

*Make things easy*



# Technical Information Container Handler

ContChamp 42-45 tonnes



# Capacity and dimensions

## Maximum lifting capacity in confined spaces.

The chassis and lifting equipment have been newly developed to ensure the best possible performance, strength and user-friendliness. The nature of the working environment and capacity requirements at different load centres determine which model is the most suitable.

### Lifting boom

The lifting boom carries the load. The design has been optimised using computer simulations and extensive field tests. The powerful execution in high-tensile steel has a minimal number of welds for maximum strength. The boom's fixture in the frame and the lifting cylinders are fitted

with spherical plane thrust bearings. The width of the rear fixture (boom suspension) increases the overall rigidity and the good rearward visibility.

The boom has two sections, the inner and outer boom. The sliding plates between the inner and outer boom require no lubrication. The cable-chain which leads hydraulic hoses and cabling to the attachment is made of maintenance-free plastic.

The blocking valves on the lifting and extension cylinders block the oil flow when the boom functions are not in use, which secures the boom position. The base of the lifting cylinders has a new design that produces smooth stopping and starting movements.

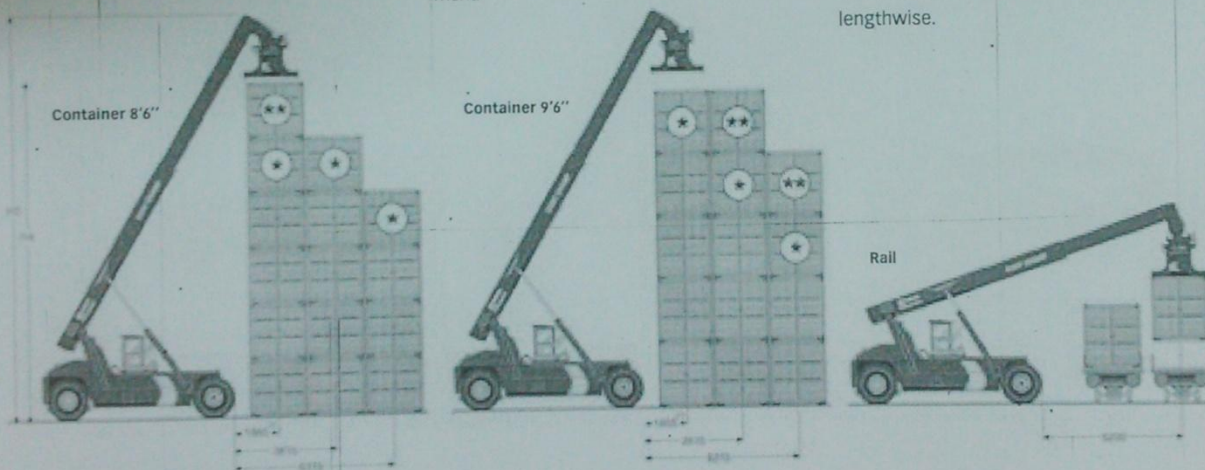
The boom's lifting and extension function is damped in the end positions for reduced wear and greater comfort.

### Lifting boom hydraulics

Oil is fed to the boom functions by load sensing pumps. To reduce pressure drops, wide hydraulic hoses have been used for the boom functions. A wider hose produces a lower flow rate with the same volume, thereby reducing friction and heat development.

### Rotator

The rotator is fixed in the inner boom and enables the container to be rotated. The rotator consists of an upper and a lower yoke joined with a powerful bearing. Rotation is enabled by two hydraulic motors, which drive a gear-ring. Two hydraulic dampers help prevent the container from swinging lengthwise.



## Capacity (tonnes)

Model	Container 8'6"			Container 9'6"			Rail	Lifting height toplift attachment	
	1:st row	2:nd row	3:rd row	1:st row	2:nd row	3:rd row	2:nd row	H4 (mm)	H5 (mm)
DRF420-6055	41*/42	25*	11*	40*/42	25*	11*	16	15100	18100
DRF450-6055	43*/45	27*	13*	42*/45	27*	13*	18	15100	18100
DRF450-6055X	43*/45	35*	18*	42*/45	35*	18*	24	15200	18200
DRF420-6555	41*/42	28*	13*	40*/42	28*	13*	18	15100	18100
DRF420-6556	39**/41*/42	28*	13*	40*/42	28**	13**	18	16200	19250
DRF450-6555	43*/45	30*	15*	42*/45	30*	15*	20	15100	18100
DRF450-6556	42**/44*/45	30*	15*	43*/45	30**	15**	20	16200	19250
DRF450-6555X	45*	36*/38	21*	43*/45	37*/38	21*	27	15200	18200
DRF450-6556X	42**/45*	35*/38	21*	43*/45	34**/36*/38	21**	27	16300	19350
DRF420-7055	41*/42	30*	15*	40*/42	30*	15*	20	15100	18100
DRF450-7055X	45*	39*/41	23*	45*	40*/41	23*	29	15100	18200
DRF450-7055X5	45*	39*/41	23*/(31*)	45*	40*/41	23*/(31*)	29/(35)	15100	18200
DRF450-7555X5	45*	43*/45	26*/(34*)	45	45*	26*/(34*)	32/(41)	15200	18400
DRD450-8054X	45*	45	35	45	45*	35	44	13500	17000
DRD450-8054X5	45*	45	35/(45)	45	45*	35/(45)	44/(45)	13500	17000

Information available on request

(xx) = Support jacks down (I) = May alter pending on model



### Attachment

The primary function of the attachment is to firmly attach the container during lifting. This is done with four twistlocks which rotate, thereby securely gripping the container's corner fittings.

