

NEW



TELESCOPIC WHEELED LOADER | TM180/TM220

Gross power: TM180 (48kW/64hp), TM220 (54.5kW/74hp) Pay load: TM180 1800kg, TM220 2200kg Lift height: TM180 4534mm, TM220 4562mm



PRODUCTIVE PERFORMANCE.

THE JCB TM180 AND TM220 ARE HIGHLY PRODUCTIVE AND MULTIFUNCTIONAL TELESCOPIC WHEELED LOADERS WITH OPTIMAL POWER-TO-WEIGHT RATIO, MAKING THEM PERFECT MATERIAL HANDLERS. BOTH MACHINES ARE TIER 4 FINAL/STAGE 3B-COMPLIANT USING JUST A DIESEL OXIDATION CATALYST (DOC). THEY'RE ALSO MORE FRUGAL THAN OUTGOING TIER 3 MODELS.

Hydrostatic drive makes these models very easy to operate even for the inexperienced. That means there's less risk of overpowering the machine at a cost to fuel economy.



JCB Diesel by Kohler.

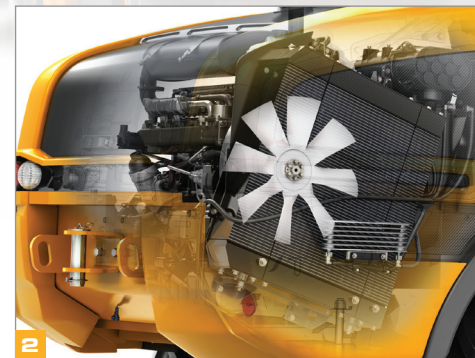
1 JCB has worked in close collaboration with Kohler to produce the ultimate compact engine. No engine power is wasted on a DPF and, with peak power and torque produced at low revs, you get good fuel economy too.

2 Our TM180 and TM220 machines are equipped with a variable speed engine crank-driven cooling fan that maintains optimum fan speed for all requirements without using any excess engine power.

3 The JCB TM220 has a high speed option – this provides a 40km/h top speed.



1



2



3

Moving with the times.

4 JCB's articulated steering boasts an easy-to-use built-in sideshift – ideal for placing bales and changing attachments.

5 So that you can tailor your telescopic wheeled loader to any application, we offer several axle options. Open diffs are ideal for hard ground, and limited slip diffs excel on soft muddy terrain. Our 100% switchable front axle diff lock on the TM220, meanwhile, provides ultimate traction on muddy terrain and creates no shear forces, so won't damage the ground when it's not in use. It can also be engaged on the move and under load.

6 Power from the driveline is transferred to the ground very efficiently through an innovative chassis, with perfect harmony between all components. This makes our machines the best possible solution.

Versatility by the bucketload.

7 Equip your telescopic wheeled loader with our new towing option (territory specific rockinger hitch) and you'll get a hitch with rear electrics and hydraulics, allowing you to trailer loads of up to 3.5 tonnes.

8 By splitting power between the transmission and the hydraulics, our inching pedal allows precise, efficient, stepless load handling.



