

SPECIFICATION

STAGE V



TELESCOPIC WHEEL LOADER | TM320 / TM420

Lift capacity: 3,200 - 4,100kg Engine Power: 97 - 112kW Lift Height: 5.2 - 5.45m



THE ARGUMENT FOR BUYING ONE JUST GOT EVEN MORE POWERFUL

Introducing the new JCB TM Stage V machines. With our 4.8 litre DIESELMAX engine delivering more power and a new 4-speed powershift transmission, they take performance and productivity to another level. And when you add superb visibility, comfort, safety and ease of use, you're looking at the ultimate telescopic wheel loaders.



GREATER PRODUCTIVITY

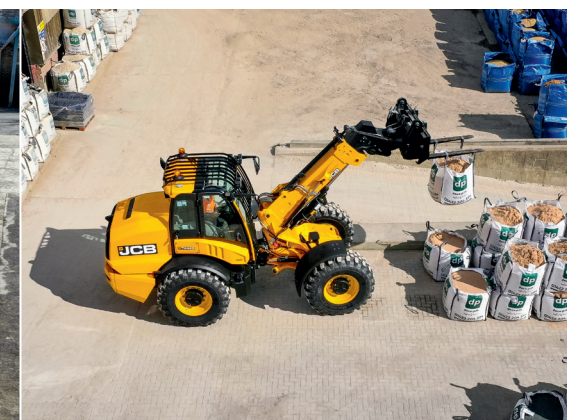
The TM's telescopic boom provides ultimate versatility, whilst variable flow auxiliary hydraulics are easy to use and allow multiple functions to be performed simultaneously.

GREATER COMFORT

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

MORE POWERFUL

The new TM machines feature our 4.8 litre DIESELMAX Stage V emission compliant engine, delivering increased power and torque at low engine speed.



SUPERB VISIBILITY

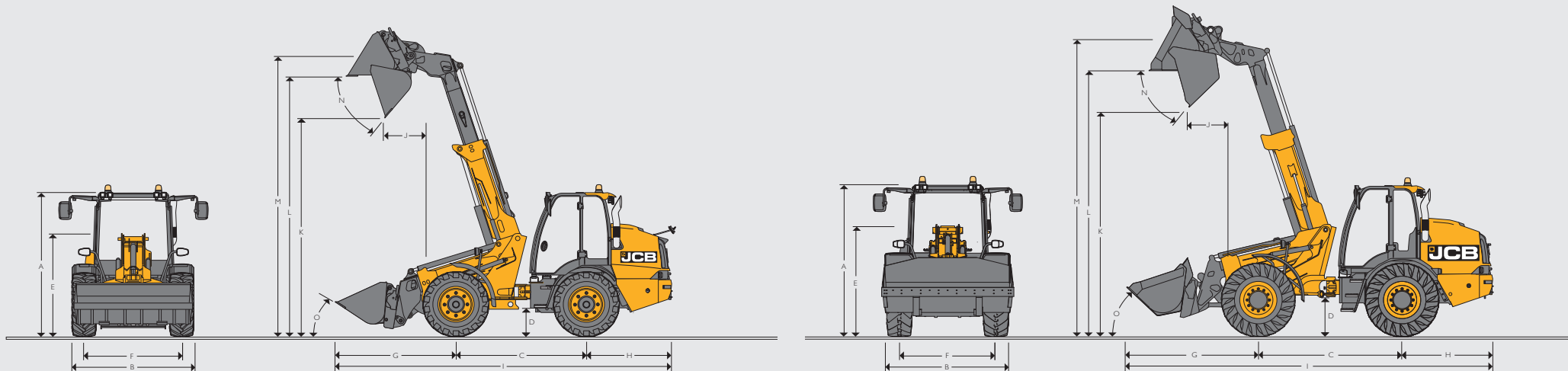
Our new multi-curve glazing increases forward visibility by 13% and provides 52% more upward visibility, when operating at height.

SAFER WORKING

A green flashing beacon highlights the wearing of a seat belt. Superb visibility in dark conditions is guaranteed with our high intensity 11x LED lighting package.

