

NEW!

ZW 225

**THE EPITOME OF
RELIABILITY AND PRODUCTIVITY**



Model name: ZW225-6

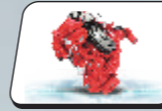
Engine Power: 225 HP/168 kW

Operating Weight: 17,650 - 18,180 Kg

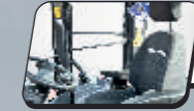
Bucket Capacity: 2.5 - 5.0 m³

Unparalleled Productivity and Reliability

The all-new ZW225 Wheel Loader exemplifies Tata Hitachi's commitment to offer the best value to customers in terms of reliability, productivity and return on investment. The ZW225 is packed with state-of-the-art innovative technologies that are primed to deliver on this commitment to customers. Capable of delivering exceptional performance, without compromising on fuel efficiency, ZW225 is a versatile Wheel Loader that effortlessly lends itself to a variety of applications, further maximising the customer's earning potential. The ZW225 has also placed special emphasis on operator comfort and convenience, amplifying the productive potential of the machine. ZW225 is powered by an engine that adheres to CEV-IV emission norms, exemplifying our long-term commitment towards larger ecological imperatives and a cleaner environment.



Engineered for higher productivity and efficiency (Page 4-5)



Unbeatable comfort and safety (page 12-13)



Unmatched Reliability (page 6-7)



Simplified Maintenance (page 14-15)



Lower Operating Cost (page 8-9)



Telematics powered by InSite (page 16)



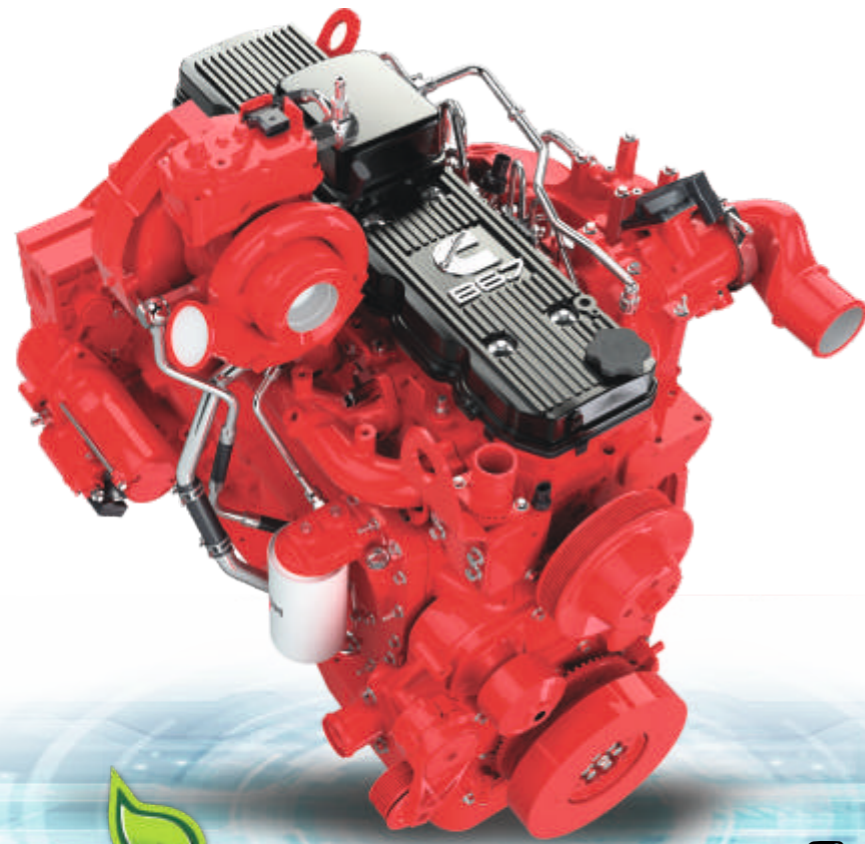
Highlights (page 10-11)



Specifications (page 17,18,19 & 20)



Engineered for Higher Productivity and Efficiency



Powerful, efficient and reliable CEV-IV compliant Cummins engine with common rail direct injection (CRDi) and after-treatment (DOC, DPF & SCR) system

This high power CRDi engine provides higher peak torque at lower rpm which helps in achieving excellent performance across applications.

Waste gate turbocharger maintains the optimum inlet air pressure for better engine performance.

Reduced emissions

The new Cummins QSB 6.7 engine is equipped with efficient after-treatment system which prevents unburnt carbon particles and pollutants discharging into the atmosphere. The inbuilt Selective Catalytic Reduction (SCR) system uses injected urea into exhaust gas to reduce nitrogen oxides (NOx). This cutting-edge technology helps the environment by ensuring compliance to CEV IV emission norms.