4



6



5



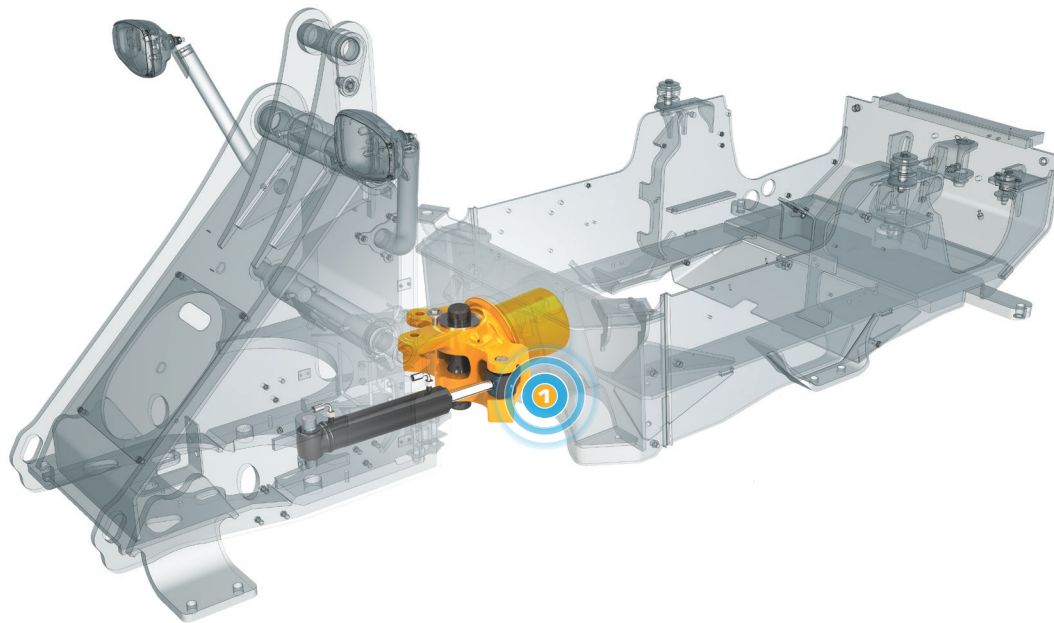
7



8

QUALITY, RELIABILITY AND DURABILITY.

AT JCB, WE UNDERSTAND THAT A TELESCOPIC WHEELED LOADER IS A KEY PART OF ANY ON-SITE PROCESS. THAT'S WHY THE TM180 AND TM220 ARE BUILT ON A FOUNDATION OF QUALITY AND RELIABILITY, ENSURING THAT THEY'LL ALWAYS BE A KEY PART OF YOUR WORKING PROCESS.



We've used only the very finest engine, driveline and axle components on the TM180 and TM220, from suppliers like DANA and Bosch.



Built to last.

- 1** We understand how tough materials handling can be, so our machines are developed to be highly durable. A case in point is our heavy-duty centre joint, which oscillates through $\pm 40^\circ$, with 10° lateral oscillation to keep all 4 wheels on the ground
- 2** These machines benefit from a strong chassis and the best possible weight distribution.



Quality design.

3 All JCB telescopic wheeled loaders have rear lights that are recessed within the solid counterweight casting for good impact protection.

4 Hydraulic hoses are always well protected; they're neatly routed, properly clamped, and positioned well away from potential pinching spots.

5 We use state-of-the-art manufacturing processes like robot machining, precision paint technology and innovative assembly techniques to achieve the very highest levels of quality.

6 Precision machining provides high tolerances and accurate location of pins and bushes.

7 Finite element analysis and rig testing ensure superior structural strength and durability. Cold cell testing guarantees starting performance at temperatures as low as -20°C.



COMFORT AND EASE OF USE.

JCB TM180 AND TM220 ARE DESIGNED TO MAKE WORK MORE STRAIGHTFORWARD. THEY'RE EASY TO ACCESS, INTUITIVE TO OPERATE, AND THEY'RE CONTROLLED FROM THE CENTRE OF THE MACHINE FOR SUPERB VISIBILITY. AFTER ALL, A COMFORTABLE, CONFIDENT OPERATOR IS A MORE PRODUCTIVE ONE.

A comfortable operator.

- 1** Both machines benefit from a comfortable and spacious cab. The operating position is designed for optimum all-round visibility, unhindered by components like silencers.
- 2** Our tilting telescopic steering column is easy to adjust for an ergonomic driving position.
- 3** All the instruments needed to operate a JCB machine are within easy reach of the seat, so there's no need to hunt around for information whilst working.
- 4** With a fully opening right-hand window operators can enjoy increased ventilation whilst still being protected from dust.



In-cab noise levels on these machines are lower than outgoing models.



In complete control.

5 A stylish, modern central dash display combines analogue dials and a colour LCD screen – this can display machine health details, service requirements, operating information and more.

