

NEW MACHINES, ORIGINAL DNA

The first Cat® backhoe loader hit the road in 1985. The machine was co-developed by a team of designers in Illinois, U.S. and a manufacturing team in Desford, UK. The machines are still designed by experts to meet the needs of today's operators. Every model provides reliability, power and a top-quality operator environment to see you through the toughest projects. The latest backhoe loader range is crafted from 35 years of passion, expertise and experience.

THE NEW CAT® 428

TAKE CONTROL IN YOUR NEW BACKHOE LOADER



MORE CONTROL FOR YOU

- + **SAVE FUEL** – SAVE UP TO 10% IN FUEL WITH THE NEW CAT C3.6 ENGINE, WHICH IS DESIGNED TO MEET THE LATEST EMISSIONS STANDARDS.
- + **PILOT CONTROLS** – OPERATE IN COMFORT WITH THE OPTIONAL PILOT HOE CONTROLS GIVING MORE COMFORT AND CONTROL THAN EVER BEFORE.
- + **CHOOSE YOUR SETTINGS** – USE THE DISPLAY SCREEN TO SET YOUR PERSONAL OPERATOR PREFERENCES, SO YOU CAN WORK AT A PACE THAT SUITS YOU, EVERY TIME.
- + **EASY TO OWN AND OPERATE** – WITH MONTHLY PAYMENT OPTIONS, FUEL SAVINGS AND BEST-QUALITY PARTS AND ENGINEERING, IT'S EASIER AND MORE AFFORDABLE THAN EVER TO OWN AND OPERATE A CAT BACKHOE LOADER.

TECHNICAL SPECIFICATIONS

See *cat.com* for complete specifications.

ENGINE	EU STAGE V (STANDARD)	EU STAGE V (OPTIONAL)	EU STAGE V (OPTIONAL)
Engine	C3.6 55.4 kW Electronic Turbo Intercooled	C3.6 70 kW Electronic Turbo Intercooled	C3.6 74.4 kW Electronic Turbo Intercooled
Ratings at 2,200 rpm			
Gross Power SAE J1995:2014	56 kW/76 hp	71 kW/97 hp	76 kW/103 hp
Engine Power ISO 14396:2002	55 kW/75 hp	70 kW/95 hp	74 kW/101 hp
Net Power Rating @ 2,200 rpm			
SAE J1349:2011	52 kW/70 hp	64 kW/86 hp	68 kW/92 hp
ISO 9249:2007	51 kW/70 hp	63 kW/86 hp	68 kW/92 hp
Torque Rise (net)	86% @ 1,200 rpm	43% @ 1,500 rpm	48% @ 1,500 rpm
Net Torque – SAE J1349	418 N·m	395 N·m	436 N·m
Bore	98 mm	98 mm	98 mm
Stroke	120 mm	120 mm	120 mm
Displacement	3.6 L	3.6 L	3.6 L
<ul style="list-style-type: none"> • 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	STANDARD SHIFT TRANSMISSION (STANDARD)	POWERSHIFT TRANSMISSION (OPTIONAL)	AUTOSHIFT TRANSMISSION (OPTIONAL)	AUTOSHIFT TRANSMISSION WITH LOCK-UP TORQUE CONVERTER (OPTIONAL)
Travel speeds of backhoe loader at full throttle, when equipped with 480/80-26 rear tires.				
Forward				
1st	6 km/h	6 km/h	6 km/h	6 km/h
2nd	9 km/h	10 km/h	10 km/h	10 km/h
3rd	21 km/h	20 km/h	12 km/h	12 km/h
4th	40 km/h	40 km/h	20 km/h	20 km/h
5th	—	—	27 km/h	27 km/h
6th	—	—	40 km/h	40 km/h
Reverse				
1st	6 km/h	6 km/h	6 km/h	6 km/h
2nd	9 km/h	12 km/h	12 km/h	12 km/h
3rd	21 km/h	27 km/h	27 km/h	27 km/h
4th	40 km/h	—	—	—

TECHNICAL SPECIFICATIONS

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AXLE RATINGS	
Front Axle, AWD	
Static	23 500 kg
Dynamic	9000 kg
Rear Axle	
Static	26 500 kg
Dynamic	10 000 kg

