

FEATURE		Unit	M642 2WS TR5
Engine Model	Engine Manufacturer and Model		Perkins 904J-E36TA
	Engine Standard		TR5
	Engine Net Power	kW	74,4 kW / 2400 RPM
	Engine Maximum Torque	Nm	430Nm @1500 RPM
	Engine Power Curve		See Sheet Engine Power Curve
	Aspiration		Turbocharged
	Engine Displacement		3,621
	Compression Ratio		0,7
	Number Of Cylinders		4
	Cylinder Bore	mm	98
	Stroke	mm	120
	Rated Engine	Rpm	2200
	Air Filter		Dual elements, two stage, dry type
	Cold Start		Pre-Heated
Drive Line	Transmission Manufacturer		Carraro
	Transmission Model		TLB2 CD
	Gear Selection		Powershift
	Torque Convertor Ratio		2.64 / 1
	Rear PTO / Front PTO		0,804
	Max Input Power	kW	81 @ 2200 Rpm
	Max Input Torque	Nm	750
	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
	Park BrakeType		Rear axle input, Manually adjusted Caliper, cable
Hydraulic Sysytem Option1	Hydraulic pump Type		Axial Piston type with variable displacement
	Hydraulic pump Flow rate	l/min	158,4 lt/min @2200 RPM (Casappa)
	Piston Pump, Power Mode	Nm	245
	Piston Pump, Eco Mode	Nm	180
	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) and optional 2. auxiliary section
	System Relief Pressure	bar	240
	Steering Type		Full Power Hydrostatic, Priority Valve
	Emergency Steering		Not Available / Optinal
	Retrun Line Filter	μ	10
	Suction Line Filter	μ	75
Electric	Battery	A/ h	135
	Optional Battery	A/ h	NA
	Altrernator	A	120
Loader Performance	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 Arm Beakout Force (extended)	kgf	2506

Backhoe Performance	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	2400		
	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	3071			
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
Turning Diameter		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	17
		Engine Oil with Filter	lt	10,5
		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
	Transmission	lt	21	
Operating Weight		Operating Weight – Extended dipper	kg	9000
		Operating Weight – Fixed dipper	kg	8720