6 These compact machines are equipped with a new ergonomically designed joystick control system for comfortable and intuitive operation and consistent with all agri telescopic wheeled loaders and Loadalls.



SERVICEABILITY.

A TELESCOPIC WHEELED LOADER NEEDS TO SPEND AS MUCH TIME AS POSSIBLE HARD AT WORK. THAT'S WHY THEY BENEFIT FROM INNOVATIVE DESIGN AND QUALITY COMPONENTS, ALLOWING THEM TO OFFER MAXIMUM UPTIME WITH LONG SERVICE INTERVALS.

Access all areas.

1 Our large single piece bonnet ensures quick and convenient access to the engine bay and cooling pack areas. All daily check points are easily accessed under the bonnet.

2 Operators, managers and dealers alike can access vital information like machine running times and error alerts – it's all available at the touch of a button on the in-cab display or if needed via JCB's LiveLink telematics system.

3 Both machines have a cyclonic pre-filter which maximises air filtration and extends filter element service intervals significantly.

The new Kohler engine designed by JCB does not use a Diesel Particulate Filter (DPF) or SCR, requiring Diesel Exhaust Fluid (DEF) level maintenance or heat-resistant lube oils. Thus reducing service and running costs.



4 Your local JCB dealer will be able to supply all parts for your TM180 and TM220, even JCB Diesel by Kohler engine components. Both machines also share parts with other JCB machinery, which makes everything even more readily available.



SAFETY AND SECURITY.

BECAUSE SAFETY AND SECURITY ARE PARAMOUNT ON ANY FARM, TM180 AND TM220 ARE DESIGNED TO PROTECT THEIR OPERATORS AND THEMSELVES AT ALL TIMES. GREAT VISIBILITY, ANTI-THEFT FEATURES AND NON-SLIP SURFACES ARE JUST THE START.

Safety first.

Machines can be equipped with a new immobiliser option, which can help prevent thefts.

1 With no exhaust after treatment, our JCB Diesel by Kohler engines are extremely compact, so there's no compromise to visibility. The sloping rear bonnet provides an unimpeded view, with the exhaust silencer and air intake filter both packaged out of sight.

2 We've fitted an in-cab electronic 2-stage quickhitch isolation system to prevent uncontrolled release of attachments.

3 Access steps are complemented by well positioned handles so that operators have three points of contact whenever they're entering or exiting the cab.

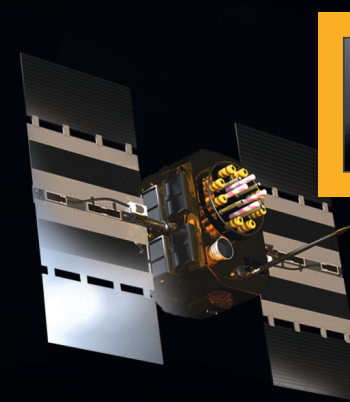
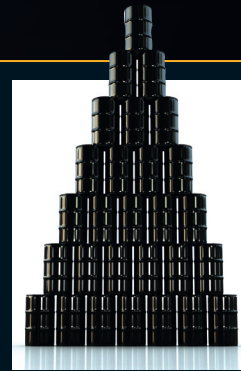


LIVELINK, WORK SMARTER.

LIVELINK IS AN INNOVATIVE SOFTWARE SYSTEM THAT LETS YOU MANAGE JCB MACHINES REMOTELY – ONLINE, BY EMAIL OR BY MOBILE PHONE. ACCESS EVERYTHING FROM MACHINE ALERTS TO FUEL REPORTS AND HISTORY INFORMATION, WITH ALL DATA STORED AT A SECURE CENTRE.

Productivity and cost benefits

By providing information like idle time monitoring and machine fuel consumption, JCB Livelink helps reduce your fuel usage, saving money and improving productivity. Machine location information can help improve efficiency and perhaps even reduce insurance costs.



Maintenance benefits

Manage machine maintenance easily – accurate hours monitoring and service alerts improve maintenance planning, while real-time location data helps you manage your fleet. Critical machine alerts and maintenance history records are also available.