TELESCOPIC WHEEL LOADER TM320 / TM420

STATIC DIMENSIONS



| Machine model | | TM320 | TM420 |
|---------------|------------------------------------|-------------------|-------------------|
| A | Height over cab (no wiper) | mm | 2717 |
| A | Height over cab (inc wiper) | mm | 2787 |
| B | Overall width (over tyres) | mm | 2350 |
| C | Wheelbase | mm | 2550 |
| D | Ground clearance to bottom of axle | mm | 420 |
| E | Height to top of boom pivot | mm | 1835 |
| F | Wheel track | mm | 1870 |
| G | Front axle to shovel toe plate | mm | 1627 |
| H | Rear axle to counterweight face | mm | 2143 |
| I | Total length (GP shovel at carry)* | mm | 6322 |
| J | Dump reach at full height | mm | 933 |
| K | Dump height | mm | 4511 |
| L | Load over height | mm | 5182 |
| M | Pin height | mm | 5367 |
| N | Max dump angle at full height | degrees | 39 |
| O | Roll back angle at carry | degrees | 41 |
| | Total length to front of hitch | mm | 5886 |
| | Inside turning radius to tyres | mm | 2001 |
| | Outside turning radius over tyres | mm | 4350 |
| | Outside turning radius over shovel | mm | 4633 |
| | Articulation angle | deg | +/- 43 |
| | Operating weight (Ref tyre, hitch) | kg | 8142 |
| | Front axle weight | kg | 2352 |
| | Rear axle weight | kg | 5790 |
| | Tyres used for specifications | BIBLOAD 460/70R24 | BIBLOAD 480/80R26 |
| | Shovel used for specifications | 1.0m3 Q-Fit | 1.6m3 Q-Fit |
| | Hitch used for specifications | Q-Fit | Q-Fit |

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

SPECIFICATION

TM320 / TM420 TELESCOPIC WHEEL LOADER

ENGINE

| Machine model | TM320 | TM420 |
|-------------------------|---------------------------|---------------------------|
| Manufacturer | JCB | JCB |
| Model | DIESELMAX | DIESELMAX |
| Capacity litres | 4.8 | 4.8 |
| Aspiration | Turbocharged, Intercooled | Turbocharged, Intercooled |
| Number of cylinders | 4 | 4 |
| Power rating | | |
| Gross power kW (hp) | 97 (130) | 112 (150) |
| Torque rating ww | | |
| Gross torque Nm | 550 | 600 |

TRANSMISSION

| Machine model | TM320 | TM420 |
|-----------------------|------------|------------|
| Type | Powershift | Powershift |
| Manufacturer | JCB | JCB |
| Model | PS900 | PS900 |
| Fwd / rev ratios | 4 / 4 | 4 / 4 |
| Max. travel speed kph | 33 | 33 |

AXLES & BRAKES

| Machine model | TM320 | TM420 |
|-----------------------------------|-------------------------|-------------------------|
| Type | Epicyclic hub reduction | Epicyclic hub reduction |
| Manufacturer | JCB | JCB |
| Model | PD70 | PD87 |
| Overall axle ratio | 12.49 | 13.875 |
| Chassis oscillation angle degrees | ± 10° | ± 10° |
| Inboard oil immersed brakes | Front axle | Front & rear axle |
| Brake system | Single circuit | Single circuit |
| Park brake | Mechanical lever | Mechanical lever |

NOISE AND VIBRATION

| | | | Uncertainty | Measurement conditions |
|---------------------------------|------|--------|-------------|---|
| Noise at the operator station | LpA | 73 dB | +/- 1 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 | +/- 1 dB | Guaranteed equivalent sound power (external noise) determined in accordance with the dynamic test conditions defined in 2000/14/EC. |
| Whole body vibration | m/s² | 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/s² | <2.5 | N/A | ISO 5349-2:2001 dynamic test conditions. |

