

TELESCOPIC WHEEL LOADER | TM320 / TM320S / TM420 / TM420S



THE ARGUMENT FOR BUYING ONE JUST GOT EVEN MORE POWERFUL

Introducing the all-new JCB TM Stage V machines. With our proven DIESELMAX engine delivering more power and a new highly efficient 8-speed intelligent powershift transmission with TorqueLock, they take performance and productivity to another level. With superb visibility, comfort and ease of use plus many innovative fuel-saving features, there's so many reasons to choose the ultimate telescopic wheel loaders.







GREATER PRODUCTIVITY

The TM's variable flow auxiliary hydraulics are easy to use and maximise productivity, allowing multiple functions to be performed at the same time, reducing cycle times.

GREATER COMFORT

The new JCB TM CommandPlus cab has been designed for operator comfort, with a spacious working environment and plenty of storage space.





SUPERB VISIBILITY

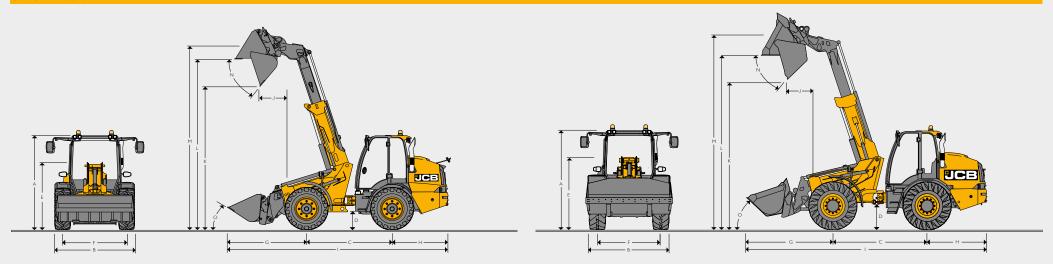
New multi-curve glazing increases front visibility by 13% and provides 52% more upward visibility, when operating at height.

SAFER WORKING

Superb visibility in dark conditions is guaranteed with our high intensity 11x LED work lighting package, providing 360-degree illumination.



STATIC DIMENSIONS



Machine model		TM320	TM320S	TM420	TM420S
A Height over cab (no wiper)	mm	2721	2721	2856	2856
A Height over cab (inc wiper)	mm	2791	2791	2926	2926
B Overall width (over tyres)	mm	2350	2350	2350	2350
C Wheelbase	mm	2550	2550	2758	2758
D Ground clearance to bottom of axle	mm	420	420	466	466
E Height to top of boom pivot	mm	1835	1835	1975	1975
F Wheel track	mm	1870	1870	1860	1860
G Front axle to shovel toe plate	mm	1627	1627	2532	2532
H Rear axle to counterweight face	mm	2143	2143	1721	1721
I Total length (GP shovel at carry)*	mm	6322	6322	7011	7011
J Dump reach at full height	mm	933	933	735	735
K Dump height	mm	4511	4511	4411	4411
L Load over height	mm	5182	5182	5064	5064
M Pin height	mm	5367	5367	5661	5661
N Max dump angle at full height	degrees	39	39	39	39
O Roll back angle at carry	degrees	41	41	43	43
Total length to front of hitch	mm	5886	5886	5829	5829
Inside turning radius to tyres	mm	2001	2001	3880	3880
Outside turning radius over tyres	mm	4350	4350	5060	5060
Outside turning radius over shovel	mm	4633	4633	5680	5680
Articulation angle	degrees	+/- 43	+/- 43	+/- 40	+/- 40
Operating weight (Ref tyre, hitch)	kg	8142	8142	9779	9779
Front axle weight	kg	2352	2352	3048	3048
Rear axle weight	kg	5790	5790	6731	6731
Tyres used for specifications		XMCL 460/70R24	XMCL 460/70R24	XMCL 480/80R26	XMCL 480/80R26
Shovel used for specifications		1.0m³ Q-Fit	1.0m³ Q-Fit	1.6m³ Q-Fit	1.6m³ Q-Fit
Hitch used for specifications		Q-Fit	Q-Fit	Q-Fit	Q-Fit

^{*}Please note total length: machine fitted with standard bucket – boom fully down, shovel crowded fully back.