Security benefits

Livelink's real-time geofencing alerts tell you when machines move out of predetermined zones, and real-time curfew alerts inform you of unauthorised usage. Further benefits include real-time location information.



VALUE ADDED.

JCB'S WORLDWIDE CUSTOMER SUPPORT IS FIRST CLASS. WHATEVER YOU NEED AND WHEREVER YOU ARE, WE'LL BE AVAILABLE QUICKLY AND EFFICIENTLY TO HELP MAKE SURE YOUR MACHINERY IS PERFORMING TO ITS FULL POTENTIAL.

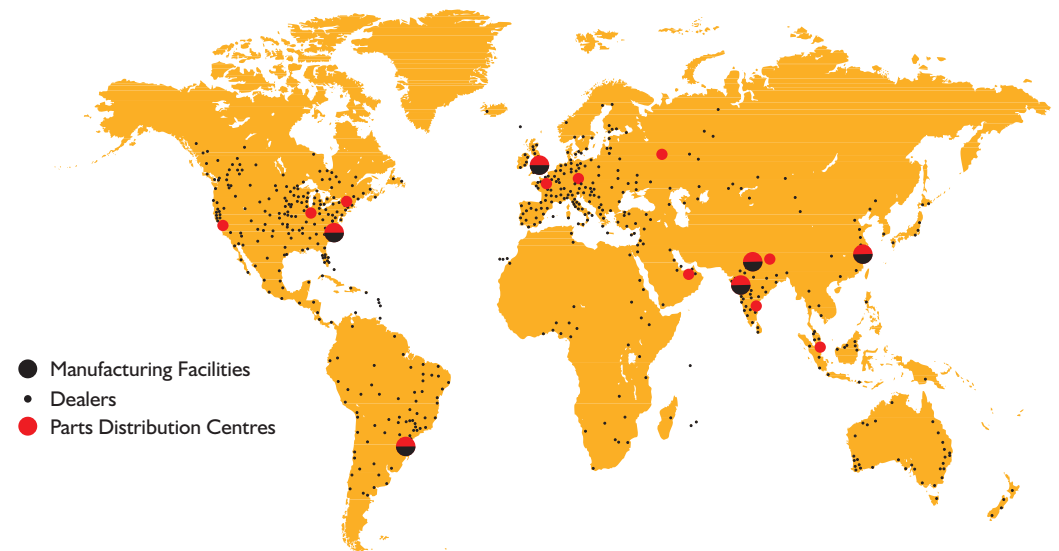


1 Our Technical Support Service provides instant access to factory expertise, day or night, while our Finance and Insurance teams are always on hand to provide fast, flexible, competitive quotes.

2 The global network of JCB Parts Centres is another model of efficiency; with 15 regional bases, we can deliver around 95% of all parts anywhere in the world within 24 hours. Our genuine JCB parts are designed to work in perfect harmony with your machine for optimum performance and productivity.



3 JCB Assetcare offers comprehensive extended warranties and service agreements, as well as service-only or repair and maintenance contracts. Irrespective of what you opt for, our Maintenance teams around the world charge competitive labour rates, and offer non-obligation quotations as well as fast, efficient insurance repair work.