WEIGHTS*	
Operating Weight (estimated) (55 kW)*	8270 kg
Operating Weight (estimated) (70 kW)*	8345 kg
Operating Weight (maximum) (ROPS capacity)	11 000 kg
Cab, ROPS/FOPS	Standard
Auto-Shift Transmission	96 kg
Ride Control	15 kg
Air Conditioning	45 kg
MP Bucket (1.03 m³)	
with Fold-over Forks	860 kg
without Fold-over Forks	674 kg
Loader QC	185 kg
Extendible Stick	208 kg
Counterweights	
Base	115 kg
Mid	240 kg
Maximum	460 kg
Minimum Counterweight Recommendations – Standard Stick	
Loader Bucket	
GP	115 kg
MP	0 kg
Minimum Counterweight Recommendations – Extendible Stick	
Loader Bucket	
GP	460 kg
MP	0 kg
Total Gross Weight Not to Exceed	11 000 kg
*Machine Configuration – 70 kW HRC engine; standard stick hoe; standard cab with A/C; AWD standard shift transmission; 1.03 m³ MP loader bucket; 600 mm standard duty hoe bucket; 340/80-20 and 480/80-26 tires; no counterweight; One Way Aux Lines; AWD Guard; Front Fenders; HD Battery; 80 kg operator; full fuel tank.	

HYDRAULIC SYSTEM	
Type	Closed Center
Pump Type	Variable-Flow, Axial Piston
Pump Capacity @ 2,200 rpm	160 L/min
System Pressure	
Backhoe	250 bar
Loader	250 bar

STEERING	
Type	Front Wheel
Power Steering	Hydrostatic
AWD Cylinder, One (1) Double-acting	
Bore	65 mm
Stroke	106 mm
Rod Diameter	40 mm
Turning Circle	
AWD (inner wheel not braked)	
Outside Front Wheels	9,273 mm
Outside Widest Loader Bucket	11,622 mm

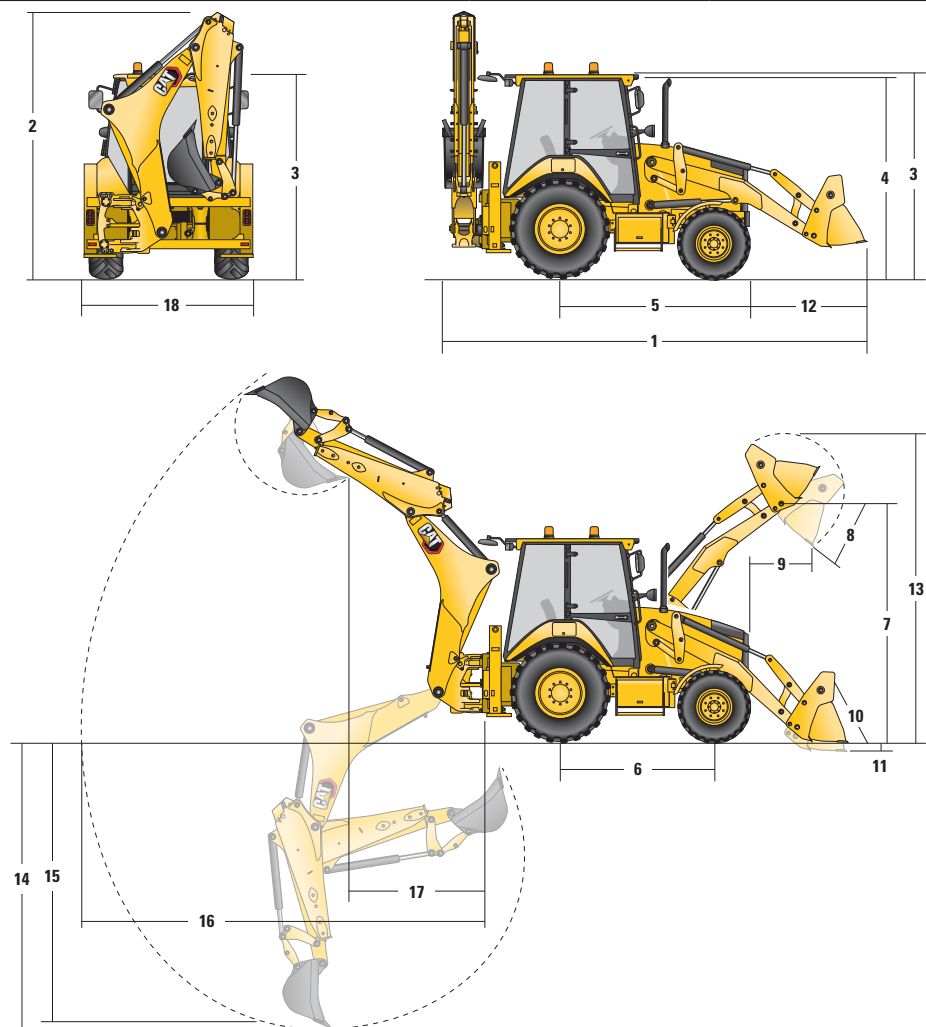
SERVICE REFILL CAPACITIES	
Cooling System with A/C	18 L
Fuel Tank	160 L
Engine Oil with Filter	9 L
Diesel Exhaust Fluid	19 L
Transmission (Standard Shift)	18 L
Transmission (Powershift/Autoshift)	19 L
Rear Axle	16 L
Planetary	1.7 L
Front Axle	11 L
Planetary	0.7 L
Hydraulic System	95 L
Hydraulic Tank	42 L