HYDRAULICS

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

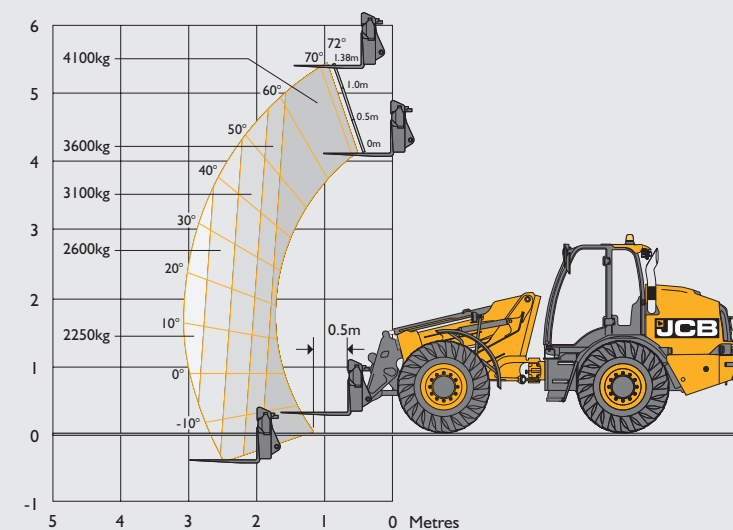
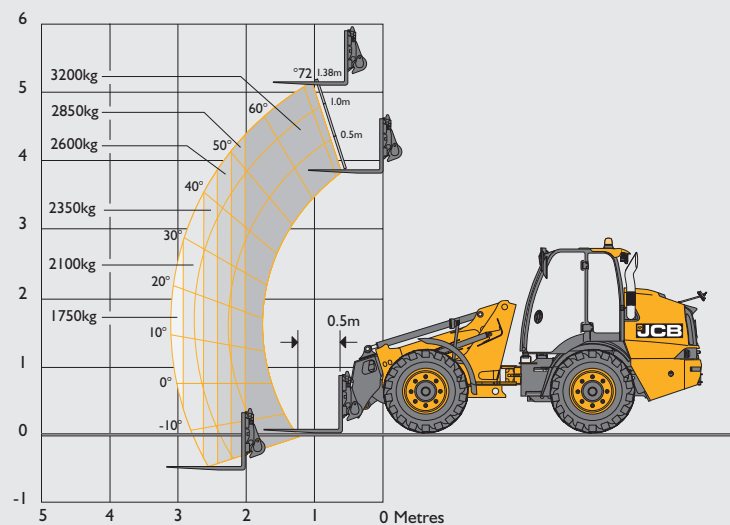
ELECTRICAL SYSTEM

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

FLUID CAPACITIES

| Machine model | TM320 | TM420 |
|-----------------------|-------|-------|
| 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 |

LOADER PERFORMANCE - FORK FRAME WITH FORKS



| Machine model | | TM320 | TM420 |
|---|----|--------|--------|
| Lift capacity to full height forks | kg | 3200 | 4100 |
| Lift capacity at full reach | kg | 1750 | 2250 |
| Lift height - forks | mm | 5200 | 5450 |
| Max forward reach - forks at 500mm | mm | 2950 | 3050 |
| Straight tipping load forks at 500mm load centre* | kg | 5262 | 6670 |
| FTTL forks at 500mm load centre* | kg | 4052** | 5200** |
| FTTL payload forks at 80% of FTTL | kg | 3242** | 4160** |
| FTTL payload forks at 60% of FTTL | kg | 2431** | 3120** |
| Breakout force - Shovel | kg | 6260 | 7200 |

** Straight and Full Turn Tipping Load with forks and direct mount to Q-Fit carriage to EN474 (ISO 14397)

TM320 TYRE OPTIONS

| Manufacturer | Size | Type | Application | Dimensional changes | |
|--------------|-----------|---------|-------------|---------------------|-----------------------|
| | | | | Overall height (mm) | Width over tyres (mm) |
| Michelin | 15.5R25 | XHA | EM | -5 | -86 |
| Michelin | 15.5R25 | XTLA | EM | -9 | -86 |
| Michelin | 460/70R24 | BIBLOAD | AG/EM | 0 | 0 |

TM420 TYRE OPTIONS

| Manufacturer | Size | Type | Application | Dimensional changes | |
|--------------|-----------|----------------|-------------|---------------------|-----------------------|
| | | | | Overall height (mm) | Width over tyres (mm) |
| Michelin | 480/80R26 | BIBLOAD | AG/EM | +8 | 0 |
| Michelin | 17.5R25 | XHA | EM | -54 | -19 |
| Michelin | 17.5R25 | XSNOPUS | EM | -60 | -19 |
| Nokian | 17.5R25 | LOADER GRIP TL | EM | -42 | -20 |
| JCB | 17.5R25 | EARTHMOVER | EM | -23 | -22 |