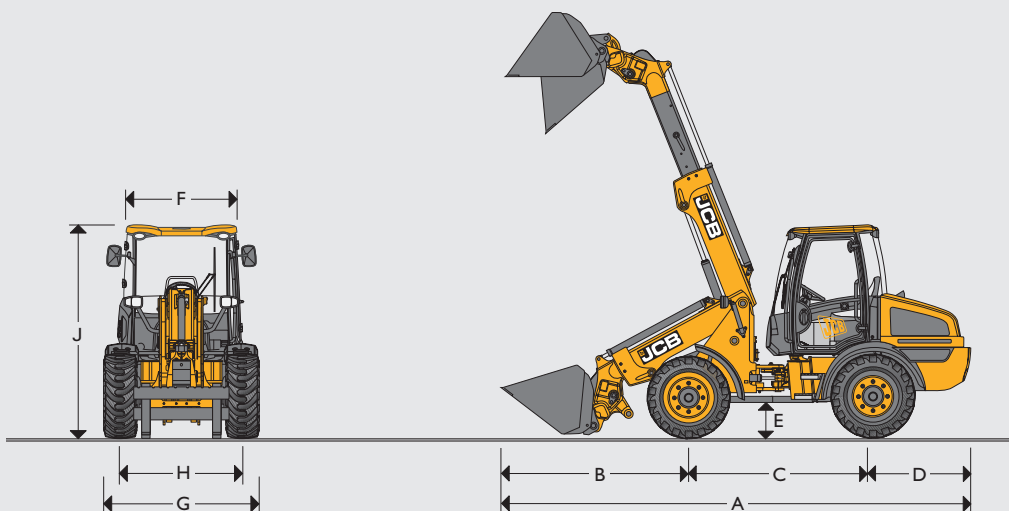


Note: JCB LIVELINK and JCB ASSETCARE may not be available in your region, so please check with your local dealer.

SPECIFICATION

TM180/TM220 TELESCOPIC WHEELED LOADER

STATIC DIMENSIONS



| | | | TM180 | TM220 |
|---|---------------------------------|-----|-------|-------|
| A | Overall length | mm | 6003 | 5998 |
| B | Axle to pivot pin | mm | 1306 | 1269 |
| C | Wheel Base | mm | 2200 | 2205 |
| D | Axle to counterweight face | mm | 1268 | 1295 |
| E | Minimum ground clearance | mm | 330 | 330 |
| F | Width over cab | mm | 1468 | 1468 |
| G | Width over tyres | mm | 1752 | 1902 |
| H | Wheel track | mm | 1396 | 1490 |
| J | Height over cab | mm | 2500 | 2634 |
| | Front axle weight | kg | 2725 | 2632 |
| | Rear axle weight | kg | 3258 | 3863 |
| | Total weight | kg | 5983 | 6495 |
| | Inside turn radius | mm | 2105 | 2090 |
| | Maximum turn radius over shovel | mm | 4480 | 4755 |
| | Maximum turn radius over tyre | mm | 3955 | 4030 |
| | Articulation angle | deg | ±40° | ±40° |

TM180 data based on machine equipped with pin mounted 0.8m³ bucket with toe plates and Michelin XMCL 340/80R18 wheels and tyres.

TM220 data based on machine equipped with pin mounted 0.9 m³ bucket with toe plates and Michelin XMCL 400/70R20 wheels and tyres.

ENGINE

| | TM180 | TM220 |
|--|-------------------------------------|-----------------------------------|
| Type | 4 stroke, Electronic Common Rail | 4 stroke, Electronic Common Rail |
| Model | JCB Diesel by Kohler - KDI 2504 TCR | JCB Diesel by Kohler KDI 2504 TCR |
| Capacity | litres | 2.482 |
| Aspiration | Turbocharged | Turbocharged |
| Cylinders | 4 | 4 |
| Max gross power to SAE J1995/ISO 14396 | kW (hp) | 54.5 (74) @ 2200rpm |
| Max torque | Nm @ 1500rpm | 300 |
| Emissions | Stage 3B & T4F | Stage 3B & T4F |

TRANSMISSION

| | | TM180 | TM220 |
|-----------------------|-----|------------------------|------------------------|
| Type | | Hydrostatic | Hydrostatic |
| Model | | Rexroth A6VM - 2 speed | Rexroth A6VM - 2 speed |
| Model (40kph options) | | N/A | Rexroth A6VM - 3 speed |
| Low range | kph | 6 | 6 |
| High range | kph | 20 | 20 |
| High speed (optional) | kph | N/A | 40 |

AXLES

| | TM180 | TM220 |
|----------------|---------------|---------------|
| Type | Straight beam | Straight beam |
| Make and model | Dana 111 | Dana 111 |