Z Bar Linkage

Z Bar linkage improves bucket penetration which helps to increase productivity.

Efficient Hydraulics

- Parallel movement ensures smooth digging operation.
- Tandem function prioritizes the bucket movement during loading operation.
- Parallel Tandem Hydraulic Circuit.
- Automatic bucket leveller.
- Lift arm kick out function.

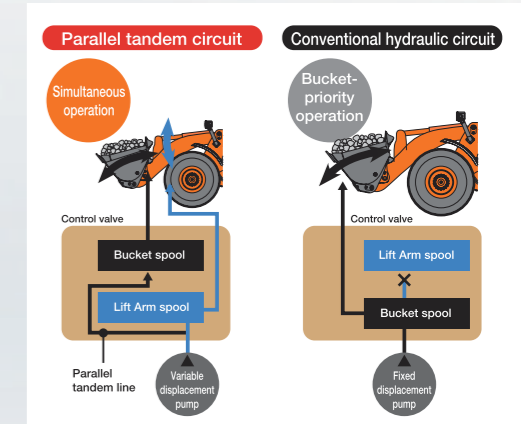
Clutch Cut Position Switch

Clutch cut-off timing is adjusted by sensing brake pedal depression for smooth, efficient truck loading.



5 Speed Automatic Transmission with Load Sensing System.

- Clutch Cut Position Switch
- Additional Electrical Pump for Emergency Steering
- Limited Slip Differential (LSD) in both forward and reverse axles
- Down Shift Switch (DSS)
- 1st Gear Fix Switch
- Travel Mode Selector (Auto and Manual)



AUTO	Automatic gear shift: gears 1-5			
MANUAL	2nd	3rd	4th	5th



Unmatched Reliability

- Guaranteed uptime with Hitachi's advanced hydraulic system.
- Durable, safe and low maintenance with inboard mounted 4 wheel wet disc brakes.
- Easy maneuverability with heavy duty, proven axles and transmission.
- Rigorously tested structures which ensures longer life.
- Suitable and reliable fluid tanks for the ultimate leak protection.
- Fully enclosed fuel and DEF tank (Diesel Exhaust Fluid).
- Parking brake switch with transmission interlock- It prevents movement of machine by dis-engaging transmission power from the wheels while parking brake is engaged. This prevents accidental damage to parking brake system.

Strengthened components

Lift arm torsion which enhances the productivity during lifting operations. Strengthened buckets and linkages for longer life.

Durable materials

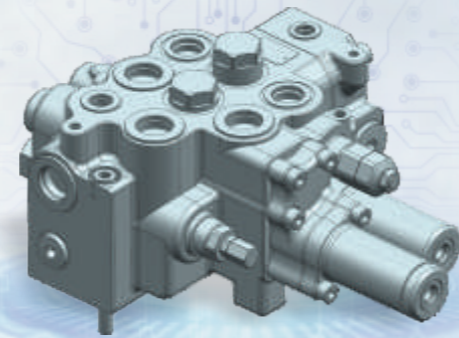
High quality radiators improve resistance to corrosion and enhance the overall durability of the ZW225 wheel loader. Robust mainframe and cylinders for long lasting performance.



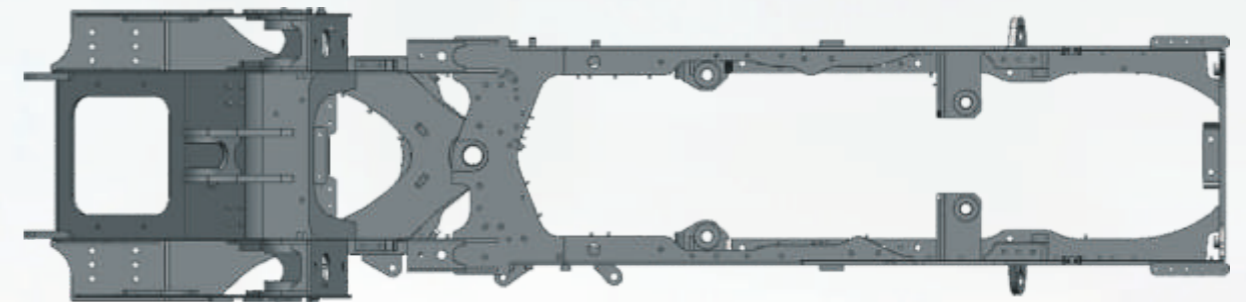
Heavy-Duty Axles



Reliable Transmission



Durable Control Valve



Robust Mainframe



Increased lift arm torsion improves productivity.

Low Cost of Operation

Thanks to the powerful Cummins engine and new generation hydraulics which helps in providing more output with lesser fuel consumption. Equipped with common rail-type fuel injection system and reliable after-treatment system which further reduces maintenance cost.

