

	FEATURE	Unit	M542 S
Engine Model	Engine Manufacturer and Model		Perkins 1104C-44T
	Engine Standard		TR2
	Engine Net Power	kW	74,5 kW @ 2200 RPM
	Engine Maximum Torque	Nm	408Nm @1400 RPM
	Engine Power Curve		See Sheet Engine Power Curve
	Aspiration		Turbocharged
	Engine Displacement	lt	4,4
	Compression Ratio		18.2:1
	Number Of Cylinders		4
	Cylinder Bore	mm	105
	Stroke	mm	127
	Rated Engine	Rpm	2200
	Air Filter		Dual elements, two stage, dry type
Drive Line	Cold Start		Pre-Heated
	Transmission Manufacturer		Carraro
	Transmission Model		TLB2 CD
	Gear Selection		Powershift
	Torque Convertor Ratio		2.64 / 1
	Rear PTO / Front PTO Ratio		0,804
	Max Input Power	kW	81kW@2200 rpm
	Max Input Torque	Nm	750
	Max Input Speed	Rpm	2400
	Peak Input Speed	Rpm	3000
	Speed Gear		4 Fwd + 4 Rev
	Transmission Ratio		1. gear 5.533
			2. gear 3.359
			3. gear 1.533
			4. gear 0.811
	Max Speed On Road	km/h	40
	Tyres Front		405/70-20" 12PR
	Tyres Front (Optional)		Not Available
	Tyres Rear		16.9-28" 14PR
	Rear Axle lock system		Equipped with differential lock on rear axle
	Front axle Static Load	N	225000
	Front axle Dynamic Load	N	90000
	Rear axle Static Load	N	187500
	Rear axle Dynamic Load	N	75000
Brake	Service BrakeType		Hydraulic Boosted Twin Ø 31.75 Compensating self Bleed Master Cylinder
	Boost Ratio		5:1
	Accumulator supported for emergency braking		Available
	Max Operating Pressure	bar	43
	Oil Displacement brakes actuation	cc	16+16
	Max Breaking Torque	Nm	46700
Hydraulic Sysytem Option1	Park BrakeType		Rear axle input, manually adjusted camper, cable operated, mounted on transmission output
	Hydraulic pump Type		Axial Piston type with variable displacement
	Hydraulic pump Flow rate	l/min	162,8 l/min @2200 Rpm (Rexroth)
	Piston Pump, Power Mode	Nm	210
	Piston Pump, Eco Mode	Nm	150
	Loader control type		Pilot oil controlled by joystick handle
	Backhoe control type		Pilot oil controlled by joystick handle
	Hydraulic system type		Closed Center (Rexroth 7SX14)
	Auxiliary Valve		1 section (Rexroth)
	System Relief Pressure	bar	240
	Steering Type		Full Power Hydrostatic, Priority Valve
	Emergency Steering		Not Available / Optional
	Retrun Line Filter	µ	10
Hydraulic Sysytem Option2	Suction Line Filter	µ	75
	Hydraulic pump Type		Tandem Gear Pump (Casappa)
	Hydraulic pump 1 displacement	cc	39,27
	Hydraulic pump 1 Flow Rate	l/min	86.39 @ 2200 Rpm
	Hydraulic pump 2 displacement	cc	26,7
	Hydraulic pump 2 Flow Rate	l/min	58.74 @ 2200 Rpm
	Open Centre system flow rate		145 @ 2200 Rpm
	Loader control type		Mechanic controlled by handle
	Backhoe control type		Mechanic controlled by handle
	Hydraulic system type		Open Center (Husco)
	Attachment Valve		2 section (Husco)
	System Relief Pressure Pump	bar	240
	Unloader Pressure	bar	207
	Steering Type		Full Power Hydrostatic, Priority Valve
	Retrun Line Filter	µ	10
Electric	Suction Line Filter	µ	75
	Battery	A/ h	165
	Optional Battery	A/ h	135
Loader Performance	Altrnator	A	85
	Loader lift capacity at maximum height (kg)	kg	3500
	Loader arm Breakout Force (kgf)	kgf	5905
	Loader bucket Breakout Force (kgf)	kgf	7734
	Backhoe Arm Beakout Force (retracted)	kgf	3461

Backhoe Performance	Backhoe Arm Beakout Force (extended)	kgf	2506		
	Bucket breakout force (speed)	kgf	5795		
	Bucket breakout force (Power)	kgf	6424		
	Lift Capacity of bucket pivot at full reach (retracted)	kg	1250		
	Lift Capacity of bucket pivot at full reach (extended)	kg	750		
	Backhoe bucket capacity 35cm	m³	0,075		
	Backhoe bucket capacity 40cm	m³	0,09		
	Backhoe bucket capacity 50cm	m³	0,13		
	Backhoe bucket capacity 60cm	m³	0,17		
	Backhoe bucket capacity 70cm	m³	0,2		
	Backhoe bucket capacity 80cm	m³	0,24		
Dimensions			Fixed dipper	TB (Extended)	TB (Retracted)
	A SAE Maximum dig depth	mm	4075	5350	4255
	A Maximum dig depth	mm	4575	5850	4755
	B Reach - ground level to rear wheel centre	mm	6866	8027	7026
	C Reach - ground level to slew centre	mm	5480	6641	5640
	D Reach - at full high to slew centre	mm	1727	2776	1936
	E Side reach –to centre line of machine	mm	6005	7149	6147
	F SAE operating height	mm	5509	6347	5653
	G Max loadover height	mm	3764	4623	3912
	J Bucket rotation	°	205		
	K Shovel Width	mm	2350		
	Y Rear frame width	mm	2250		
	SS Total travel clearance	mm	3838		
	QQ Kingpost clearance	mm	542		
	Z Departure angle	°	19		
	ZZ Stabilizer feet clearance	mm	338		
	YY Slew centre to rear axle centre distance	mm	1388		
	XX Axle centreline distance	mm	2237		
	X Total travel length	mm	5740		
	TT Steering wheel centre height	mm	2057		
	RR Cab roof height	mm	2970		
	P Pin forward reach	mm	377		
	S Reach at full height fully dumped	mm	900		
	R Max. reach at full height	mm	1124		
	V Dump angle	°	43		
	M Dump height	mm	2800		
	N Load over height	mm	3328		
	O Loader hinge pin height	mm	3481		
	U Roll back at ground	°	44		
	T Dig depth	mm	124		
	Q Reach at ground (toe plate horizontal)	mm	1317		
	H Total kingpost travel	mm	1125		
	W Rear wheel centre to ground	mm	643		
	L Front wheel centre to ground	mm	496		
	AB Ground Clearance	mm			
	BB Stabilizer Overall Width, Operating	mm			
	CC Stabilizer Spread, Operating	mm			
	DD Stabilizer Width, Transport	mm			
Turning Diameter Defition	Turning Diameter Defition (braked)	m	8075		
	Turning Diameter Defition (unbraked)	m	10000		
Service Refill Capacities	Fuel Tank	lt	140		
	Total Hydraulic System Volume	lt	145		
	Hydraulic Tank Volume	lt	62		
	DEF Tank	lt	18		
	Engine Cooling System	lt	22		
	Engine Oil with Filter	lt	8,5		
	Diferential Oil of the Front Axle	lt	7,5		
	Diferential Oil of the Rear Axle	lt	16		
	Front axles pins	lt	2 x 0,80		
	Rear axles pins	lt	2 x 1,5		
Operating Weight	Transmission	lt	22		
	Operating Weight – Extended dipper	kg	8860		
	Operating Weight – Fixed dipper	kg	8580		