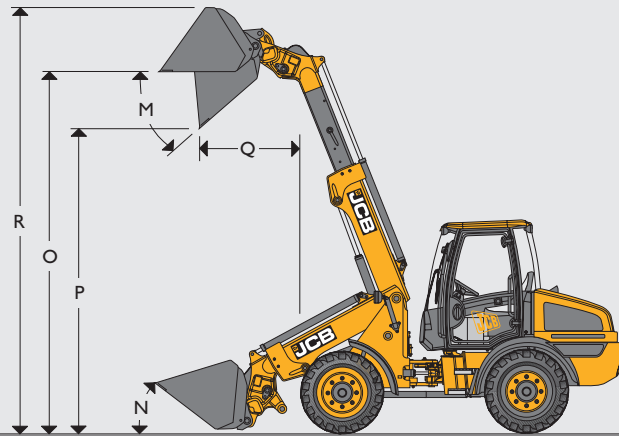
STEERING

Hydraulic power steering system emergency steering.

BRAKES

In board oil immersed brakes with combined handbrake; spring actuated hydraulic released park brake

LOADER DIMENSIONS



| Model | | TM180 | TM220 |
|--|-------------------|-------------------|-------------------|
| Bucket type | | General purpose | General purpose |
| Bucket equipment | | Teeth or toeplate | Teeth or toeplate |
| Bucket capacity (SAE heaped) | m ³ | 0.8 | 0.9 |
| Bucket width | mm | 1829 | 1981 |
| Bucket weight | kg | 353 | 370 |
| Maximum material density * | kg/m ³ | 2300 | 2033 |
| Payload * | kg | 1800 | 2200 |
| Maximum breakout force | kN | 4140 | 4990 |
| M Dump angle maximum | degrees | 43 | 43 |
| N Roll back at carry | degrees | 43 | 43 |
| Roll back at ground level | degrees | 31 | 31 |
| O Load over height | mm | 4308 | 4376 |
| P Dump height (45 deg dump) | mm | 3585 | 3652 |
| Q Reach at dump height | mm | 1235 | 1175 |
| Operating weight (includes 80Kg operator and full fuel tank) | kg | 7726 | 8576 |
| R Hinge pin height max. | mm | 2991 | 3189 |

TYRE SIZE – TM180

| Tyre size | Manufacturer | Type | Op weight (kg) | Dimensions | |
|------------|--------------|----------|----------------|---------------|------------|
| | | | | Vertical (mm) | Width (mm) |
| 335/80 R18 | Dunlop | SPT9 EM | -30.4 | 2 | -25 |
| 365/70 R18 | Dunlop | SPT9 EM | -7.4 | -8 | 44 |
| 405/70 R18 | Dunlop | SPT9 EM | 22.4 | 15 | 88 |
| 335/80 R20 | Dunlop | SPT9 MPT | 5.8 | 28 | -47 |
| 12.5/80-18 | Goodyear | SGL | -83.2 | -9 | -46 |
| 12.5-20 | Goodyear | MPT | -55.7 | 34 | -40 |
| 335/80 R18 | Michelin | XZSL | 10.0 | 15 | -11 |
| 340/80 R18 | Michelin | XMCL | 0.0 | 0 | 0 |
| 340/80 R18 | Nokian | TRI 2 | -16.0 | 7 | -13 |
| 12.5-18 | Solideal | SLR4 | -71.6 | 6 | -25 |
| 12.5/80-18 | Solideal | SLR4 | -71.6 | -9 | -40 |

Loader dimensions quoted on 340/80R18 Wheels and Tyres.