The mechanical levelling ensures that the twistlocks reach the corners, even if the container is leaning.

The attachment can easily be adapted to different container standards. A hydraulic motor drives the function via chains. The container can also be moved sideways to facilitate loading and unloading, or to compensate for unbalanced loads. Two hydraulic cylinders perform the side-shift movement.

### Attachment and rotator hydraulics

The functions are fed with a constant pressure, which means there is no pumping of hydraulic oil when the functions are not in use. One valve serves all the hydraulic functions in the attachment. The valve ensures that each hydraulic function is fed the exact amount of oil needed to optimise the speed of the functions' movements. The attachment functions are damped in the end positions.

### Chassis

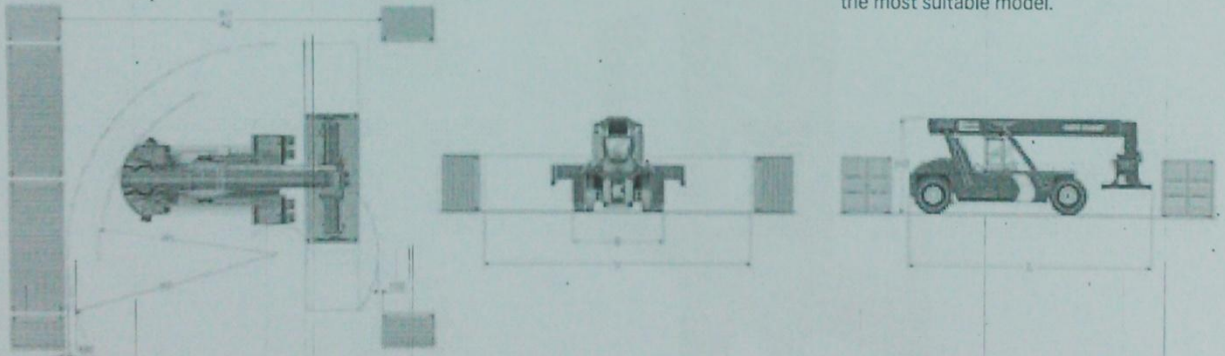
The frame forms the basis of the machine's lifting and manoeuvring characteristics. The frame's beam construction, along with its width, makes the reachstacker stable, torsion resistant and service-friendly.

Firstly, a large number of computer simulations have been run in order to eliminate critical tensions under various kinds of strain. The simulations were characterised by uncompromising demands on the fundamental principles of stability, manoeuvrability and visibility. Secondly, the machine has then undergone extensive field-testing to fully ensure its dynamic strength.

The reachstacker is available with a variety of wheelbases to fulfil demands on lifting capacity in relation to manoeuvrability and operating economy in the best way.

### Increased capacity

In some cases, high capacity requirements in the second and third rows of containers, or on the far rail track, call for the benefit of support legs. In other cases, it may be the restricted handling space that determines the most suitable model.



## Dimensions

Model	Aisle width (mm)		Turning radius (mm)		Main dimensions (mm)						Service weight (kg)
	A1 - 20 ft	A2 - 40 ft	R1 - 20 ft	R3 - 40 ft	B	V	L	H3	Clearance	Wheels	
DRF420-60S5	11200	13600	8100	9400	4150	6055-12185	11200	4500	250	18.00x25/36	64500
DRF450-60S5	11200	13600	8100	9400	4150	6055-12185	11200	4500	250	18.00x25/40	66400
DRF450-60S5X	11200	13600	8100	9400	4150	6055-12185	11200	4600	300	18.00x33/36	76500
DRF420-65S5	11600	13600	8500	9400	4150	6055-12185	11700	4500	250	18.00x25/36	65000
DRF420-65S6	11900	13900	8500	9450	4150	6055-12185	12000	4500	250	18.00x25/36	66200
DRF450-65S5	11600	13600	8500	9400	4150	6055-12185	11700	4500	250	18.00x25/40	66800
DRF450-65S6	11900	13900	8500	9450	4150	6055-12185	12000	4500	250	18.00x25/40	67800
DRF450-65S5X	11600	13600	8500	9400	4150	6055-12185	11700	4600	300	18.00x33/36	76300
DRF450-65S6X	11900	13900	8500	9450	4150	6055-12185	12000	4600	300	18.00x33/36	77200
DRF420-70S5	12100	13600	9000	9400	4150	6055-12185	12200	4500	250	18.00x25/36	65800
DRF450-70S5X	12100	13600	9000	9400	4150	6055-12185	12200	4700	300	18.00x33/36	77800
DRF450-70S5XS	12100	13600	9000	9400	4150	6055-12185	12200	4700	300	18.00x33/36	79300
DRF450-75S5XS	12500	13600	9400	9400	4150	6055-12185	12700	4750	300	18.00x33/36	82100
DRD450-80S4X	14900	15300	11000	11250	4500	6055-12185	14200	5150	425	21.00x35/36	102600
DRD450-80S4XS	14900	15300	11000	11250	4500	6055-12185	14200	5150	425	21.00x35/36	103100
DRD450-80S5XS											

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