

CONTCHAMP DRD100

TECHNICAL INFORMATION EMPTY CONTAINER HANDLER

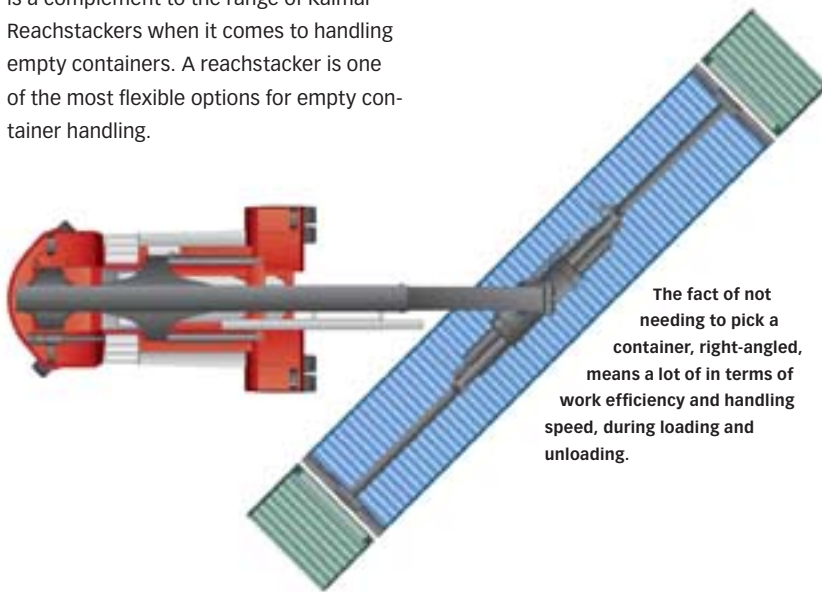




Flexible Empty Container Handling

Dedicated for empty container handling

DRD100S with a lift capacity of 10 tonnes is a complement to the range of Kalmar Reachstackers when it comes to handling empty containers. A reachstacker is one of the most flexible options for empty container handling.



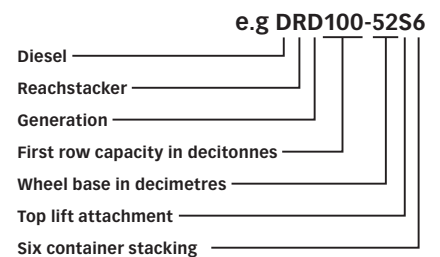
Containers can be lifted lengthwise making it possible to deliver the container through workshop doors, port shed gates, etc in then low, longitudinal position.

Chassis

The chassis is built of fully welded steel profiles, which gives a rigid construction with extremely strong mounting points for the axles and lift equipment.



Clarification of model designation



Boom and attachment

The telescopic boom is constructed of high tensile steel and is of a very sturdy design. The rotator consists of an upper and lower yoke, which rotate by double hydraulic motors. The attachment is adjustable for 20'-40' empty or light loaded containers. Side shifting is achieved with two hydraulic cylinders and mechanical pile slope is allowed. Electronic locking of the twist-locks makes the loading / unloading process secure. Two hydraulic dampers help prevent the container from swinging.

The extensive freedom allowed by the lifting equipment, gives that drivers can improve the work efficiency and the manoeuvrability of the machine.

Hydraulic system

Three different pumps feed the hydraulic system and it's sub-system:

- 2 variable piston pumps feed the working hydraulics, the attachment hydraulics, the electro-hydraulic servo and the steering system.
- A fixed, wing type pump feeds the brake system via an accumulator charge valve.



Brake system

The drive axle is fitted with hydraulic brake system of wet disc type. The parking brake system consists of a dry disc, which is applied by means of a powerful spring and is released by means of hydraulic pressure from the parking brake valve in the cab.



Steering system

The steering system is completely hydraulic and is fed from one of the load sensing pumps via a priority valve. The steering axle is an extremely robust construction with double acting cylinders. The minimal number of parts ensures operational reliability, a minimum of service points and easy maintenance.

Drive train

DRD100S are equipped with Volvo's TAD 720 VE, a turbo-charged straight 6-cylinder diesel engine with intercooler that gives high torque at low revs. The engine fulfils the requirements of 97/68 EC stage 2, USA EPA Tier 2 and sound DIN 45635.