TYRE SIZE – TM220

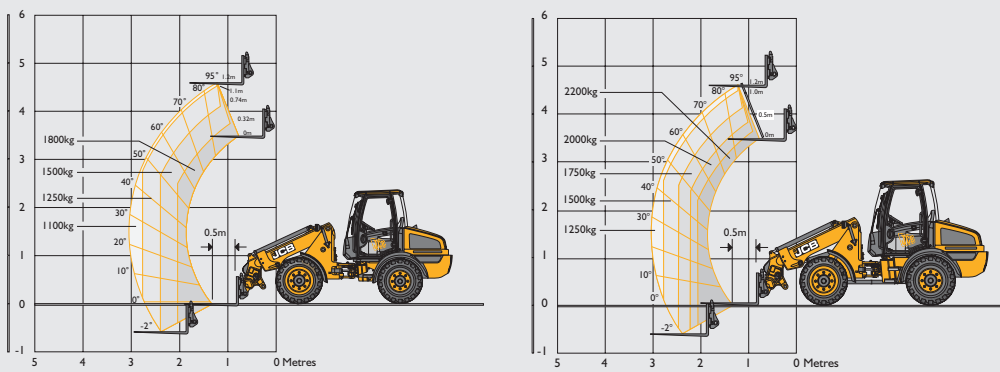
| Tyre size | Manufacturer | Type | Op weight (kg) | Dimensions | |
|------------|--------------|----------|----------------|---------------|------------|
| | | | | Vertical (mm) | Width (mm) |
| 405/70 R18 | Dunlop | SPT9 EM | -68.4 | -20 | -12 |
| 335/80 R20 | Dunlop | SPT9 MPT | -85 | 1 | -89 |
| 365/80 R20 | Dunlop | SPT9 MPT | -55.2 | 21 | -55 |
| 405/70 R20 | Dunlop | SPT9 MPT | -13.7 | 14 | -11 |
| 12.5-20 | Goodyear | MPT ISG | -144.8 | -1 | -82 |
| 16.0/70-20 | Goodyear | SGL | -12 | 4 | -4 |
| 375/75 R20 | Michelin | XZSL | -0.8 | 0 | -17 |
| 380/75 R20 | Michelin | XMCL | -12.8 | 0 | -19 |
| 400/70 R20 | Michelin | XMCL | 0 | 0 | 0 |
| 405/70 R20 | Michelin | XZSL | 24.8 | 23 | 6 |
| 420/75 R20 | Michelin | XMCL | 38 | 27 | 6 |
| 340/80 R18 | Nokian | TRI 2 | -82.4 | -28 | -69 |
| 360/80 R20 | Nokian | TRI 2 | -56.8 | 14 | -55 |

Loader dimensions quoted on 400/70R20 Wheels and Tyres.

SPECIFICATION

TM180/TM220 TELESCOPIC WHEELED LOADER

LOADER DIMENSIONS – FORK FRAME WITH FORKS



| | | TM180 | TM220 |
|---|----|-------|-------|
| Fork carriage width | mm | 1345 | 1345 |
| Length of tines | mm | 1069 | 1069 |
| Reach at ground level | mm | 1168 | 1043 |
| Maximum forward reach | mm | 3107 | 3041 |
| Boom, horizontal height | mm | 1428 | 1497 |
| Max. lift height with forks | mm | 4534 | 4562 |
| Reach at maximum height | mm | 1200 | 1200 |
| Payload | kg | 1800 | 2200 |
| Full turn tipping load - forks with 500mm load centre * | kg | 2250 | 2750 |
| Full turn tipping load - forks calculated @ 80% load factor * | kg | 1800 | 2200 |
| Full turn tipping load - forks calculated @ 60% load factor * | kg | 1350 | 1650 |
| Attachment weight | kg | 191 | 191 |
| Straight tipping load - forks with 500mm load centre * | kg | 2950 | 3250 |

| | |
|------------|--|
| CAB | In-cab noise level – TM180: 78 dB(A), TM220: 76dB(A) |
|------------|--|

ELECTRICAL SYSTEM

| | | TM180 / TM220 |
|-------------------|----------|---------------|
| System voltage | Volt | 12 |
| Alternator output | Amp hour | 80 |
| Battery capacity | Amp hour | 100 |

