

# 120

## MOTOR GRADER



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**Engine Power**  
**Operating Weight**

134 kW (180 hp)  
16 831 kg (37,106 lb)

Cat® C7.1 Engine meets U.S. EPA Tier 4 Final and EU Stage V emission standards.



The Next Generation **Cat® 120** Motor Grader combines AWD power, joystick or steering controls, and advanced grade control technology for optimal precision. Comfort cab and integrated features make it ideal for site preparation.

# THE CAT® 120

THE NEXT GENERATION



## GRADING THE ROAD AHEAD

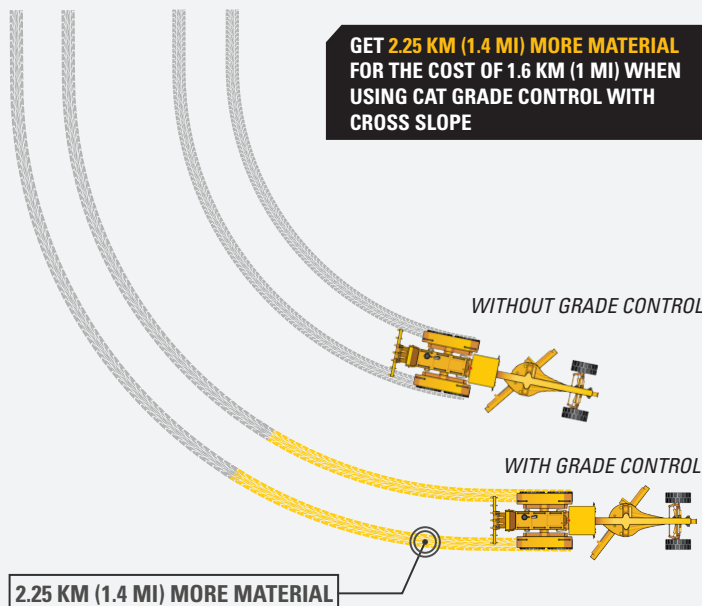
The Cat 120 Motor Grader offers you total machine options, including technology, controls, and cab to power through any job with the utmost performance.

- + INCREASED FUEL ECONOMY WITH THE C7.1 ENGINE
- + NEXT GENERATION CAB OPTIONS FOR MAXIMUM COMFORT
- + SPEND LESS TIME AND MONEY ON REGULAR MAINTENANCE



## SAVE MORE MATERIAL.

Use 40% less material with Cat Grade with Cross Slope Assist.



### SCENARIO:

1559 M<sup>3</sup>/KM (2,039 YD<sup>3</sup>/MI) MOVED WITH NON-GRADE CONTROL – 924 M<sup>3</sup>/KM (1,208 YD<sup>3</sup>/MI) MOVED WITH GRADE CONTROL = 635 M<sup>3</sup>/KM (831 YD<sup>3</sup>/MI) MATERIAL SAVED

## FUEL-EFFICIENT POWER<sup>1</sup>

The 120 delivers increased fuel economy while maintaining a balanced weight-to-power ratio through the C7.1 engine. Power is optimized across all gears to ensure smooth and efficient performance in every operating condition.

## OPERATOR-FIRST DESIGN

The cab features an adjustable heated and cooled seat, touchscreen display with Cat Grade tech, automatic climate control,<sup>1</sup> and enhanced rear visibility for improved comfort and efficiency.

## REDUCED MAINTENANCE COSTS<sup>2</sup>

Benefit from longer maintenance intervals, advanced filtration technology, and precise control with the top-adjust drawbar option for consistent, reliable accuracy.

<sup>1</sup> JOY configuration only.

<sup>2</sup> Compared to 120K and 120M2.

