



# Cat<sup>®</sup> 120

## Motor Grader

***The Next Generation Cat<sup>®</sup> 120 Motor Grader with steering wheel and lever controls can save you up to 15 percent in fuel consumption. New cab and comfort options help improve performance as well as factory options such as Stable Blade to ensure finish surface quality while maximizing productivity and reducing rework. Not all features are available in all regions. Consult your Cat dealer for specific configurations available in your region.***

### **High Performance with Lower Fuel Consumption**

- Get to work with balanced weight and power in the Cat C7.1 engine.
- Increase your fuel economy up to 15 percent with the standard ECO mode.
- The powershift transmission works hard with machine balance to ensure drawbar power to the ground.
- Power train components are specifically made to be rebuilt.
- Stable Blade option senses blade bounce before you to reduce manual throttle use and site rework. When machine bounce is detected, the system automatically reduces ground speed eliminating bouncing to ensure a better grade finish.
- Product Link™ provides location, machine hours, fuel usage, productivity, idle time, diagnostic codes, and other machine data on demand through the VisionLink® online interface, which helps you improve job site efficiency with lower operating costs.
- Update machine software with Remote Services without taking the machine out of service.

### **New Cab Keeps You Comfortable All Day Long**

- Choose your comfort level in the cab with standard, comfort plus, and premium plus options.
- With one 254 mm (10 in) color monitor display screen, view your machine information from fuel levels to machine alerts. The anti-glare screen makes it easy to read no matter how bright it gets.
- Connect your phone with Bluetooth® or auxiliary cord option to listen to music and podcasts throughout your work day.
- Decrease clutter with more storage areas in the cab.
- The high capacity Heating, Ventilation and Air Conditioning (HVAC) system dehumidifies and pressurizes the cab, circulates fresh air, seals out dust and keeps windows clear from fogging.
  - With the auto-controlled climate option, you can set your ideal temperature.
- Easily add a radio to the cab using the built-in mounting location.
- Keep your phone charged with the optional USB charging port along with a spot designed to hold your phone.



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## Safety

- View your surroundings with the rear camera option to ensure the safety of you and those around you. The dedicated display can be always on to ensure a safe work environment.
  - The heated lens keeps the rearview camera clear.
- In the event of an engine stall, count on the secondary steering system option to help stop the machine safely.
- Ensure three points of contact when entering and exiting the machine with strategically placed walk ways and grab rails.
- Ground level engine shut-off switch stops all fuel to the engine when activated and shuts down the machine.
- See the rear of your machine with connecting windows.
- Work past sundown using the LED light option for increased night time visibility.

## Maintenance

- Filters, such as fuel, engine air, and oil filters, are grouped together for easy access and preventative maintenance.
- Be more environmentally friendly with the next generation filters to get up to 15 percent in reduced filtration costs.
- Maintain roads with the standard drawbar circle moldboard with hardened circle teeth for increased durability.
- Hydraulic brakes are oil cooled to prevent fade under extreme operation and ensure safer trouble-free stopping power.
- Lower costly repairs to your circle and pinion with the Circle Saver.

## Versatility

- Improve the balance of your machine with the counterweight or push block for increased performance and efficiency.
- Ripper and scarifier options are available to assist with grading hardened ground.
- The front lift group option is ready for attachments like the straight or front blade.
- For more road coverage, add a moldboard extension to add 605 mm (24 in).

## Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
<b>CAB</b>			<b>ENGINE</b>		
Vinyl Seat	✓		Cat C7.1	✓	
Cloth or Leather Seat		✓	ECO Mode	✓	
Steering Wheel/Lever Controls	✓		Engine Idle Shutdown System	✓	
ROPS	✓		Hydraulic Demand Fan	✓	
Heating/Cooling Cab System	✓		<b>DRAWBAR CIRCLE MOLDBOARD</b>		
Rear Wiper		✓	Standard	✓	
Base Cab	✓		Circle Drive Slip Clutch	✓	
Comfort Plus		✓	Circle Saver		✓
Premium Plus		✓	<b>SAFETY</b>		
Seat Belt Indicator		✓	Parking Brake	✓	
203 mm (8 in) Touchscreen Monitor		✓	Signaling/Warning Horn	✓	
254 mm (10 in) Information Display	✓		Rearview Mirror	✓	
Heated/Cooled Seat		✓	Rearview Camera		✓
Bluetooth/Auxiliary Radio		✓	Hydraulic Brakes	✓	
Halogen Lighting	✓		Secondary Steering System		✓
LED Lighting		✓	Side View Mirrors	✓	
Rear Window Screen		✓	Walkways and Grab Rails	✓	
<b>CAT TECHNOLOGY</b>			<b>VERSATILITY</b>		
Stable Blade		✓	Counterweight		✓
Product Link	✓		Push Block		✓
Remote Services		✓	Ripper		✓
			Scarifier		✓
			Front Blade		✓

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## Technical Specifications

### Engine

Engine Model	Cat 7.1	
Emissions	China Nonroad Stage III, equivalent to U.S. EPA Tier 3/ EU Stage IIIA	
Engine Power (ISO 9249)	93 kW-116 kW	125 hp-156 hp
Engine RPM	2,000 rpm	
Displacement	7.01 L	427.8 in <sup>3</sup>
Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Torque Rise ISO 9249	42%	
Maximum Torque ISO 9249	822 N·m	606 lbf·ft
Number of Cylinders	6	
Derating Altitude	3000 m	9,842.5 ft
Standard Capability	50° C	122° F
<ul style="list-style-type: none"> <li>• Engine power is tested per ISO 9249, SAE J1349, and EEC 80/1269 Standards in effect at the time of manufacture.</li> <li>• Engine power advertised is the power available at rated speed of 2,000 rpm, measured at the flywheel when engine is equipped with fan, air cleaner, muffler and alternator.</li> <li>• Power as declared per ISO 14396.</li> </ul>		

### Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.6 kg of refrigerant which has a CO<sub>2</sub> equivalent of 2.288 metric tonnes.

### Service Refill Capacities

Fuel Tank	246 L	65 gal
Circle Drive	7 L	1.8 gal
Engine Crankcase	18 L	4.8 gal
Cooling System	52.5 L	14 gal
Hydraulic System	75 L	19.8 gal
Transmission and Differential	60 L	15.9 gal

### Machine Weight

Weight*	15 699 kg	34,610 lb
*Typically equipped includes ROPS cabin, 4267 mm (14 ft) plus blade, 14.00R24 tires, push plate, ripper, bottom guard, operator, and full fluids.		

### Dimensions

Length of Machine*	9838 mm	387 in
Maximum Height	3440 mm	135.4 in
Width	2592 mm	102 in
*Typically equipped with push block and ripper.		

### Moldboard

Blade Width	3.7 m	12 ft
Blade Height	610 mm	24 in
Arc Radius	413 mm	16.3 in
Throat Clearance	105 mm	4.1 in
End Bit Width	152 mm	6 in
Cutting Edge Width	152 mm	6 in

### Blade Range

Circle Center Shift – Right	656 mm	26 in
Circle Center Shift – Left	656 mm	26 in
Moldboard Side Shift – Right	663 mm	26.1 in
Moldboard Side Shift – Left	512 mm	20.1 in
Blade Tip Range – Forward	40°	
Blade Tip Range – Backward	5°	
Maximum Shoulder Reach – Right	1928 mm	76 in
Maximum Shoulder Reach – Left	1764 mm	69.4 in
Maximum Lift Above Ground	410 mm	16.1 in
Maximum Depth of Cut	775 mm	30.5 in

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