More savings with extended oil change intervals for engine oil/filter, fuel filter and transmission oils.

Inboard mounted fully hydraulic braking system with multiple oil immersed discs gives the braking system a virtually maintenance free life span.

Improved fuel efficiency-

The ZW225 demonstrates greater fuel efficiency during V-shape loading, and load and carry operations. This results in considerable savings for operating costs.

Eco Mode: For lower fuel consumption

Variable Displacement Load Sensing Axial Piston Pump optimizes hydraulic flow and power requirement adding to higher performance and better fuel efficiency.

The new CEV-IV compliant engine has Diesel particulate filter (DPF) which helps in reducing pollutants. It can be cleaned at the workshops and re-used to lower maintenance costs.

New 5-Speed Automatic Transmission

The new transmission comes standard with the Auto mode that can automatically select an optimum gear according to the load, thereby reducing fuel consumption. This 5-speed automatic transmission offers improved power distribution to wheels across all speed ranges, by better optimizing gear ratio compared to the conventional 4-speed transmission.

Better Engine Control and Optimization

The Engine Control Module (ECM), ensures that the machine operates at optimal performance. The ECM monitors most of the sensors in the engine bay in order to manage the machine's injection timing and regulates the emission control systems.



Tata Hitachi Genuine Spare Parts and Lubricants

THE EPITOME OF RELIABILITY AND PRODUCTIVITY

The ZW225 has been designed and built using market leading Japanese technology. Developed to perfection, with an emphasis on the environment, operator comfort and safety, it responds to customer demands for exceptional productivity at the lowest possible cost of ownership in Indian working conditions.



Industry-leading safety

360° visibility from the cab.



Bucket availability

Wide range of bucket options for various applications



Easy to operate

Multifunctional monitor shows information at a glance.



Low running costs

Fuel savings in load and carry operations



Powerful engine

That enables better digging performance, impressive travel speed and has excellent fuel efficiency.



Quieter performance

New materials in the cab absorb sound to reduce noise levels.



Superior comfort

Spacious cab with several storage compartments.



Enhanced fuel efficiency

CEV IV engine with single unit after-treatment system



Robust machine

Heavy duty axle and transmission



Enhanced design

Excellent rear view thanks to the curved engine hood.



Convenient access

Easy-to-open wide engine covers.



User-friendly

Effortless single pilot operating lever and power steering system.



Unbeatable Comfort and Safety

- Quieter engine and sound insulated cabin for better operator comfort.
- The 360° panoramic view for the spacious cab creates a comfortable working environment, and helps to increase safety and productivity. The rear-view camera also contributes to excellent all-round visibility and safety on the job site.
- Enhanced rear visibility- The muffler and air intake have been positioned and aligned to improve the rear-view visibility from the cab, enhancing safety on a variety of job sites.
- The rear view monitor allows the operator to see the rear of the machine, including a view behind the counterweight enhancing safe operation.
- To ensure a smooth drive on all kinds of terrain, the ride control feature (optional) prevents unnecessary pitching through the accumulator and movement of lift arm cylinders.
- The convenient utility space at the rear of the ZW225 has been designed to provide sufficient storage for a variety of tools.
- Double door access and safety hand rails for enhanced safety.
- Equipped with ROPS/FOPS cabin



Rearview monitor. Rearview camera



Fitted with a multi functional LCD colour monitor that shows useful information such as fuel and urea levels, operating mode and other working parameters



LCD colour monitor

Automatic air-conditioning system with multiple vents provides cleaner and cooler air to the operator for comfortable operation



Auto air-conditioner

Bottle holder

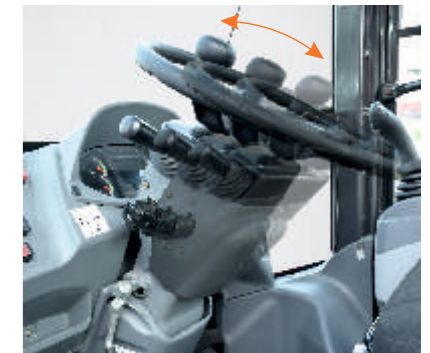


Steering



Storage compartment

The seat and tilt-able steering column can be adjusted to offer customized position to the operator for uninterrupted fatigue free operation.



Adjustable Steering Column

AM/FM Radio has an auto-tuning feature and 2 speakers stereo system provides excellent sound quality. An AUX port (USB type) is provided for mobile connectivity and charging.



Music system & Speakers

The mechanical suspension seat absorbs shocks and vibration from the machine in order to reduce operator fatigue.