(continued on next page)

TECHNICAL SPECIFICATIONS

See *cat.com* for complete specifications.

MACHINE DIMENSIONS



	Parallel Lift Loader		
	GP – 1.0 m ³	MP – 1.03 m ³	MP with Forks – 1.03 m ³
1 Overall Length in Rooding Position	5747 mm	5728 mm	5728 mm
Overall Transportation Length	5754 mm	5711 mm	5711 mm
2 Overall Transportation Height	3786 mm	3786 mm	3786 mm
Overall Width	2352 mm	2352 mm	2352 mm
3 Height to Top of Cab/Canopy	2835 mm	2835 mm	2835 mm
4 Height to Top of Exhaust Stack	2731 mm	2731 mm	2731 mm
5 Rear Axle Centerline to Front Grill	2705 mm	2705 mm	2705 mm
6 Wheelbase	2200 mm	2200 mm	2200 mm

Dimensions and performance specifications shown are for machines equipped with 340/80-20 front tires, 480/80-26 rear tires, Std Cab, E-Stick, 610 mm standard duty bucket, and 1.03 m³ MP loader bucket and standard equipment unless otherwise specified.

TECHNICAL SPECIFICATIONS

See *cat.com* for complete specifications.

LOADER BUCKET DIMENSIONS AND PERFORMANCE

	Parallel Lift Loader		
	GP – 1.0 m³	MP – 1.03 m³	MP with Forks – 1.03 m³
Capacity (SAE rated)	1.0 m³	1.03 m³	1.03 m³
Width	2406 mm	2406 mm	2406 mm
Lift Capacity at Maximum Height	3765 kg	3525 kg	3340 kg
Lift Breakout Force	54 658 N	53 161 N	51 449 N
Tilt Breakout Force	54 211 N	59 763 N	58 818 N
Tipping Load at Breakout Point	6769 kg	6750 kg	6595 kg
7 Maximum Hinge Pin Height	3492 mm	3492 mm	3492 mm
8 Dump Angle at Full Height	45°	45°	45°
Dump Height at Maximum Angle	2789 mm	2813 mm	2813 mm
9 Dump Reach at Maximum Angle	805 mm	732 mm	732 mm
10 Maximum Bucket Rollback at Ground Level	38°	38°	38°
11 Digging Depth	67 mm	101 mm	101 mm
Maximum Grading Angle	114°	116°	116°
12 Grill to Bucket Cutting Edge, Carry Position	1474 mm	1457 mm	1457 mm
13 Maximum Operating Height	4358 mm	4395 mm	4395 mm
Weight (does not include teeth)	438 kg	674 kg	860 kg