ENGINE				
Machine model	TM320	TM320S	TM420	TM420S
Manufacturer	JCB	JCB	JCB	JCB
Model	DIESELMAX	DIESELMAX	DIESELMAX	DIESELMAX
Capacity lit	es 4.8	4.8	4.8	4.8
Aspiration	Turbocharged, Intercooled	Turbocharged, Intercooled	Turbocharged, Intercooled	Turbocharged, Intercooled
Number of cylinders	4	4	4	4
Power rating				
Gross power kW (p) 97 (130)	112 (150)	112 (150)	129 (173)
Torque rating				
Gross torque	m 550	600	600	690

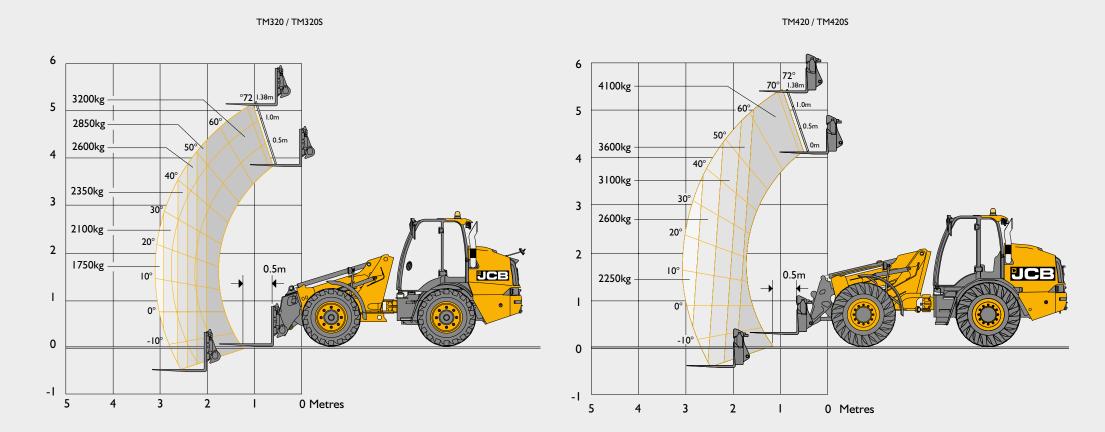
TRANSMISSION							
Machine model		TM320 (40kph)	TM320S (40kph)	TM320S (50kph)	TM420 (40kph)	TM420S (40kph)	TM420S (50kph)
Туре		Powershift	Powershift	Powershift	Powershift	Powershift	Powershift
Manufacturer		JCB	JCB	JCB	JCB	JCB	JCB
Model		PS900	PS900	PS900	PS900	PS900	PS900
Fwd / rev ratios		8 / 4	8 / 4	8 / 4	8 / 4	8 / 4	8 / 4
Torque lock		Fwd gears 5 - 8	Fwd gears I - 8, Rev gears I - 4	Fwd gears I - 8, Rev gears I - 4	Fwd gears 5 - 8	Fwd gears I - 8, Rev gears I - 4	Fwd gears I - 8, Rev gears I - 4
Max. travel speed	kph	40	40	50	40	40	50
Engine rpm at max travel speed	rpm	1900	1900	2380	1900	1900	2380