Comfortable Suspension Seat



Panoramic cab

Simplified Maintenance

- With long service intervals and quality components, maintaining the machine is easy.
- The engine air filter has been located at the rear of the engine compartment, providing easier access at ground level for maintenance. The urea tank is also strategically positioned for convenience and safety.
- Equipped with one battery compartment instead of two, which provides easy access for maintenance and battery replacement. This results in minimal downtime and a high level of availability.
- For safer and easier maintenance, the battery disconnect switch is now included as standard. This helps to avoid electrical accidents and retain battery energy during long-term storage.



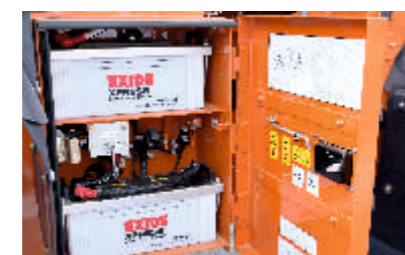
Easy access to consumables:

Engine top cover swings up to provide a wide service space. Inspection / maintenance points are concentrated for easy inspection and servicing from the ground.



Easy access for ground level maintenance.

The engine covers open fully from both sides for convenient access. This helps to ensure routine maintenance is completed quickly to ensure a reliable performance.



Battery Compartment

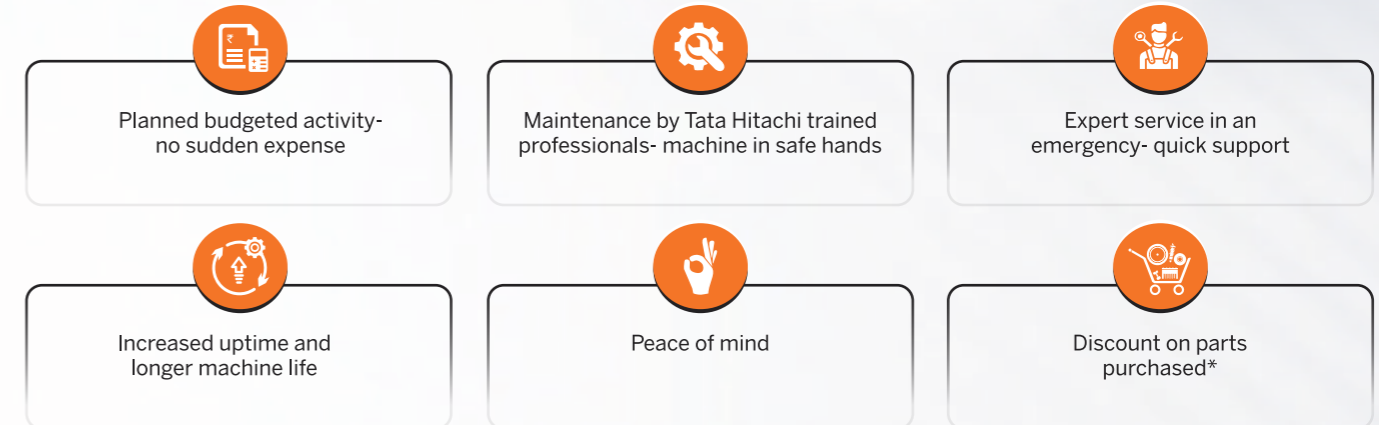
Automatic Reversible Cooling Fan:

Keeps the radiator clean at all times. The cooling fan is automatically self-reversed every 30 minutes to blow dust off the radiator.



SUPPORT CHAIN

Annual Maintenance Contract



*Conditions apply

Full Maintenance Contract





TELEMATICS

InSite is a GPS/GPRS based remote machine monitoring system for tracking various machine parameters which helps in better Business decisions. InSite can be accessed by any web and application based platform making it easy to track the machine's performance from any location at any time.