The well proven Spicer off Highways 13.7 HR 32335 hydrodynamic gearbox has a built in torque converter. It has 3 gears in each direction. The Kessler D81 drive axle shifts gear down in two stages, differential and hub-reduction. The engine only achieves maximum torque at the drive wheels, which spares the transmission.

Drive train		Standard
Engine	Manufacturer Model	Volvo TAD 720VE with water cooled intercooler
	Power	172 kW at 2200 rpm
	Peak torque	854 Nm at 1400 rpm
Transmission		Spicer off Highways 13.7HR 32335
Driving axle		Kessler D81

Drivers environment

Spirit Delta cabin offers an efficient and secure workplace. Visibility is superb and controls and instruments are logically grouped. Steering wheel, seat and joystick are adjustable for best individual driving position. The climate control unit ensures a comfortable cab temperature.



Service access

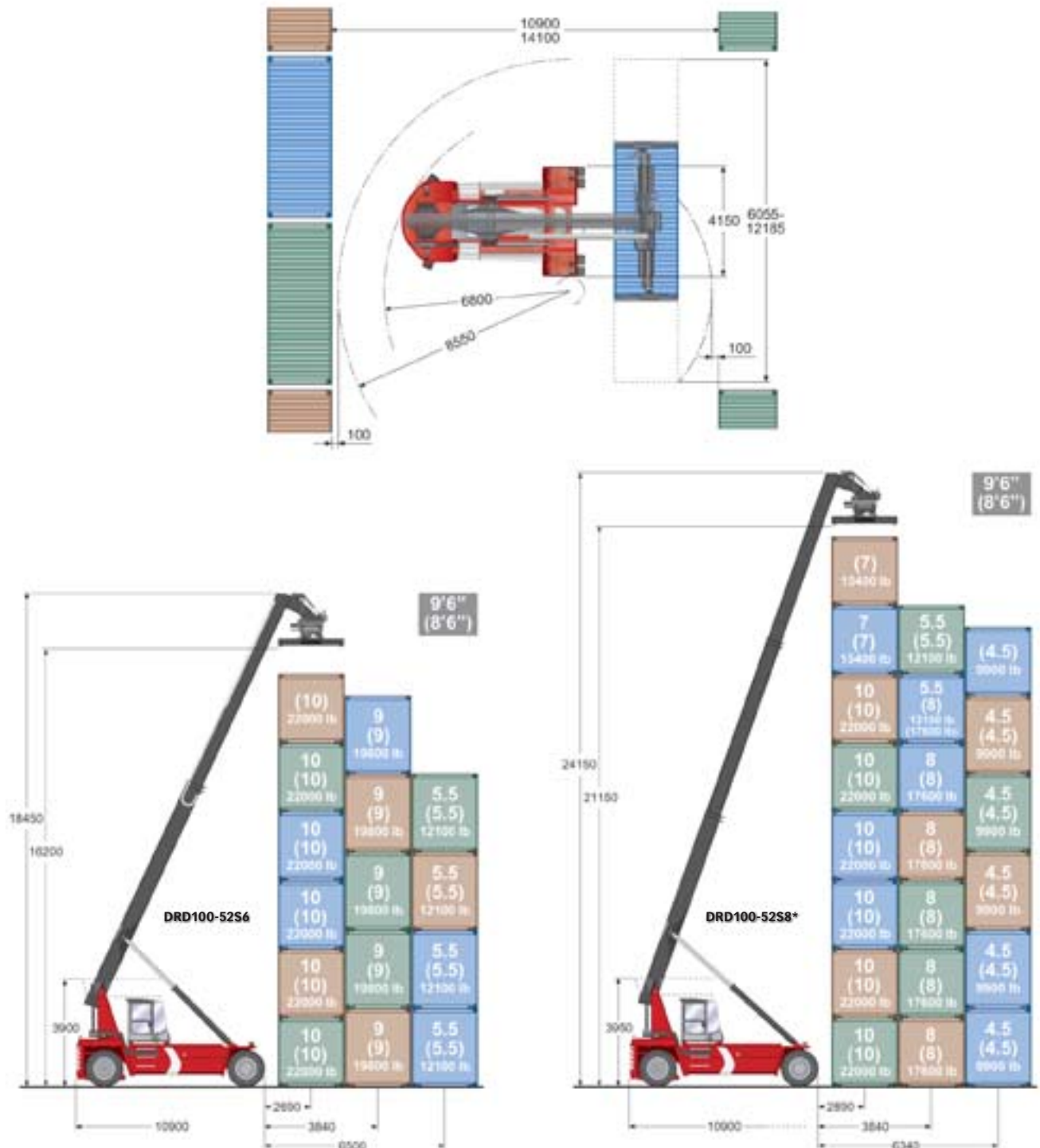
Daily service checks are made easier thanks to well thought out and grouped service points. All cabs are moveable horizontally for service access.