STANDARD/OPTIONAL EQUIPMENT

| | TM320 | TM420 | | TM320 | TM420 | | TM320 | TM420 |
|---|-------|-------|--|-------|-------|---|-------|-------|
| ENGINE AND COOLING | | | CAB (CONTINUED) | | | ELECTRICAL (CONTINUED) | | |
| I 30hp JCB DIESELMAX Engine | • | X | Super deluxe heated air suspension half leather seat | + | + | Green seatbelt beacon | + | + |
| I 50hp JCB DIESELMAX Engine | X | • | LED Interior lights | • | • | LED front and rear worklights | + | + |
| Cyclonic air filter | • | • | Tilt and telescopic steering column | • | • | LED boom worklights | + | + |
| Air intake scavenge system | • | • | Adjustable joystick control console and armrest | • | • | Twin reverse light kit | + | + |
| Widecore cooling pack | • | • | Front and rear wash / wipe | • | • | Reverse foglight kit | + | + |
| Auto reversing fan | + | + | 3 speed heater fan | • | • | LiveLink telematics | • | • |
| | | | Air conditioning | + | + | LED 360 degree worklights | + | + |
| TRANSMISSION / AXLES | | | RH opening window with lock back | • | • | LED tow hitch light | + | + |
| 4 speed Powershift transmission | • | • | LH opening door with door lock back | • | • | 12v in-cab power socket | • | • |
| 33kph travel speed | • | • | Single lever joystick controls | • | • | Reverse camera with colour screen | • | • |
| Transmissions disconnect on footbrake | • | • | Loader control isolator | • | • | Auxiliary venting | • | • |
| Forward / reverse controls on joystick | • | • | External rear view mirrors | • | • | Reverse alarm | • | • |
| Column mounted transmission selector | • | • | Front and roof screen blinds | • | • | White noise reverse alarm | + | + |
| Inboard oil immersed disc brakes | • | • | Fire extinguisher | + | + | Multi-media port (USB and 3.5mm) | • | • |
| MAXTRAC differential front and rear axles | • | • | Additional storage box | + | + | Bluetooth radio | + | + |
| | | | Toolbox | + | + | Roof wiper | + | + |
| HYDRAULICS | | | Mechanical park brake | • | • | Step lighting | • | • |
| Servo controls | • | • | Mobile phone cradle | + | + | Walk-me-home lighting | • | • |
| Flow sharing hydraulics | • | • | | | | Heated front screen | + | + |
| Proportional boom and auxiliary controls | • | • | CHASSIS AND BODYWORK | | | Programmable smart key | • | • |
| Adjustable constant flow hydraulics | • | • | Articulated steering | • | • | Automatic boom worklights | + | + |
| Variable displacement piston pump | • | • | Centre pivot oscillation | • | • | Automatic rear worklights | • | • |
| Priority steer valve | • | • | Plastic front and rear fenders | • | • | Tow hitch light | + | + |
| Hose burst check valves | • | • | Fixed bottom step | • | • | | | |
| JCB Adaptive Load Control | • | • | Full width rear counterweight | • | • | ATTACHMENTS | | |
| JCB Smoothride system | + | + | Recovery hitch | • | • | GP shovel 1.0m³ | + | X |
| Biodegradable hydraulic oil | + | + | Prop shaft guard | • | • | GP shovel 1.6m³ | X | + |
| | | | Grease gun and cartridge | + | + | Pallet forks 1067mm | + | + |
| LOADER | | | Deluxe exterior mirrors | + | • | Pallet forks 1200mm | + | + |
| Centre mounted single stage telescopic boom | • | • | Rockinger tow hitch (15000kg) | + | + | | | |
| Parallel lift | • | • | Rear electrics | + | + | Regional variations may apply to standard and optional equipment. | | |
| End damping on boom lower, extend and retract | • | • | Trailer braking single line | + | + | | | |
| JCB Q-fit carriage | • | • | Rear auxiliary | + | + | | | |
| Industrial carriage | + | + | Rear belly guards | + | + | | | |
| Electrical in cab quickhitch pin isolation | • | • | | | | | | |
| 3/4" Auxiliary couplers | X | + | ELECTRICAL | | | | | |
| | | | LED road lights rear | • | • | | | |
| CAB | | | LED road lights front | + | + | | | |
| ROPS/FOPS safety structure | • | • | Reverse lights | • | • | | | |
| B-post mounted membrane switches | • | • | Battery isolator | • | • | | | |
| Fully adjustable mechanical seat | • | • | Direction indicators | • | • | | | |
| Air suspension seat | + | + | Rotating beacon | + | + | | | |
| | | | Twin beacons | + | + | | | |

STANDARD •

OPTIONAL +

NOT AVAILABLE X





ONE COMPANY, OVER 300 MACHINES.

Your nearest JCB dealer

TELESCOPIC WHEEL LOADER TM320 / TM420

Lift capacity: 3,200 - 4,100kg Engine Power: 97 - 112kW Lift Height: 5.2 - 5.45m

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