432 Backhoe Loader



C3.6 Stage V Engine

The Cat[®] C3.6 engine meets EU Stage V emission standards while delivering up to a 10% fuel efficiency improvement compared to the previous model. The aftertreatment system is completely maintenance free with Selective Catalytic Reduction (SCR), Diesel Exhaust Fluid (DEF) and a fit for life Diesel Particulate Filter (DPF) system. This new engine delivers power and torque density as per the C4.4 engine installed in the previous model.

Optimal Operator Comfort and Control

EH Seat Mounted Controls are standard on the 432. These give the operator better comfort and more flexibility by allowing the operator to control either hoe, loader or both from any seat position (front, rear or offset).

Interactive Display Screens

The choice of either a soft key or touchscreen display screen gives the operator information at the touch of their fingertips. Many customizable features including hoe response rate and modulation are now offered. Machine Security Software is embedded into the display screen as well as notifications on service intervals.

Powershift Transmission

The four speed powershift transmission, improves operator comfort by utilizing the Power Shuttle Lever to shift gears. There is no floor-mounted gear shift lever, adding to the already spacious work environment.

Excavator Style Boom

The Excavator Style Boom is iconic to the Cat backhoe loader (BHL). This gives the operator more dig depth and reach when working around obstacles meaning less repositioning of the machine is required.

Powerful and Efficient Hydraulics

The load sensing hydraulic system coupled with a variable displacement piston pump deliver powerful hydraulics when the operator really requires it.

Power Management Modes

The operator can choose between Eco Mode, Standard Mode or Standard Plus dependent on job and site conditions. Eco Mode will save the operator fuel, lowering their owning and operating costs, where Standard Plus Mode will give more speed and power when time or tough ground conditions demand this.

Product Link™

Product Link[™] comes as standard on the Cat BHL. Many features exist through Product Link including fuel burn and location allowing the owner to access all data to help increase productivity while reducing costs.



432 Backhoe Loader Specifications

Engine

| | EU Stage V (Standard) | EU Stage V (Optional) |
|------------------------------|---|---|
| Engine | C3.6 74.5 kW Electronic Turbo Intercooled | C3.6 82 kW Electronic Turbo Intercooled |
| Ratings at 2,200 rpm | | |
| Gross Power SAE J1995 | 76 kW/103 hp | 84 kW/114 hp |
| Gross Power ISO 14396 | 74 kW/101 hp | 82 kW/111 hp |
| Net Power Rating @ 2,200 rpm | | |
| SAE J1349 | 69 kW/92 hp | 76 kW/103 hp |
| ISO 9249 | 68 kW/92 hp | 76 kW/102 hp |
| Torque Rise (net) | 48% @ 1,500 rpm | 48% @ 1,500 rpm |
| Net Torque – SAE J1349 | 436 N·m | 485 N·m |
| Bore | 98 mm | 98 mm |
| Stroke | 120 mm | 120 mm |
| Displacement | 3.6 L | 3.6 L |

• Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler and alternator.

• No derating required up to 3048 m altitude. Auto derate protects hydraulic and transmission systems.

• Meets EU Stage V emission standards.

Transmission

Travel speeds of backhoe loader at full throttle, when equipped with 440/80-28 rear tires.

| | | | Auto-Shift Transmission with | | |
|---------|---------------------------------------|---------------------------------------|--|--|--|
| | Powershift Transmission (Standard) | Auto-Shift Transmission (Optional) | Lock-Up Torque Converter (Optional) | | |
| Forward | | | | | |
| 1st | 6 km/h | 6 km/h | 6 km/h | | |
| 2nd | 9.5 km/h | 9.5 km/h | 9.5 km/h | | |
| 3rd | 19.8 km/h | 12.5 km/h | 12.5 km/h | | |
| 4th | 40 km/h | 19.8 km/h | 19.8 km/h | | |
| 5th | | 27.3 km/h | 27.3 km/h | | |
| 6th | | 40 km/h | 40 km/h | | |
| Reverse | | | | | |
| 1st | 6 km/h | 6 km/h | 6 km/h | | |
| 2nd | 12.5 km/h | 12.5 km/h | 12.5 km/h | | |
| 3rd | 27.3 km/h | 27.3 km/h | 27.3 km/h | | |
| 4th | | | | | |