AXLES & BRAKES							
Machine model		TM320 (40kph)	TM320S (40kph)	TM320S (50kph)	TM420 (40kph)	TM420S (40kph)	TM420S (50kph)
Туре		Epicyclic hub reduction					
Manufacturer		JCB	JCB	JCB	JCB	JCB	JCB
Model		PD70	PD70	PD70	PD87	PD87	PD87
Overall axle ratio		12.49	12.49	12.49	13.875	13.875	13.875
Chassis oscillation angle	degrees	±10°	±10°	±10°	±10°	±10°	±10°
Inboard oil immersed brakes		Front axle	Front axle	Front & rear axle	Front & rear axle	Front & rear axle	Front & rear axle
Brake system		Single circuit	Single circuit	Dual circuit	Single circuit	Single circuit	Dual circuit
Park brake		Mechanical lever	Mechanical lever	Electrical switch	Mechanical lever	Mechanical lever	Electrical switch

NOISE AND VIBRATION				
			Uncertainty	Measurement conditions
Noise at the operator station	LpA	73 dB	+/- I dB	Determined in accordance with the test method defined in ISO 6396 and the dynamic test condition defined on 2000/14/EC.
Noise emission from the machine	LWA	104 dB	+/- I dB	Guaranteed equivalent sound power (external noise) determined in accordance with the dynamic test conditions defined in 2000/14/EC.
Whole body vibration	m/s ²	0.39	+/- 0.11 dB	ISO 2631-1:1997 normalised to an 8h reference period and based upon a test cycle comprising of loader work (soil).
Hand-arm vibration	m/s ²	< 2.5	N/A	ISO 5349-2:2001 dynamic test conditions.

LOADER PERFORMANCE - FORK FRAME WITH FORKS									
Machine model		TM320	TM320S	TM420	TM420S				
Lift capacity to full height forks	kg	3200	3200	4100	4100				
Lift capacity at full reach	kg	1750	1750	2250	2250				
Lift height - forks	mm	5200	5200	5450	5450				
Max forward reach - forks at 500mm	mm	2950	2950	3050	3050				
Straight tipping load forks at 500mm load centre*	kg	5262	5262	6670	6670				
FTTL forks at 500mm load centre*	kg	4052**	4052**	5200**	5200**				
FTTL payload forks at 80% of FTTL	kg	3242**	3242**	4160**	4160**				
FTTL payload forks at 60% of FTTL	kg	243 **	243 ***	3120**	3120**				
Breakout force - Shovel	kg	6260	6260	7200	7200				

^{**} Straight and Full Turn Tipping Load with forks and direct mount to Pin and Cone carriage to EN474 (ISO 14397)



HYDRAULICS					
Machine model		TM320	TM320S	TM420	TM420S
Pump type		Variable displacement piston pump	Variable displacement piston pump	Variable displacement piston pump	Twin variable displacement piston pump
Pump capacity	I/min	63cc/rev	72cc/rev	72cc/rev	100cc/rev
Max flow	I/min	140	160	160	160
Engine rpm req. for max flow	rpm	2380	2380	2380	1700
max pressure	bar	230	230	260	260
Aux circuit rated flow	I/min	90	90	100	100
Engine rpm req. for Aux rated flow	rpm	1600	1600	1700	1200
Hydraulic cycle times					
Raise	seconds	5.9	5.5	5.1	5.1
Lower	seconds	6	6	4.7	4.7
Extend	seconds	3.4	3.4	3.6	3.6
Retract	seconds	2.6	2.6	3.5	3.5
Dump	seconds	2.8	2.8	2.9	2.9
Crowd	seconds	2.8	2.8	3.4	3.4

ELECTRICAL SYSTEM					
Machine model		TM320	TM320S	TM420	TM420S
System voltage	Volt	12	12	12	12
Alternator output	Amp Hour	170	170	170	170
Battery type		Twin batteries	Twin batteries	Twin batteries	Twin batteries
Battery capacity	Amp Hour	2 x 610CCA, 62Ah			

FLUID CAPACITIES			
Machine model		TM320 / TM320S	TM420 / TM420S
Hydraulic tank	litres	97	97
Fuel tank	litres	160	160
Engine sump	litres	14	14
Front axle	litres	20	25
Rear Axle	litres	20	25
Drop box	litres	1.3	1.3
DEF	litres	29	29
Transmission	litres	19	19