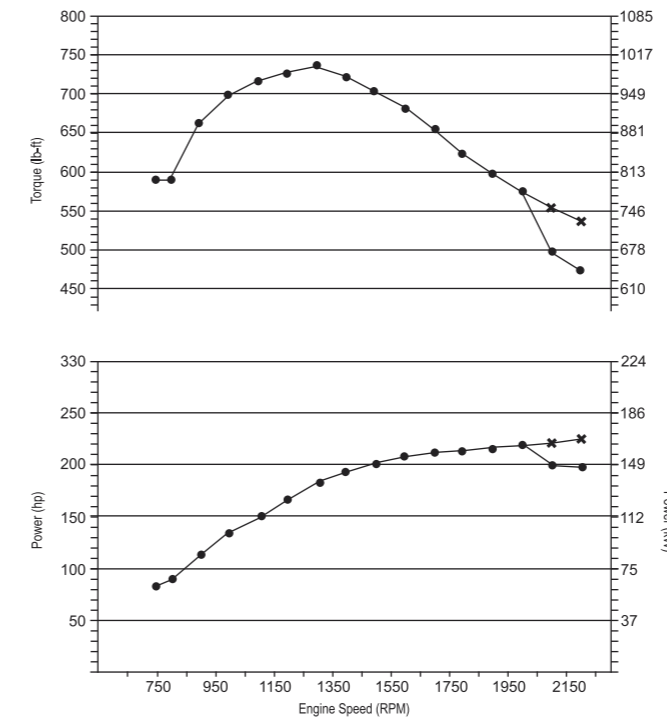
BE IN SYNC WITH YOUR MACHINES

- Location, Geo Fencing
- Asset Utilization
- Overall Fleet Summary in Graphical Widgets (Dashboard)
- Asset Operation
- Ability to Track Machine Maintenance / Service Due Date
- Fuel Levels
- Fleet Management

Specifications

ENGINE

Model.....CUMMINS QSB6.7
 Type.....4-cycle water-cooled, direct injection
 Aspiration.....Turbo charger and intercooled
 After treatment.....DOC + SCR + DPF system
 No. of cylinders.....6
 Maximum power168 kW (225 hp) at 2 200 min⁻¹(rpm)
 Maximum torque, gross1000 Nm at 1300 min⁻¹(rpm)
 Bore and stroke.....107 mm X 124 mm
 Piston displacement.....6.702 L
 Batteries.....2 x 12 V
 Air cleaner.....Two element dry type with restriction indicator
 Emission.....Complies with BS IV



POWER TRAIN

Transmission.....Torque converter, counter shaft type power shift with computer-controlled automatic shift and manual shift features included.

Torque converter.....Three element, single stage, single phase
 Main clutch.....Wet hydraulic, multi-disc type
 Cooling method.....Forced circulation type
 Travel speed* (Reverse) / Forward
 1st.....(7.1km/h) / 6.8 km/h
 2nd.....(12.4 km/h) / 11.8 km/h
 3rd.....(27.4 km/h) / 17.8 km/h
 4th.....26.2 km/h
 5th.....36.9 km/h

*With 23.5-25-20PR tires

AXLE AND FINAL DRIVE

Drive system.....Four-wheel drive system
 Front & rear axle.....Semi-floating
 Front.....Fixed to the front frame
 Rear.....Trunnion support
 Reduction and differential gear.....Limit Slip Differential
 Oscillation angle.....Total 24° (+12°, -12°)
 Final drives.....Heavy-duty planetary, mounted inboard

TIRES

Tire size23.5-25-20PR
 Optional.....Refer to standard & optional equipment list

BRAKES

Service brakes Inboard mounted fully hydraulic 4 wheel wet disc brake. Front & rear independent brake circuit
 Parking brakes Switch operated spring applied, hydraulically released, dry disc type with external output shaft

STEERING SYSTEM

Type.....Articulated frame steering
 Steering angle.....Each direction 40° ; total 80°
 Cylinders.....Double-acting piston type
 No. x Bore x Stroke.....2 x 70 mm x 442 mm

HYDRAULIC SYSTEM

Arm and bucket are controlled by multifunction lever
 Arm controls.....Four position valve; Raise, hold, lower, float
 Bucket controls.....Three position valve; Roll back, hold, dump
 Main pump (Serve as steering pump)
 Type.....Variable Displacement Axial Plunger Pump
 Maximum flow.....271 L/min at 2170 min⁻¹(rpm)
 Maximum pressure.....27.4 Mpa

Fan pump
 Type.....Fixed Displacement Gear Pump
 Maximum flow.....43.2 L/min at 1500 min⁻¹(rpm)
 Maximum pressure.....24.5 MPa