# REAL-TIME INFORMATION FROM CAT EQUIPMENT MANAGEMENT TAKES THE GUESSWORK OUT OF MANAGING YOUR EQUIPMENT

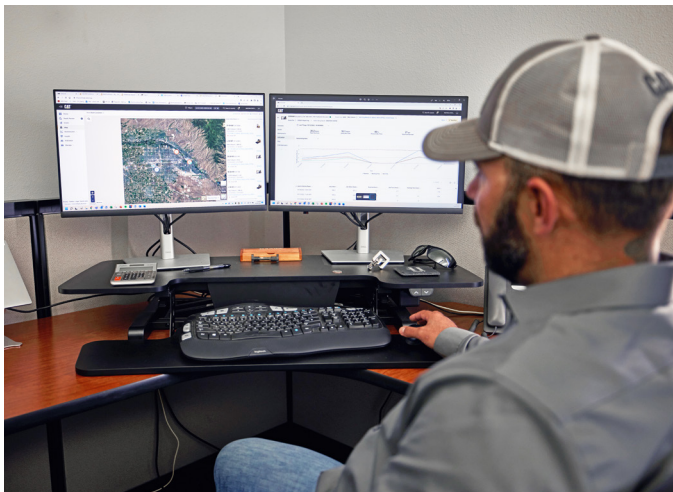
Cat Equipment Management technologies work together to put equipment information at your fingertips. Get real-time access to information on every machine in your fleet on any jobsite – no matter the size of the operation or the brands of equipment you run.



## VISIONLINK™

Gather and summarize machine telematics and jobsite data from all your equipment – regardless of the manufacturer.\* View actionable information such as idle time, fuel burn, location, total cycles, and more to improve machine efficiency, productivity, and utilization. Access data anywhere via a mobile, tablet, or desktop device – on or off the jobsite.

\* Data field availability can vary by equipment manufacturer. VisionLink subscription required. Availability may vary by region. Consult your Cat dealer for more details.



## CAT REMOTE SERVICES\*

A suite of technologies that improve your jobsite efficiency.

- + Remote Troubleshoot allows your Cat dealer to perform diagnostic testing on your connected machine remotely, pinpointing potential issues while the machine is in operation. Remote troubleshooting helps to ensure the technician arrives with the correct parts and tools the first time, eliminating additional trips, to save you time and money.
- + Remote Flash allows you to update onboard software without a technician being present, allowing you to initiate software updates when convenient, increasing your overall operating efficiency.
- + Operator ID requires operators to log in via Passcode or Bluetooth® (Cat Key Fob) at machine startup, helping to deter theft, vandalism, and unauthorized use. It saves settings from the last time an operator was logged in and maintains profiles that were retained during machine software flash updates. Operator IDs are easily managed through the touchscreen and can also be managed remotely and uploaded to the machine through Visionlink.

\* Must be within cell range coverage.



## CAT INSPECT

Cat Inspect is a mobile application that allows you to easily perform digital preventative maintenance checks, inspections, and daily walkarounds. The app includes machine-specific Preventive Maintenance (PM) checklists to perform service intervals as recommended in the Operation and Maintenance Manual. Inspections can easily be integrated with other Cat data systems like VisionLink, so you can keep a close eye on your fleet.

## OPTIONAL CAT GRADE TECHNOLOGY

### DIGITAL BLADE SLOPE METER

View blade slope on the integrated machine display with the Digital Blade Slope Meter. Reduce the need for manual grade checking to keep you and your worksite safer.

### CROSS SLOPE

Cat Grade with Cross Slope<sup>1</sup> saves you up to 40% in material. Cross Slope is an integrated system that enables you to achieve grade faster and more accurately by automating the cross slope of the blade and keeps your slope consistent.

### ADDITIONAL OPTIONS

Cat Grade with Attachment Ready Option (ARO) gives your machine the connections to add on future Cat Grade or other grade control systems to help you get the most out of your motor grader. Stable Blade helps improve your finished surface quality by reducing machine bounce.

<sup>1</sup>Top Adjust only.



LOWER REGULAR

# MAINTENANCE COSTS



## NEXT GENERATION FILTERS

New filtration system makes changing filters a breeze. The filters inside the cartridge are replaced instead of the entire canister to save in costs.

## LONGER SERVICE INTERVALS

Reduce your typical operating expenses with extended engine oil, hydraulic, and transmission filter change cycles. The new filters last longer to keep your motor grader active on the jobsite.

## GROUPED LOCATION

Service your machine faster with the filters in a central location. Filters are grouped together for easy access so you can do preventative maintenance quickly and move on to the next task.

