

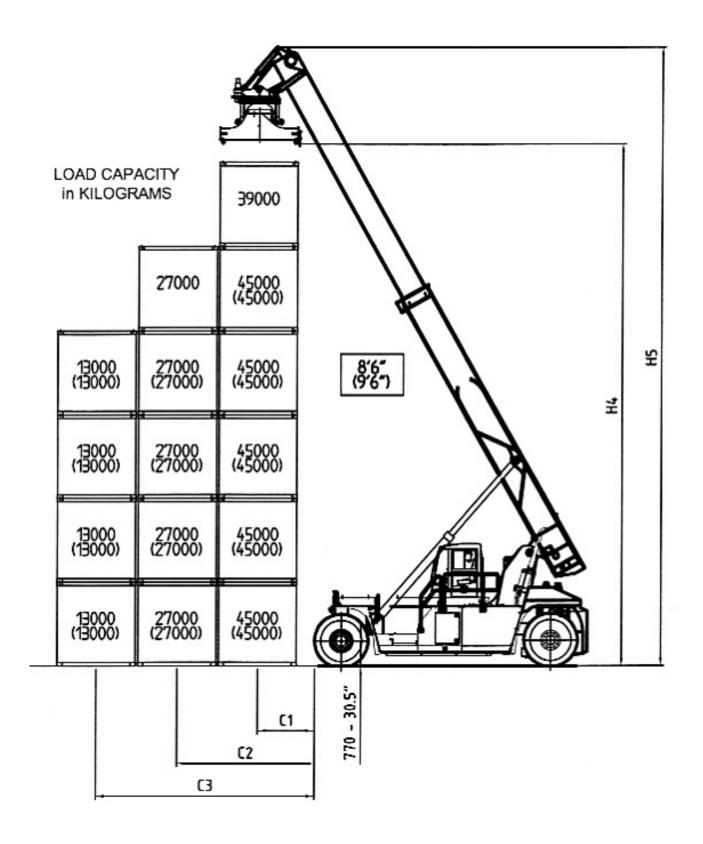




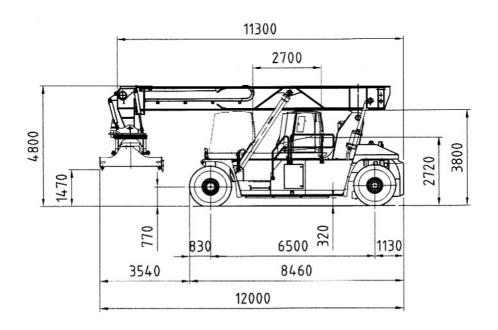
REACH STACKER CVSFERRARI Model F500-RS1

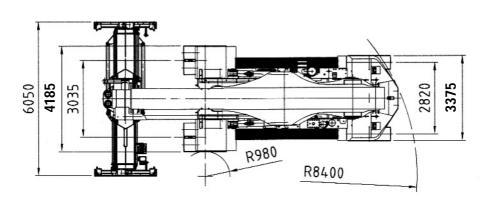
> CVS FERRARI Srl a division of MANITEX INTERNATIONAL INC. Via Emilia, 29010 Roveleto di Cadeo (PC) Italy www.cvsferrari.com

	1.0	Manufacturer	l		CVS Fe	rrari
CHARACTERISTICS	1.1	Truck type			Reach Stacker	
	1.2	Truck model			F500-RS1	
	1.3	Attachment type			Container spreader	
	1.4	Attachment model			TS45RSX5	
	1.5	Load capacity "on tyres" 1 st / 2 nd / 3 rd row	Q	kg	45000 / 27000 / 13000	
	1.6	Load centre distance	C1/C2/C3	mm		
		1 st / 2 nd / 3 rd row		111111	1780 / 3850 / 6400	
	1.7	Wheelbase	Υ	mm	6500	
	2.1	Service weight - Unladen	I	kg	68000	
2		Axle load at load center C1,				
WEIGHTS	2.2	with rated load Front and Rear		kg	99000 -14000	
×	2.3	Axle load at load center C1,		kg	36000 – 32000	
		without load Front and Rear		9		
					SCANIA DC13	CUMMINS QSM11
	3.0	Engine manufacturer / type			(EU STAGE 3B)	(EU STAGE 3A)
S	3.1	Rated power		kW	257 (at 2100 rpm)	250 (at 2100 rpm)
DRIVE TRAIN & OTHERS	3.2	Maximum power		kW	257 (at 1500 rpm)	272 (at 1500 rpm)
	3.3	Peak torque		N m	1950 (at 1200 rpm)	1674 (at 1200 rpm)
	3.4	Rated speed		rpm	2100	2100
	3.5	Number of cylinder - Displacement Transmission manufacturer / type		N°-cm³	6 - 12700 Dana TE	6 - 10800
	3.7	Nr. of Gear – Forward / Reverse			4 / 4	
	3.8	Driving axle		 	Kessler D102	
	3.9	Service brake			Cooled wet disk brake	
	3.10	Parking brake			Dry disk brake	
	3.11	Steering system			Fully hydrostatic	
		Traval speed	I	1 1		
PERFORMANCE	4.0	Travel speed Laden / Unladen		km/h	21.1 - 23	
	4.1	Tractive Effort		kN	323	335
	4.2	Gradeability at 2 km/h –		%	34,2 / 20,3	34,2 / 21,9
		without Load / with rated load Lifting speed				
	4.3	Lifting and Extension movement		m/s	0.25 / 0,32	
		Laden (70% of rated load) / Unladen				
	4.4	Lowering speed		m/s	0.35 / /) EE
	4.4	Lowering and Retraction movement Laden (70% of rated load) / Unladen		111/5	0.35 / 0,55	
		Edder (70% of fated load) 7 offidaeri		<u> </u>		
DIMENSIONS	5.0	Boom angle min - max		deg	0 – 6	0
	5.1	Spreader distance from the ground min	H2	mm	1470	
	5.2	Boom height – Fully lowered	H3	mm	4800	
	5.3	Maximum lift height under spreader	H4	mm	16100	
	5.4	Boom height – maximum	H5	mm	19100	
	5.5	Truck height – without boom	H6	mm	3800	
	5.6	Seat height – S.I.P.	H7	mm	2720	
	5.7	Ground clearance Center of wheelbase	M1	mm	320	
	5.8	Overall lenght	L1	mm	12000	
	5.9	Length without boom	L2	mm	8460	
		90° Stacking Aisle 20′ / 40′ container	A1			
	5.10	spreader central above front axle	20'/40'	mm	9800 / 12700	
	5.11	with 200 mm ground clearance Turning radius – Inner / Outer	R1	mm	980 / 8400	
		-				
TYRES	6.0	Tyres type and size			Pneumatic type	
		Front and Rear Number Front / Rear wheels			18.00 25 40PR	
	6.1	(X = driven wheels)			4 X / 2	
	6.2	Reference radius – Loaded	r	mm	770	
		Front axle distance from the ground				
	6.3	Track – Front / Rear Overall width over front / rear tyres	T1 W1	mm mm	3035 / 2820 4185 / 3375	
	0.7	1 3.5rdii widdi ovoi iiont / reai tyres	1 441			
ATTACH MENT	_				45000	
	7.0	Rated Load		kg		
	7.1	Side Shift		mm	+/- 800	
	7.2	Rotation		deg	-105 +195	
	,			-105+1		170
	7.3	Side tilting (pile slope)		deg	+/- 3° Mechanical pile slope	
		1				