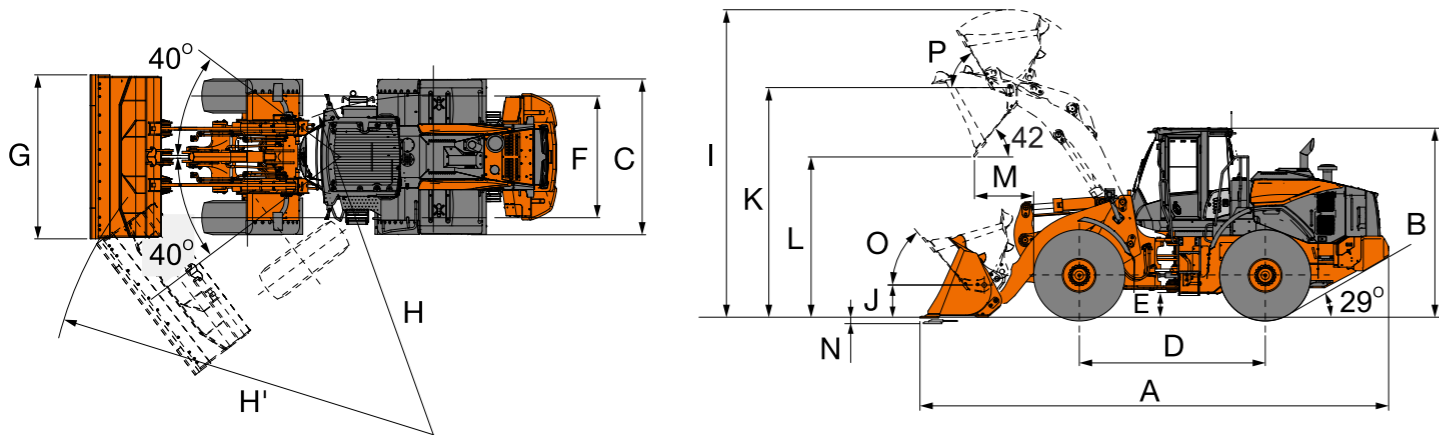
Hydraulic cylinders
 Type.....Double acting type
 No. x Bore x Stroke.....Arm: 2 x 130 mm x 880 mm
 Bucket: 1 x 165 mm x 510 mm
 Filters.....Full-flow 10 micron return filter in reservoir

Hydraulic cycle times
 Lift arm lower.....2.9 s
 Lift arm raise.....5.2 s
 Bucket dump.....1.3 s
 Total.....9.8 s

SERVICE REFILL CAPACITIES

Fuel tank255 L
 Engine coolant.....28 L
 Engine oil.....25 L
 Torque convertor & transmission.....27 L
 Front axle differential & wheel hubs.....35 L
 Rear axle differential & wheel hubs.....35 L
 Hydraulic oil tank.....171 L
 DEF/AdBlue® tank.....24 L

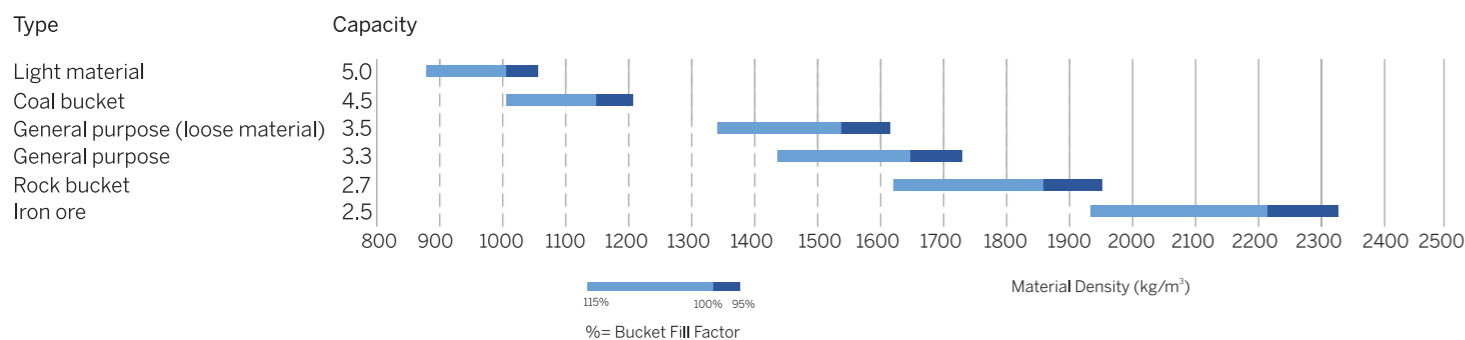
DIMENSIONS AND WORKING RANGES



Bucket type	Bolt on teeth						Bolt-on cutting edge		
	ISO heaped	ISO struck	m ³	2.5*	2.7*	3.3	3.5*	4.5*	5.0*
Bucket capacity			m ³	2.5*	2.7*	3.3	3.5*	4.5*	5.0*
A Overall length			mm	8,345	8,420	8,525	8,570	8,640	8,525
B Overall height			mm			3,360			
C Width over tires			mm			2,785			
D Wheel base			mm			3,290			
E Ground clearance			mm			450			
F Tread			mm			2,160			
G Bucket width			mm			2,910		3,500	
H Turning radius (Centerline of outside tire)			mm			5,770			
H' Loader clearance radius, bucket in carry position			mm	6,560		6,375	6,620	6,655	6,880
I Overall operating height			mm	5,390	5,515	5,395	5,680	5,885	5,815
J Carry height of bucket pin			mm			300			
K Height to bucket hinge pin, fully raised			mm			4,070			
L Dumping clearance 45 degree, full height			mm	2,885	2,820	2,900	2,710	2,665	2,755
M Reach, 45 degree dump, full height			mm	1,030	1,070	1,020	1,180	1,235	1,160
N Digging depth (Horizontal digging angle)			mm			120			
O Max. roll back at carry position			deg	40		50		40	
P Roll back angle at full height			deg			60			
Static tipping load *	Straight		kg	14,858	14,360	14,960	14,803	14,530	14,370
Full 40 degree turn			kg	12,683	12,258	12,770	12,636	12,403	12,267
Breakout force			kN	182	170	156	149	121	130
			kgf	18,581	17,309	15,860	15,223	12,307	13,254
Operating weight *			*kg	17,650	18,180	17,760	17,810	18,000	18,170