## GET THE CONTROL POWER THAT YOU NEED WITH THE ALL-WHEEL DRIVE OPTION

Providing maximum power and full power turns, the all-wheel drive (AWD) option helps keep your tires moving, even if it's muddy.



# MAXIMUM TRACTION WITH **ALL-WHEEL DRIVE**

The AWD option assists with traction and maneuvering in loose material. The increased power with AWD handles rough terrain with extra traction for better productivity.

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## CONTROL OPTIONS

Get the job done with a choice of joysticks or steering wheel and lever controls. Integrated technology options put more productivity at your fingertips.

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## IMPROVED VENTILATION

The ISO-certified rollover protective structure (ROPS) cab is pressurized to lock out noise. The heating and cooling system keeps you at your ideal temperature throughout the day.

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## MULTIPLE CAB OPTIONS

Your cab is like your office. Choose the options that you want to work comfortably, like adjustable seats. Heated/cooled seat options are available.

GROUND-UP REDESIGN

# NEXT GENERATION COMFORT





## EASY ON AND OFF

Work safely using three points of contact when entering and exiting the machine with strategically placed walkways and grab rails.



## EXTRAORDINARY VISIBILITY

View your jobsite through connecting glass windows, rear- and side-view mirrors. Rearview camera option offers a wide view of the back of the machine for better visibility.



## STOP SAFELY

If the engine stalls or main pump pressure drops, the secondary steering system<sup>1</sup> automatically activates to help you steer safely to a stop.



## CONVENIENT SETTINGS

Get all the settings information that you need, including integrated technology options, on the touchscreen display.

<sup>1</sup> Secondary steering system is standard for JOY and optional for LVR.

# WORK MORE... FUEL LESS

Save fuel with the Next Generation Cat® 120 Motor Grader

## BETTER FUEL ECONOMY

Grade longer while using the same amount of fuel with Eco mode. Eco mode is an easy selection in your information display screen. Less stopping means more production. Ground level fuel fill keeps you from climbing onto the machine to get you back to work faster.



### SCENARIO:

SAVINGS COMPARISON IS BASED ON 120M AND 120K CAT MOTOR GRADERS.





**LESS TIME**  
**LOWER COST**

Keep your circle moldboard tight for precise grading throughout the motor grader's life. Durable structures with drawbar circle moldboard adjustments save you service time using replaceable wear inserts.

#### **TOP ADJUST CIRCLE**

- + EASY ACCESS
- + MAXIMUM TIGHTNESS
- + REMOVABLE ACCESS PLATES



UP TO **20%** MAINTENANCE SAVINGS  
WITH TOP ADJUST

# SEE YOUR INVESTMENT GO FURTHER DESIGNED TO LAST

## MAXIMIZE COMPONENT LIFE

Reduce daily greasing requirements and costly repairs to your circle and pinion with the Circle Saver option. The grease fitting is easy to access and maintain.

## PRESERVE YOUR MACHINE

The standard circle drive slip clutch protects your pinion drive and circle teeth from potential damage.

## REDUCE DAMAGE

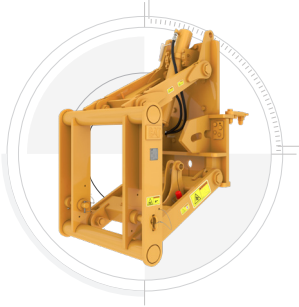
Keep your machine running smoothly in demanding applications with optional guarding. Guards defend against potential damage to your transmission, filter, front axles, and window guards.



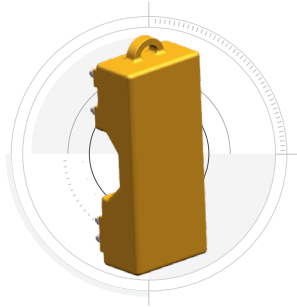
# INCREASE YOUR PRODUCTIVITY AND PROFIT WITH CAT ATTACHMENTS

You can easily expand the performance of your machine by utilizing the variety of Cat attachments available for motor graders. Each Cat attachment is designed to fit the weight and horsepower of your machine for improved performance, safety, and stability.