BACKHOE DIMENSIONS AND PERFORMANCE

	Standard Stick – 4.3 m		
	E-Stick Retracted – 4.3 m	E-Stick Extended – 4.3 m	
14 Digging Depth, SAE Maximum	4297 mm	4300 mm	5290 mm
Digging Depth, Manufacturer's Maximum	4778 mm	4764 mm	5682 mm
15 Digging Depth, 2400 mm Flat Bottom	3914 mm	3918 mm	4985 mm
Digging Depth, 600 mm Flat Bottom	4254 mm	4257 mm	5251 mm
Digging Depth, 600 mm Flat Bottom, Manufacturer's	4734 mm	4739 mm	5682 mm
Reach from Rear Axle Centerline at Ground Line	6740 mm	6746 mm	7672 mm
16 Reach from Swing Pivot at Ground Line	5650 mm	5656 mm	6582 mm
Maximum Operating Height	5664 mm	5664 mm	6260 mm
Loading Height	3990 mm	3999 mm	4595 mm
17 Loading Reach	1702 mm	1650 mm	2515 mm
Swing Arc	180°	180°	180°
Bucket Rotation	205°	205°	205°
18 Stabilizer Overall Width	2352 mm	2352 mm	2352 mm
Bucket Dig Force	63 445 N	63 417 N	63 417 N
Stick Dig Force	36 225 N	36 891 N	26 967 N

STANDARD & OPTIONAL EQUIPMENT

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

CAB ROPS AND FOPS	STANDARD	OPTIONAL
Cab, Standard	•	
Cab, Deluxe		•
TIRES/STEERING/BRAKES	STANDARD	OPTIONAL
All Wheel Drive	•	
100% Differential Lock	•	
Hydraulic Boosted Brakes	•	
Tires 26 inch	•	
Tires 28 inch		•
ENGINE/TRANSMISSION	STANDARD	OPTIONAL
Engine, C3.6 55.4 kW	•	
Engine, C3.6 70 kW		•
Engine, C3.6 74.4 kW		•
Battery, 750 CCA, Standard	•	
Battery, 750 CCA, Heavy Duty		•
Hinged Radiator Pack	•	
Auto Idle		•
Eco Mode		•
Standard Mode	•	
Standard + Mode		•
Engine Block Heater		•
Transmission Neutralizer	•	
Transmission, Four Speed Standard Shift	•	
Transmission, Four Speed Powershift (not on 55 kW engine)		•
Transmission, Six Speed Autoshift (not on 55 kW Engine)		•
Transmission, Six Speed Autoshift with Lock-Up Torque Converter (not on 55 kW engine)		•
CONTROLS	STANDARD	OPTIONAL
Controls, Mechanical Levers	•	
Controls, Pilot Hoe Joysticks		•
Pattern Selector (ISO/SAE)		•
Power Steering, Hydrostatic	•	
ELECTRICAL	STANDARD	OPTIONAL
Display Screen, Soft Key	•	
Display Screen, Touchscreen		•
Product Link Cellular	•	
Product Link, Dual Mode (cellular and satellite)		•
Reversing Alarm	•	
Stabilizer Alarm	•	
Beacon, Rotating		•
Beacon, Strobe		•
HYDRAULICS	STANDARD	OPTIONAL
Variable Displacement Piston Pump	•	
Hydraulic Quick Disconnects		•
Side Shift Lock	•	
Hydraulic Oil Cooler	•	
Hydraulic Lines, One Way		•
Hydraulic Lines, Two Way		•
Loader Kickout, Float	•	
Loader Kickout, Return to Dig	•	
Powered Side Shift		•
Ride Control		•
Continuous Flow		•
Programmable Auxiliary Flow		•
BOOMS, STICKS AND LINKAGES	STANDARD	OPTIONAL
Stick Standard, 4.3 m	•	
Stick Extending, 4.3 m		•
Hoe Quick Coupler, Mechanical		•
Hoe Quick Coupler, Hydraulic		•
Loader Quick Coupler, Hydraulic		•
Transport Lock, Swing	•	
Transport Lock, Boom	•	
OTHER ATTACHMENTS	STANDARD	OPTIONAL
Counterweight, 115 kg		•
Counterweight, 240 kg		•
Counterweight, 460 kg		•
Front Fenders		•
Street Pads, Stabilizers		•
External Tool Box	•	
Transport Tie Downs	•	

Not all features are available in all regions. Please check with your local Cat dealer for specific offering availability in your area.

For additional information, refer to the Technical Specifications brochure available at www.cat.com or your Cat dealer.