TM420 / TM420S 1	TYRE OPTIONS					
Manufacturer	Size	Tona	Annliastian	Dimensional changes		
Manufacturer	Size	Туре	Application	Overall height (mm)	Width over tyres (mm)	
Michelin	480/80R26	XMCL	AG	0	0	
Michelin	480/80R26	BIBLOAD	AG/EM	+8	0	
Michelin	620/70R26	CEREXBIB	AG	+7	+201	
Michelin	17.5R25	XHA	EM	-54	-19	
Michelin	17.5R25	XSNOPLUS	EM	-60	-19	
Nokian	17.5R25	LOADER GRIP TL	EM	-42	-20	
JCB	17.5R25	EARTHMOVER	EM	-23	-22	

TM320 / TM320S T	YRE OPTIONS						
Manufacturer	Size	Timo	Application	Dimensional changes			
Manufacturer	Size	Туре	Application	Overall height (mm)	Width over tyres (mm)		
Mitas	445/70R24	AC70G MPT	AG	-1	-22		
Michelin	440/80R24	XMCL	AG	+30	-82		
Michelin	460/70R24	XMCL	AG	0	0		
Michelin	500/70R24	XMCL	AG	+24	+38		
Michelin	15.5R25	XHA	EM	-5	-86		
Michelin	15.5R25	XTLA	EM	-9	-86		
Michelin	460/70R24	BIBLOAD	AG/EM	-4	0		
Michelin	500/70R24	BIBLOAD	AG/EM	+19	+54		
Alliance	460/70R24	AGRO-INDUSTRIAL R-4	AG	+5	-61		
Alliance	500/70R24	AGRO-INDUSTRIAL R-4	AG	+32	+48		

STANDARD/OPTIONAL EQUIPMENT									
Machine model	TM320	TM320S	TM420	TM420S	Machine model	TM320	TM320S	TM420	TM420S
ENGINE AND COOLING					CAB				
130hp JCB DIESELMAX Engine	•	X	X	X	ROPS/FOPS safety structure	•	•	•	•
I 50hp JCB DIESELMAX Engine	X	•	•	X	B-post mounted membrane switches	•	•	•	•
173hp JCB DIESELMAX Engine	X	X	X	•	Fully adjustable mechanical seat	•	•	•	•
Cyclonic air filter	•	•	•	•	Air suspension seat	+	+	+	+
Air intake scavenge system	•	•	•	•	Super deluxe heated air suspension half leather seat	+	+	+	+
Widecore cooling pack	•	•	•	•	LED Interior lights	•	•	•	•
Auto reversing fan	+	+	+	+	Tilt and telescopic steering column	•	•	•	•
					Adjustable joystick control console and armrest	•	•	•	•
TRANSMISSION / AXLES					Front and rear wash / wipe	•	•	•	•
8 speed Powershift transmission	•	•	•	•	3 speed heater fan	•	•	•	•
Lock-up torque converter in gears 1 - 8	X	•	X	•	Air conditioning	+	+	+	+
Lock-up torque converter in gears 5 - 8	•	X	•	X	RH opening window with lock back	•	•	•	•
40kph travel speed	•	•	•	+	LH opening door with door lock back	•	•	•	•
50kph travel speed	X	+	X	•	LH Sliding window	+	+	+	+
Transmissions disconnect on footbrake	•	•	•	•	Single lever joystick controls	•	•	•	•
Forward / reverse controls on joystick	•	•	•	•	Loader control isolator	•	•	•	•
Column mounted transmission selector	•	•	•	•	External rear view mirrors	•	•	•	•
In board oil immersed disc brakes	•	•	•	•	Front and roof screen blinds	•	•	•	•
Limited slip differentials front and rear	•	•	•	•	Fire extinguisher	+	+	+	+
					Additional storage box	+	+	+	+
HYDRAULICS					Toolbox	+	+	+	+
Servo controls	•	•	•	•	Mechanical park brake	•	•	•	•
Flow sharing hydraulics	•	•	•	•	Electric park brake	X	+	X	+
Proportional boom and auxiliary controls	•	•	•	•	Mobile phone cradle	+	+	+	+
Adjustable constant flow hydraulics	•	•	•	•					
Variable displacement piston pump	•	•	•	•	CHASSIS AND BODYWORK				
Priority steer valve	•	•	•	•	Articulated steering	•	•	•	•
Hose burst check valves	•	•	•	•	Centre pivot oscillation	•	•	•	•
JCB Adaptive Load Control	•	•	•	•	Plastic front and rear fenders	•	•	•	•
JCB Smoothride system	+	+	+	+	Fixed bottom step	•	•	•	•
Biodegradable hydraulic oil	+	+	+	+	Full width rear counterweight	•	•	•	•
					Recovery hitch	•	•	•	•
					Prop shaft guard	•	•	•	•
					Grease gun and cartridge	+	+	+	+
					Deluxe exterior mirrors	+	•	•	•
					Hydraulic tow hitch (8000kg)	+	+	+	+
					Rockinger hitch (15000kg)	+	+	+	+
					Rear electrics	+	+	+	+
					Trailer braking single line	+	+	+	+