HYDRAULICS

| | | TM180 | TM220 |
|--------------------------------------|---------|------------------|------------------|
| Pump type | | Single Gear Pump | Single Gear Pump |
| Pump max. flow | l/min | 64 | 89 |
| Pump max. pressure | bar | 230 | 250 |
| Hydraulic cycle times at full engine | | | |
| Boom raise | Seconds | 6.2 | 4.3 |
| Boom lower | Seconds | 5.1 | 4.5 |
| Extend | Seconds | 5.3 | 3.6 |
| Retract | Seconds | 4.4 | 2.9 |
| Bucket dump | Seconds | 3.9 | 3.4 |
| Bucket crowd | Seconds | 4.1 | 2.8 |
| Total cycle | Seconds | 29.0 | 21.5 |

SERVICE FILL CAPACITIES

| | | TM180 | TM220 |
|------------------|--------|-------|-------|
| Hydraulic system | litres | 70 | 70 |
| Fuel tank | litres | 80 | 80 |
| Engine oil sump | litres | 11.2 | 11.2 |
| Axle oil (front) | litres | 4.4 | 4.4 |
| Axle oil (rear) | litres | 6.05 | 6.05 |

STANDARD EQUIPMENT

| | TM180 | TM220 |
|---------------------------------|--|-------|
| GENERAL MACHINE FEATURES | Parallel lift geometry, JCB hydraulic Quickhitch, articulated steering, front and rear fenders, one piece opening bonnet, recovery hitch, lifting lugs, temperature controlled engine cooling fan, HBCV, End damping on extend/retract, LLMC system, full-LiveLink. | |
| TRANSMISSION | Two speed, neutral start, inching function, forward/reverse switch on joystick control lever | |
| BRAKES | In board oil immersed brakes with combined handbrake; spring actuated hydraulic released parkbrake | |
| ELECTRIC | Full road lighting, direction indicators and battery isolator. | |
| HYDRAULICS | Single lever servo control, gear pump with priority steer, emergency steer back up, flow sharing | |
| CAB | ROPS/FOPS safety structure, roof widow, fully opening RH window, fully adjustable seat, interior light, adjustable tilt steering column, safety glass, LCD display, front and rear screen wash/wipe, 3 speed heater fan with replaceable filters, radio aperture, sun visors | |

OPTIONAL EQUIPMENT

| | TM180 / TM220 |
|---------------------------------|--|
| GENERAL MACHINE FEATURES | LSD axles, locking differential front axle with on the fly operation, immobiliser, under bonnet battery isolator, worklights, bio oil, aircon, adjustable constant flow, 3-stage SRS, Rockinger Tow hitch 3.5t, rear aux. hydraulics, rear electrical connection, creep speed, stowage box, roof wash wiper. See dealer for full list. |





ONE COMPANY, OVER 300 MACHINES.

Your nearest JCB dealer

Telescopic Wheeled Loader TM180/TM220

Gross power: TM180 (48kW/64hp) TM220 (54.5kW/74hp) Pay load: TM180 1800kg TM220 2200kg Lift height: TM180 4,534mm TM220 4,562mm

JCB Agriculture, Rokester, Staffordshire ST14 5JP.

Tel: +44 (0)1889 590312 Email: salesinfo@jcb.com

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

[facebook.com/JCBAg](https://www.facebook.com/JCBAg) [@JCBAgriculture](https://twitter.com/JCBAgriculture) [youtube.com/JCBAgriculture](https://www.youtube.com/JCBAgriculture)

©2014 JCB Sales. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any other means, electronic, mechanical, photocopying or otherwise, without prior permission from JCB Sales. All references in this publication to operating weights, sizes, capacities and other performance measurements are provided for guidance only and may vary dependant upon the exact specification of machine. They should not therefore be relied upon in relation to suitability for a particular application. Guidance and advice should always be sought from your JCB Dealer. JCB reserves the right to change specifications without notice. Illustrations and specifications shown may include optional equipment and accessories. All images are correct at time of print. The JCB logo is a registered trademark of J C Bamford Excavators Ltd.

9999/5856 en-GB 09/14 Issue 1