Axle Ratings Front Axle, AWD Static 12 000 kg Dynamic 6000 kg Rear Axle Static 13 000 kg Dynamic 7000 kg Weights* **Operating Weight*** 8322 kg Operating Weight (maximum) 11 000 kg (ROPS capacity) Cab, ROPS/FOPS Standard Powershift Transmission Standard 15 kg Ride Control Air Conditioning 45 kg All-Wheel Drive Standard MP Bucket (1.03 m³) with Fold-over Forks 860 kg 611 kg without Fold-over Forks Loader QC 185 kg 4.3 m Extendible Stick 199 kg (excludes front counterweight) 4.9 m Extendible Stick 355 kg (excludes front counterweight) Counterweights Base 115 kg 250 kg Stackable, One 485 kg Maximum Minimum Counterweight Recommendations - Standard Stick IT Loader No QC with QC Loader Bucket GP 250 kg 485 kg MP 485 kg 0 kg Minimum Counterweight Recommendations – Extendible Stick IT Loader No QC with QC Loader Bucket GP 485 kg 485 kg MP 115 kg 485 kg

Total Gross Weight Not to Exceed 11 000 kg

*Machine Configuration – HRC 74.5 kW engine; 4.3 m standard stick hoe; standard cab with A/C; AWD powershift transmission; 1.03 m³ MP loader bucket; 600 mm standard duty hoe bucket; 340/80-18 and 440/80-28 tires; no counterweight; 80 kg operator; full fuel tank.

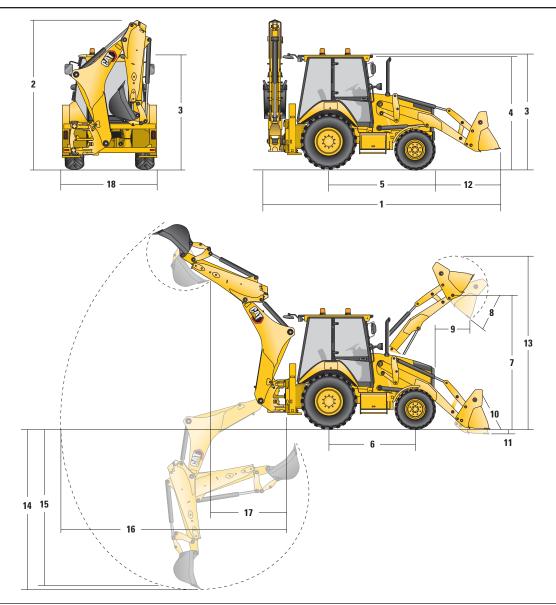
432 Backhoe Loader Specifications

| Hydraulic System | |
|------------------------------------|-----------------------------|
| Туре | Closed Center |
| Pump Type | Variable-Flow, Axial Piston |
| Pump Capacity @ 2,200 rpm | 187 L/min |
| System Pressure | |
| Backhoe | 250 bar |
| Loader | 250 bar |
| Steering | |
| Туре | Front Wheel |
| Power Steering | Hydrostatic |
| AWD Cylinder, One (1) Double-activ | ng |
| Bore | 65 mm |
| Stroke | 106 mm |
| Rod Diameter | 40 mm |
| Axle Oscillation | 11 mm |
| Turning Circle | |
| 2WD/AWD (inner wheel not braked |) |
| Outside Front Wheels | 8.205 m |
| Outside Widest Loader Bucket | 10.745 m |
| Service Refill Capacities | |
| Cooling System with A/C | 18 L |

| Cooling System with A/C | 18 L |
|------------------------------|-------|
| Fuel Tank | 160 L |
| Engine Oil with Filter | 9 L |
| Diesel Exhaust Fluid | 19 L |
| Transmission (Power Shuttle) | |
| 2WD | 18 L |
| AWD | 18 L |
| Transmission (Powershift) | |
| AWD | 19 L |
| Rear Axle | 16 L |
| Planetaries | 1.7 L |
| Front Axle (AWD) | 11 L |
| Planetaries | 0.7 L |
| Hydraulic System | 95 L |
| Hydraulic Tank | 42 L |
| | |

432 Backhoe Loader Specifications

Machine Dimensions



| | Parallel Lift Loader | | | Parallel Lift Loader with QC | |
|---------------------------------------|----------------------------|-----------------------------|----------------------------|-------------------------------|--------------------------------|
| | GP – 1.0 m ³ | MP – 1.03 m ³ | MP with Forks – 1.03 m³ | GP/QC – 1.0 m ³ | MP/QC – 1.03 m ³ |
| 1 Overall Length in Roading Position | 5763 mm | 5744 mm | 5744 mm | 5847 mm | 5760 mm |
| Overall Transportation Length | 5775 mm | 5731 mm | 5731 mm | 5884 mm | 5778 mm |
| 2 Overall Transportation Height | 3806 mm | 3806 mm | 3806 mm | 3806 mm | 3806 mm |
| Overall Width | 2352 mm | 2352 mm | 2352 mm | 2352 mm | 2352 mm |
| 3 Height to Top of Cab/Canopy | 2822 mm | 2822 mm | 2822 mm | 2822 mm | 2822 mm |
| 4 Height to Top of Exhaust Stack | 2715 mm | 2715 mm | 2715 mm | 2715 mm | 2715 mm |
| 5 Rear Axle Centerline to Front Grill | 2705 mm | 2705 mm | 2705 mm | 2705 mm | 2705 mm |
| 6 Wheelbase 2WD/AWD | 2200 mm | 2200 mm | 2200 mm | 2200 mm | 2200 mm |