Note: All dimensions, weight and performance data based on ISO 6746:1987/ISO 7131:2009 and ISO 7546:1983
 : Static tipping load and operating weight marked with include 23.5-25 tires (No ballast) with lubricants, full fuel tank and operator. Machine stability and operating weight depend on counterweight, tire size and other attachments.

BUCKET SELECTION GUIDE



MONITORING SYSTEM

- Gauge: coolant temperature, fuel level, transmission oil temperature ●
- Indicator lights: clearance lights, control lever lock, low fuel level, high beam, parking brake, turn signals, work lights ●
- Indicator on multifunction monitor: air conditioner display, clock, DEF alarm indicator, DEF level gauge, fan reverse indicator, F-N-R/ Shift position indicator, forward/reverse selector switch indicator, Eco Indicator, Ride control Indicator, hour meter, odometer, seat belt indicator, speedometer, tachometer, transmission auto-shifting indicator, transmission oil temperature ●
- Warning lights: air filter restriction, brake oil low pressure, communication system error, discharge warning, engine oil low pressure, engine warning, hydraulic oil level, low steering oil pressure, overheat, transmission warning ●

BRAKE SYSTEM

- Front & rear independent brake circuit ●
- Inboard mounted fully hydraulic 4 wheel wet disc ●
- Spring-applied/Hydraulic-released parking brake ●

HYDRAULIC SYSTEM

- Bucket auto leveler (Automatic return to dig control) ●
- Control lever for 2 spools control valve ●
- Multifunction lever (MF lever) ●
- Control lever lock switch ●
- Hydraulic filters ●
- Lift arm kickout ●
- Reservoir sight gauge ●
- Ride control system (OFF-AUTO type) ○

TIRES

- 23.5-25-20 PR (L3) ●

MISCELLANEOUS

- Articulation lock bar ●
- Auto Centralized Lubrication System (ACLS) ○
- Bucket cylinder guard ○
- Counterweight, built-in ●
- Drawbar with locking pin ●
- Emergency steering ●
- Fenders for 23.5-25 (Front and half rear fenders with mud flaps) ●
- Front windshield guard ○
- InSite ●
- Lift arm Standard lift arm ● High lift arm ○
- Lift & tie down hooks ●
- On board information controller ●
- Pilfer proof Battery cover with locking bracket ● Lockable engine cover ● Lockable fuel refilling cap ●
- Rear licence plate bracket ●
- Standard tool kit ●
- Ride Control System ○
- Auto Fire Detection and Suppression System (AFDSS) ○

OPERATOR'S STATION

- Adjustable steering column ●
- AM/FM radio with AUX for digital audio player ●
- Auto control air conditioner with single intake filter ●
- Auto idle ●
- Coat hook ●
- Glove compartment ●
- Rear view camera & monitor ○
- Rear view mirrors Inside (2) ● Outside (2) ●
- Retractable seat belt ●
- ROPS (ISO3471), FOPS (ISO3449): multi-plane isolation mounted for noise, vibration reduction ●
- Rubber floor mat ●
- Seat Weight adjusted suspension seat with headrest : fabric, damper, adjustable for weight-height, reclining angle, armrest angle, head rest height. ●
- Steering system Wheel steering ●
- Storage Cup holder ● Document holder ● Hot & cool box ● Seatback pocket ●
- Sun visor ●
- Textured steering wheel with spinner knob ●
- Tinted safety glass Front windshield: laminated ● Others: tempered ●
- Windshield washer front and rear ●
- Windshield wipers front and rear ●

ENGINE

- Air intake Pre-cleaner (Turbo II) ●
- Air filter double elements ●
- Automatic reversible cooling fan with heat sensing ●
- Cartridge-type engine oil filter ●
- Cartridge-type fuel pre-filter ●
- Cartridge-type fuel main filter ●
- Coolant reservoir sight gauge ●
- DEF/AdBlue® tank inlet strainer ●
- Engine auto shut-down control system ○
- Fan guard ●
- Radiator Standard fin pitch radiator ●