Electric- and control system

The electrical system is logically structured and well proven. The system is supplied by two 12 V batteries connected in series charged by an alternator.

The control system module 80 contains an electronic overload protection and a graphic display for operating information as standard.

Capacity and dimensions



Model	Lifting speed(m/s)		Lowering speed(m/s)		Driving speed (km/h)		Grade ability (%)			Draw pull(kN)	Service weight (kg)
	unloaded	at 70% of rated load	unloaded	at rated load	unloaded (F/R)	at rated load (F/R)	at 2 km/h, unloaded	at 2 km/h, at rated load	max, unloaded		
DRD100-52S6	0,42	0,38	0,40	0,40	29/29	27/27	26	21	26	118	37400
DRD100-52S8*	0,42	0,38	0,40	0,40	29/29	26/26	27	20	27	118	41100

* Special sales conditions apply, contact PSC Lidhult

Standard equipment

Chassis

- Safe angled entrance
- Towing pin (incasted)

Body

- Steps with anti slip protection
- Rear view mirrors on each side

Steering axle

- Rear axle: Kalmar
- Double acting steering cylinder

Drive train

- Engine: Volvo TAD 720 VE
- Transmission: Spicer off Highways 13.7 HR 32335
- Front axle: Kessler D81

Cabin

- Instep handle
- Fixed drivers seat BEGE
- Armrest right hand side
- Wipers/washers on front, rear and roof pane
- Sliding window on left side
- Lockable doors (key)
- Inside rear view mirror
- Joystick for boom and attachment functions
- Steering wheel knob
- Horn
- Brake pedal incl. transmission disconnection (declutch)
- Warning buzzer for not activated hand brake, leaving seat

Instrumentation

- Gauges
 - Transmission oil pressure
 - Fuel level
 - Engine coolant level temperature
- Warning/Indication lamps
 - Low charging level
 - Low brake pressure
 - Low engine oil pressure
 - Low engine coolant level
 - High engine coolant temperature
 - Preheater engine
 - Low transmission oil pressure
 - High transmission oil temperature
 - Parking brake
 - High beam
 - Direction indicator
 - Hour meter
- ECS Display Module 80
 - Engine rpm
 - Extension from loading edge of front wheel to load centre
 - Current load
 - Indicator for steer axle loading
 - Load indicator
 - Extension of boom
 - Extension from centre of front wheel to load centre
 - Boom angle in degrees

Wheels

- Tyres: 14.00x24/24

Lifting boom

- DRD100-52S6: 5 9"6 containers high
6 8"6 containers high
- DRD100-52S8*: 7 9"6 containers high
8 8"6 containers high

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Hydraulics

- Hydraulic oil cooler
- Pressure filter (10 micron)
- 2 variable load sensing pumps
- 1 vane pump
- Visual level glass hydraulic tank
- Regeneration system (lift and extension boom)
- Most of the boom and attachment functions are damped in the end positions

Electrics

- Electrical system 24 V
- Main power switch
- 2 working lights on attachment
- 2 working lights on boom
- 2 working lights on front edge cabin
- 2 rear lights on fenders activated in reverse
- 2 head lights on front fenders
- 2 position lights on each side
- Lights high/low beam front
- Tail lights, brake lights
- Blinkers front and rear
- Rotating beacon

Attachment

- Top lift 20'-40' (cap. 10 ton)
 - Sideshift ± 1000 mm
 - Mechanical levelling $\pm 5^\circ$
 - Rotation $+195^\circ/-105^\circ$
- Floating ISO twistlocks

Signs and documentation

- Load chart diagram in cabin
- Machine data plate chassi incl. load chart
- Warning stickers
- Information stickers
- Fuse diagram
- Instruction manual
- Technical manual
- Spare parts catalogue

Contact information:

Kalmar global partner

Local presence, globally

Kalmar is a global supplier of heavy materials handling equipment and services for ports, terminals, industry and intermodal handling.

Local presence means that we can support our customers throughout the product's life cycle, wherever they are.

Our products are manufactured in Sweden, Finland, the USA and the Netherlands.



Other reachstacker models



Container Handler ContChamp



Intermodal ContChamp



Container Handler ContMaster

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