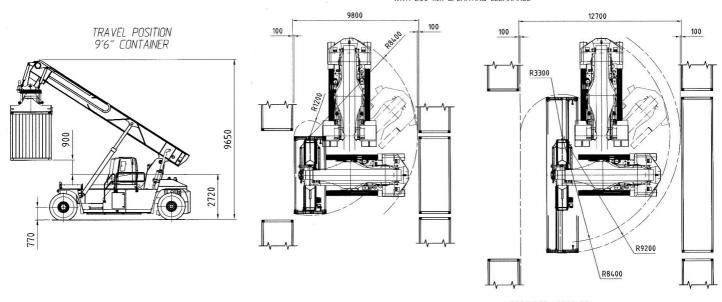


F500-RS1 – Dimensions (standard configuration)





90° STACKING AISLE SPREADER CENTRAL ABOVE THE CENTRAL AXLE WITH 200 mm OPERATING CLEARANCE



DESCRIPTION

CHASSIS and BOOM

Extra heavy duty and torsion resistant welded structures, made of high quality steel, which enhance a lot the reliability and fatigue of the entire machine. Ability to stack up to 6 high 8'6" container in first. Compact machine with the longest wheel base but the shortest steering radius that none can match on the market.

ENGINE

SCANIA DC13 engine (compliant to EU stage 3B) or CUMMINS QSM11 engine (compliant to EU stage 3A).

Best performances and lowest fuel consumption for the lowest CO2 emission. Engine protection system features are provided to avoid major breakages.

TRANSMISSION

Dana TE 32 with the new full flow system. Hydrodynamic torque converter and multi Speed powershift transmission, 4 speed forward and for speed reverse. Possibility of manual or automatic gear shifting selection. The transmission is fitted with automatic gear shifting which means a load sensitive shifting with a smoother shifting for the best driver comfort; optimization of the shifting point, which enhance and reduce the fuel consumption. High temperature protection system is standard provided.

FRONT AXLE

Kessler D102. Extra wide and heavy duty drive front axle for the best stability and long lasting throughout the time of the machine life.

REAR AXLE

Unique CVS design of heavy duty axle with a single double acting cylinder of well known reliability. Nut protection included as standard. Full hydrostatic steering system with priority valve integrated in the main distributor.

HYDRAULIC SYSTEM

Composed of:

- Main proportional electro hydraulic distributor which integrates the main movements related to steering, boom extension, spreaders or accessories, stabilizers.
- 2 High Pressure Variable Displacement Piston Pumps of the latest generation, mounted directly on the transmission.
- Unique Load Sensing Distributor with "flow sharing system" which is called LUDV, which is a further improvement of the old load sensing system.
 - This LUDV grants the independency of the working pressure of the oil flow inside the system giving a constant oil flow and avoids pumps cavitations.
 - The LUDV grants the Operator best possible comfort as he drives the machine and when combined manoeuvres are required, without any loss of pressure, enhancing the movements done per hour.
- Hydraulic Oil Temperature monitored by a temperature transducer in the Air/Oil Heat Exchanger to maintain optimum operating temperature.
- Superior Leak Free ORFS type Hydraulic Pipes Fitting are supplied.

ELECTRICAL SYSTEM

24 Volt system, 2 x 12V 200Ah battery with manual disconnect switch.

Multifunctional joystick which greatly controls the movements of the boom and main attachment functions (side shifting, rotation, twist lock/unlock, etc).

System designed in according to the modularity concept philosophy of CVS and CAN BUS oriented in order to satisfy the main needs of all the Clients.

Full Colour High Contrast Digital Display, easy to read, receives all the information from the CAN BUS System line and displays this information in real time in accordance with the priorities defined by the Control Master Unit, enhancing the Operator's performances.

SPREADER:

Telescoping container spreader for handling 20' and 40' ISO containers. Full floating ISO twitslocks. Damping system fitted between the boom and the spreader for a smoother sway control of the attachment.