ELECTRICAL SYSTEM

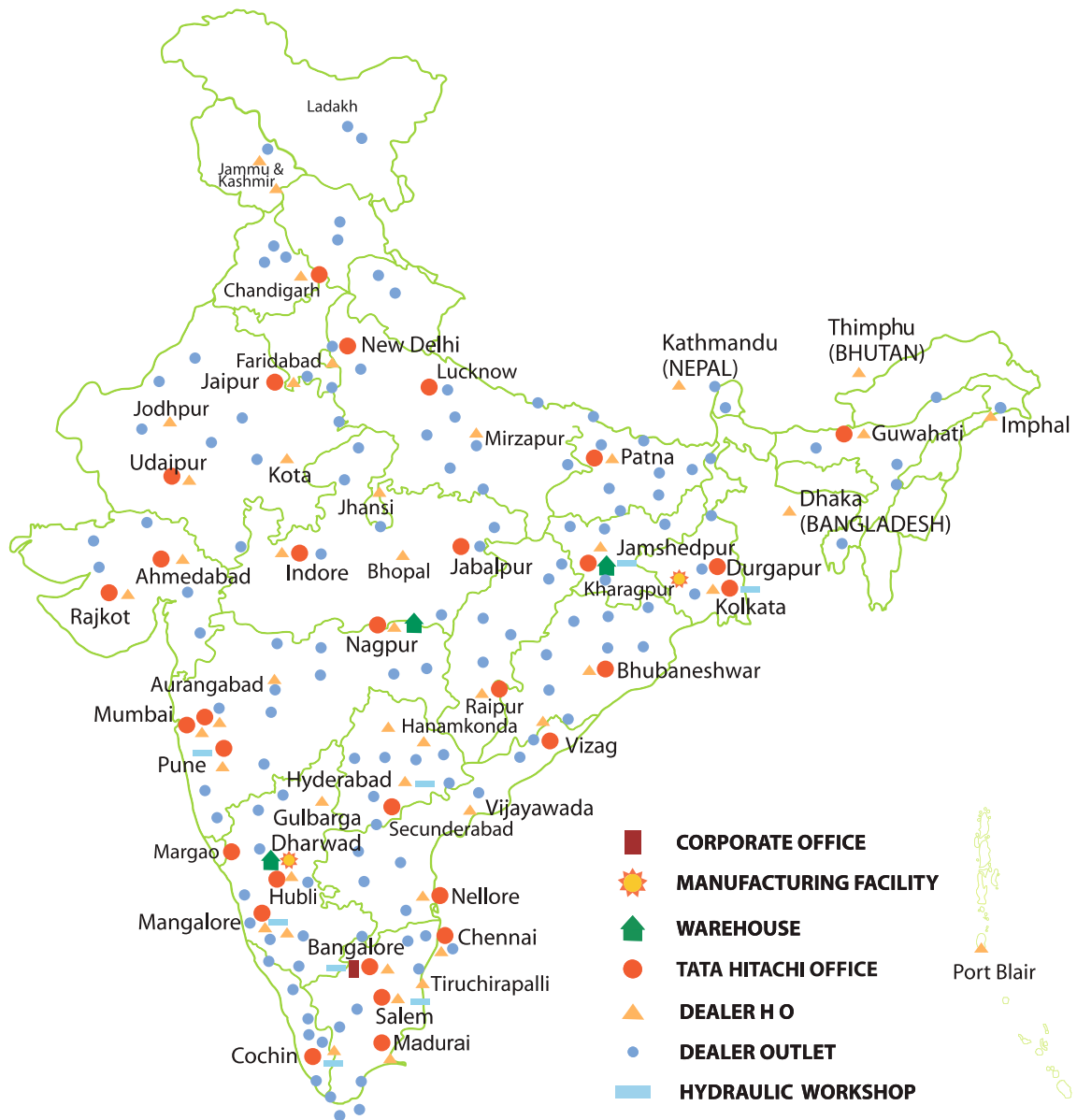
- Backup alarm ●
- Batteries Standard batteries (130AH-720CCA) ●
- Battery disconnect switch ●

LIGHTS	
Brake & tail lights	●
Clearance lights	●
Headlights	●
Rotating lamp	●
Turn signals with hazard switch	●
Work lights	
Front lights on cab (2)	●
Rear lights in rear grille cover (2)	●

POWER TRAIN	
Automatic transmission with load sensing system	●
Clutch cut position switch	●
Differential	
LSD (Limited Slip Differential, front and rear)	●
DSS (Down Shift Switch)	●
Forward/Reverse lever	●
Travel mode selector (Auto -Manual)	●
1st speed fixed switch	●

● Standard equipment ○ Optional equipment

Our Network



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OUR RANGE OF PRODUCTS



Authorised Dealer

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