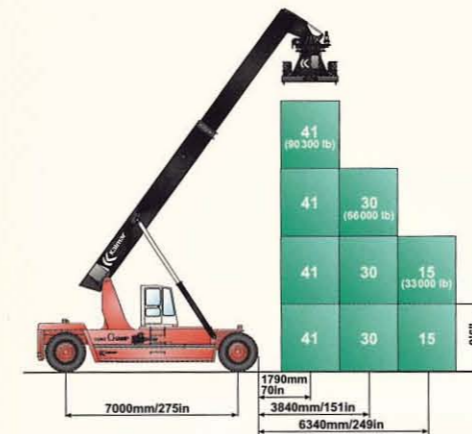
The DC 4180 and DC 4580 therefore have an extended wheelbase of eight metres while the DC 4590 has a nine metre wheelbase. This makes these designs particularly suitable for intermodal applications and provide the ability to handle trailers and containers on rail waggons on not only the adjacent but also the second rail track.



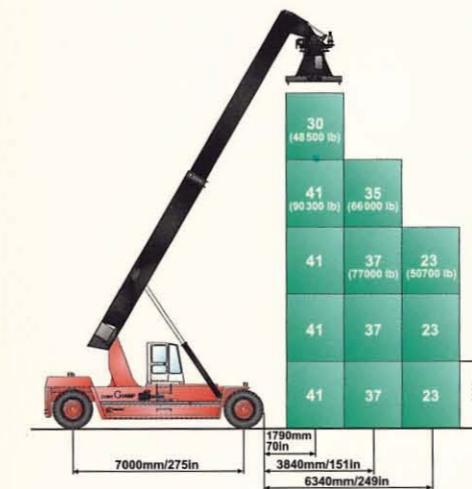
DC 4160 RS4 able to stack up to four 41 tonne containers high in the first row, three 24 tonne containers in the second row and two 11 tonne containers in the third row. Wheelbase, six metres.



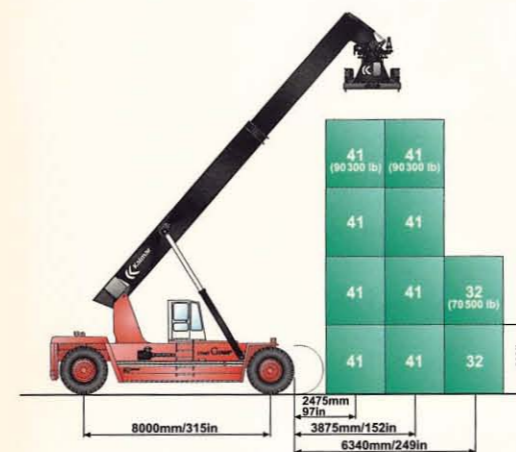
DC 4160 RS5 able to stack up to four 41 tonne containers high in the first row, three 35 tonne containers in the second row and two 18 tonne containers in the third row. Wheelbase, six metres.



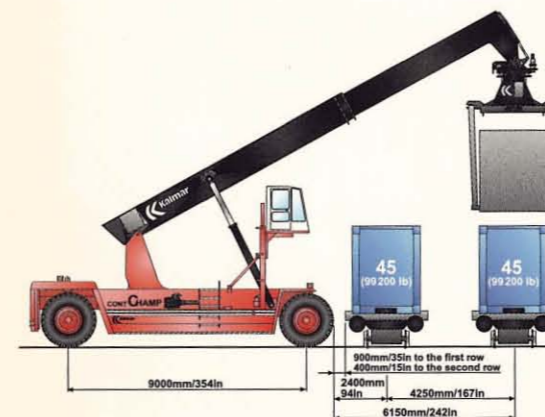
DC 4170 RS4 able to stack up to four 41 tonne containers high in the first row, three 35 tonne containers in the second row and two 23 tonne containers in the third row. Wheelbase, seven metres.



DC 4171 RS5 able to stack up to four 41 tonne plus one 30 tonne containers in the first row, three 37 tonne and one 35 tonne containers in the second row and two 23 tonne containers in the third row. Wheelbase, seven metres.



DC 4180 RS4 able to stack up to four 41 tonne containers high in the first row, four 41 tonne containers in the second row and two 32 tonne containers in the third row. Wheelbase, eight metres.



DC 4590 RC4 for combined handling of trailers and containers up to 45 tonnes in weight. Loading and unloading of rail waggons on nearest and second rail tracks with a 45 tonne capacity at 6.15 m. outreach from the front wheels. Wheelbase, nine metres.



The combi-attachment is designed for handling 20'-40' containers and other container sizes with pick-up points at the ordinary ISO-position as well as trailers.



The attachment, equipped with two sets of retractable trailer handling legs, is electro-hydraulically operated from the cab.



The combi-attachment provides rational handling of both containers and trailers with the time consuming need change attachments when switching from containers to trailer handling and vice versa.

Kalmar LMV leads the way

Kalmar LMV is a world leading manufacturer of counterweight trucks and the largest supplier of trucks over 18 tonnes capacity. Our extensive range includes over 50 different base models, including front and side lift trucks as well as reachstackers covering lifting capacities from 8 to 90 tonnes plus dedicated machines for specialised applications.

Customised trucks for every handling application

Thanks to a comprehensive range of equipment and accessories we can always create the right truck for every user. Kalmar LMV builds efficient machines with a superb level of operator comfort, excellent reliability and long life, which make them a valuable asset in every respect.

As a result, Kalmar trucks are much sought-after as second-hand machines – an economical way of expanding or cautiously increasing capacity.

Specialised machines for ports, terminals and the forestry industry

Complementing Kalmar's range of lifting trucks, the terminal tractors provide a complete solution to container and trailer handling requirements. Kalmar is also a leading manufacturer of machines for handling raw materials and forestry products.



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