Dimensions and performance specifications shown are for machines equipped with 12.5/80-18 SGL front tires, 16.9-28 rear tires, standard cab, 4.3 m standard stick with 600 mm standard duty bucket, and 1.03 m³ MP loader bucket and standard equipment unless otherwise specified.

Loader Bucket Dimensions and Performance

| | Р | Parallel Lift Loader | | | Parallel Lift Loader with QC | |
|--|--------------------|-----------------------------|----------------------------|-------------------------------|---------------------------------------|--|
| | GP – 1.0 m³ | MP – 1.03 m ³ | MP with Forks – 1.03 m³ | GP/QC – 1.0 m ³ | MP/QC – 1.03 m ³ | |
| Capacity (SAE rated) | 1.0 m ³ | 1.03 m ³ | 1.03 m ³ | 1.03 m ³ | 1.03 m ³ | |
| Width | 2406 mm | 2406 mm | 2406 mm | 2406 mm | 2406 mm | |
| Lift Capacity at Maximum Height | 3728 kg | 3488 kg | 3303 kg | 3509 kg | 3278 kg | |
| Lift Breakout Force | 54 791 N | 53 252 N | 51 536 N | 51 669 N | 50 841 N | |
| Tilt Breakout Force | 54 292 N | 59 845 N | 58 900 N | 48 223 N | 53 400 N | |
| Tipping Load at Breakout Point | 6695 kg | 6674 kg | 6518 kg | 6157 kg | 6339 kg | |
| 7 Maximum Hinge Pin Height | 3462 mm | 3462 mm | 3462 mm | 3462 mm | 3462 mm | |
| 8 Dump Angle at Full Height | 45° | 45° | 45° | 45° | 45° | |
| Dump Height at Maximum Angle | 2755 mm | 2780 mm | 2780 mm | 2669 mm | 2749 mm | |
| 9 Dump Reach at Maximum Angle | 805 mm | 732 mm | 732 mm | 838 mm | 784 mm | |
| 10 Maximum Bucket Rollback at Ground Level | 38° | 39° | 39° | 39° | 38° | |
| 11 Digging Depth | 99 mm | 132 mm | 132 mm | 137 mm | 118 mm | |
| Maximum Grading Angle | 113° | 116° | 116° | 112° | 114° | |
| 12 Grill to Bucket Cutting Edge, Carry Position | 1488 mm | 1471 mm | 1471 mm | 1571 mm | 1487 mm | |
| 13 Maximum Operating Height | 4328 mm | 4365 mm | 4365 mm | 4361 mm | 4407 mm | |
| Weight (does not include teeth) | 427.5 kg | 611.2 kg | 705 kg | 459 kg | 697 kg | |

Backhoe Dimensions and Performance

| | Standard Stick – 4.3 m | E-stick Retracted – 4.3 m | E-stick Extended – 4.3 m | E-stick Retracted – 4.9 m | E-stick Extended – 4.9 m |
|---|------------------------------|---------------------------------|--------------------------------|---------------------------------|--------------------------------|
| 14 Digging Depth, SAE Maximum | 4298 mm | 4301 mm | 5292 mm | 4636 mm | 5665 mm |
| Digging Depth, Manufacturer's Maximum | 4778 mm | 4782 mm | 5700 mm | 5201 mm | 6169 mm |
| 15 Digging Depth, 2400 mm Flat Bottom | 3915 mm | 3919 mm | 4987 mm | 4293 mm | 5373 mm |
| Digging Depth, 600 mm Flat Bottom | 4255 mm | 4259 mm | 5254 mm | 4611 mm | 5632 mm |
| Digging Depth, 600 mm Flat Bottom, Manufacturer's | 4753 mm | 4758 mm | 5700 mm | 5164 mm | 6150 mm |
| Reach from Rear Axle Centerline at Ground Line | 6741 mm | 6746 mm | 7672 mm | 7218 mm | 8169 mm |
| 16 Reach from Swing Pivot at Ground Line | 5651 mm | 5656 mm | 6582 mm | 6128 mm | 7079 mm |
| Maximum Operating Height | 5665 mm | 5666 mm | 6265 mm | 6231 mm | 6956 mm |
| Loading Height | 3991 mm | 4000 mm | 4599 mm | 4555 mm | 5280 mm |
| 17 Loading Reach | 1690 mm | 1639 mm | 2501 mm | 1559 mm | 2319 mm |
| Swing Arc | 180° | 180° | 180° | 180° | 180° |
| Bucket Rotation | 205° | 205° | 205° | 205° | 205° |
| 18 Stabilizer Overall Width | 2352 mm | 2352 mm | 2352 mm | 2352 mm | 2352 mm |
| Bucket Dig Force | 63 447 N | 63 419 N | 63 419 N | 63 427 N | 63 427 N |
| Stick Dig Force | 42 835 N | 43 548 N | 31 743 N | 47 251 N | 35 180 N |