Trailer braking twin line

Rear auxiliary Rear belly guards +

+

Machine model	TM320	TM320S	TM420	TM420S
ELECTRICAL				
LED road lights rear	•	•	•	•
LED road lights front	+	+	+	+
Reverse lights	•	•	•	•
Battery isolator	•	•	•	•
Direction indicators	•	•	•	•
Rotating beacon	+	+	+	+
Twin beacons	+	+	+	+
LED front and rear worklights	+	+	+	+
LED boom worklights	+	+	+	+
Twin reverse light kit	+	+	+	+
Reverse fog light kit*	+	+	+	+
LiveLink telematics	•	•	•	•
LED 360 degree worklights	+	+	+	+
LED tow hitch light	+	+	+	+
I 2v in-cab power socket	•	•	•	•
Reverse camera with colour screen	•	•	•	•
Auxiliary venting	•	•	•	•
Reverse alarm	•	•	•	•
White noise reverse alarm	+	+	+	+
Multi-media port (USB and 3.5mm)	•	•	•	•
Bluetooth radio	+	+	+	+
Roof wiper	+	+	+	+
Step lighting	•	•	•	•
Walk-me-home lighting	•	•	•	•
Heated front screen*	+	+	+	+
Programmable smart key	•	•	•	•
Automatic boom worklights	+	+	+	+
Automatic rear worklights	•	•	•	•
Automatic tow hitch light	+	+	+	+

Machine model	TM320	TM320S	TM420	TM420S
LOADER				
Centre mounted single stage telescopic boom	•	•	•	•
Parallel lift	•	•	•	•
End damping on boom lower, extend and retract	•	•	•	•
Pin and Cone carriage	+	+	+	+
JCB Q-fit carriage	+	+	+	+
Industrial carriage	+	+	+	+
Electrical in cab quickhitch pin isolation	•	•	•	•
3/4" Auxiliary couplers	X	×	+	+
ATTACHMENTS				
Grain shovel 4.0m³	X	×	+	+
Grain shovel 2.7m³	+	+	+	+
Muck grab 2.4m³	X	×	+	+
GP shovel 1.0m³	+	+	×	X
GP shovel 1.6m³	X	×	+	+
Pallet forks 1067mm	+	+	+	+
Pallet forks 1200mm	+	+	+	+

*Not Tractor Homologated

STANDARD OPTIONAL +

NB. Regional variations may apply to standard and optional equipment







ONE COMPANY, OVER 300 MACHINES.

Your nearest JCB dealer

Telescopic Wheel Loader TM320 / TM320S / TM420 / TM420S

Gross power: 97kW/130hp - 129kW/173hp Lift capacity: 3200kg - 4100kg Lift height: 5.2m - 5.45m

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Download the very latest information on this product range at: www.jcb.com

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