Standard and Optional Equipment

Standard and Optional equipment may vary. Consult your Cat dealer for details.

| | Standard | Optional | | Standard | Optiona |
|-------------------------------------|--------------|--------------|-----------------------------------|--------------|--------------|
| Cab ROPS and FOPS | | | Hydraulics | | - |
| Cab, Standard | √ | | Variable Displacement Piston Pump | √ | |
| Cab, Deluxe | | \checkmark | Hydraulic Quick Disconnects | | \checkmark |
| Tires/Steering/Brakes | | | Side Shift Lock | ✓ | |
| All Wheel Drive | \checkmark | | Hydraulic Oil Cooler | \checkmark | |
| 100% Differential Lock | \checkmark | | Hydraulic Lines, One Way | | \checkmark |
| Hydraulic Boosted Brakes | \checkmark | | Hydraulic Lines, Two Way | | ✓ |
| Tires 26 inch | \checkmark | | Loader Kickout, Float | \checkmark | |
| Tires 28 inch | | \checkmark | Loader Kickout, Return to Dig | √ | |
| Engine/Transmission | | | Powered Side Shift | | \checkmark |
| Engine, C3.6 74.5 kW | \checkmark | | Ride Control | | \checkmark |
| Engine, C3.6 82 kW | | \checkmark | Continuous Flow | ✓ | |
| Battery, 750 CCA, Standard | \checkmark | | Programmable Auxiliary Flow | ✓ | |
| Battery, 750 CCA, Heavy Duty | | \checkmark | Booms, Sticks and Linkages | | |
| Hinged Radiator Pack | \checkmark | | Stick Standard, 4.3 m | ✓ | |
| Auto Idle | \checkmark | | Stick Extending, 4.3 m | | \checkmark |
| Forward-Neutral-Reverse (FNR) | \checkmark | | Stick Extending, 4.9 m | | \checkmark |
| on Loader Lever | | | Hoe Quick Coupler, Mechanical | | \checkmark |
| Eco Mode | \checkmark | | Hoe Quick Coupler, Hydraulic | | ✓ |
| Standard Mode | \checkmark | | Loader Quick Coupler, Hydraulic | | ✓ |
| Standard + Mode | \checkmark | | Transport Lock, Swing | √ | |
| Engine Block Heater | | \checkmark | Transport Lock, Boom | ✓ | |
| Transmission Neutralizer | \checkmark | | Other Attachments | | |
| Transmission, Four Speed Powershift | ✓ | | Counterweight, 115 kg | | ✓ |
| Transmission, Six Speed Automatic | | ✓ | Counterweight, 240 kg | | ✓ |
| Transmission, Six Speed with | | \checkmark | Counterweight, 460 kg | | √ |
| Lock-Up Torque Converter | | | Front Fenders | | ✓ |
| Controls | | | Street Pads, Stabilizers | | ✓ |
| Controls, EH | ✓ ✓ | | External Tool Box | √ | |
| Pattern Selector (ISO/SAE) | ✓ ✓ | | Transport Tie Downs | √ | |
| Power Steering, Hydrostatic | v | | Electrical | | |
| | | | Display Screen, Soft Key | ✓ | |

Display Screen, Touchscreen

Product Link Cellular

Product Link Satellite

Reversing Alarm

Stabilizer Alarm

Beacon, Rotating

Beacon, Strobe

√

√

√

✓ ✓

✓

√

432 Backhoe Loader

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at **www.cat.com**

© 2020 Caterpillar All rights reserved

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

CAT, CATERPILLAR, LET'S DO THE WORK, their respective logos, "Caterpillar Yellow," the "Power Edge" and Cat "Modern Hex" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

AEHQ8250 (01-2020) Build Number: 07 (Europe)