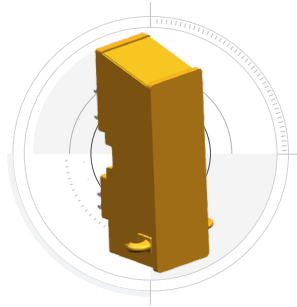
**LIFT GROUPS**



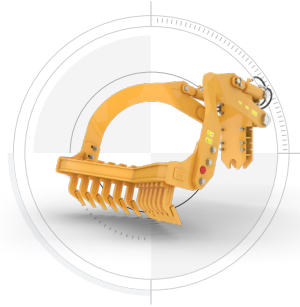
**COUNTERWEIGHT**



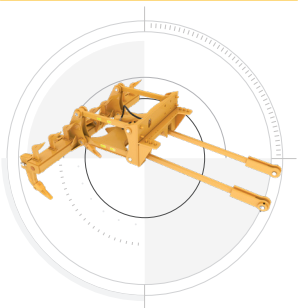
**PUSHBLOCK**



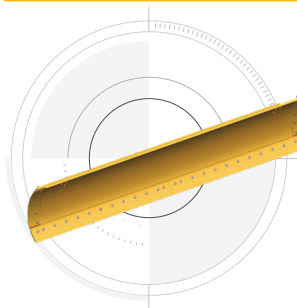
**MID-MACHINE SCARIFIER**



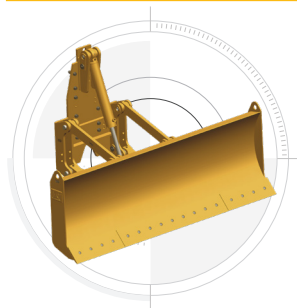
**REAR RIPPER**



**MOLDBOARDS**



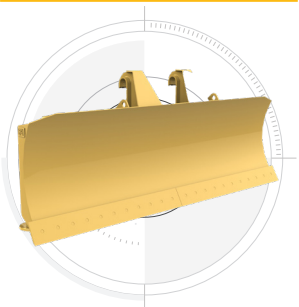
**FRONT BLADE**



**V-PLOW**



**STRAIGHT PLOW**



**BROOMS<sup>1</sup>**



<sup>1</sup> JOY configuration only.

# TECHNICAL SPECIFICATIONS

POWERTRAIN		
Engine Model	Cat® C7.1	
Emissions	Meets U.S. EPA Tier 4 Final/EU Stage V emission standards	
Net Engine Power Range (Tandem) (LVR Configuration) ISO 9249	81 - 134 kW 109 - 180 hp	
Net Engine Power Range (AWD) (LVR Configuration) ISO 9249	81 - 134 kW 109 - 180 hp	
Net Engine Power Range (Tandem) (JOY Configuration) ISO 9249	85 - 129 kW 114 - 173 hp	
Net Engine Power Range (AWD) (JOY Configuration) ISO 9249	84 - 129 kW 113 - 173 hp	
Bore	105 mm	4.1 in
Stroke	135 mm	5.3 in
Displacement	7.01 L	1.9 gal
Torque Rise (Tandem)	29%	
Torque Rise (AWD)	29%	
Maximum Torque	822 N•m	606 lbf-ft
Rated Speed	2,000 rpm	
Number of Cylinders	6	
<ul style="list-style-type: none"> <li>• Advertised power is tested per the specified standard in effect at the time of manufacture.</li> <li>• Net power available at the flywheel when the engine is equipped with fan, air cleaner, aftertreatment, and alternator with engine speed at 2,000 rpm.</li> </ul>		
WEIGHT		
Weight, Typically Equipped (LVR Configuration)	16 831 kg	37,106 lb
Front Axle	4666 kg	10,287 lb
Rear Axle	12 165 kg	26,819 lb
Weight, Typically Equipped (JOY Configuration)	17 081 kg	37,657 lb
Front Axle	4846 kg	10,684 lb
Rear Axle	12 235 kg	26,974 lb
AIR CONDITIONING SYSTEM		
<p>The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a or R1234yf. Refer to the machine labeling for identification of the gas</p> <ul style="list-style-type: none"> <li>– If equipped with R134a (Global Warming Potential = 1430), the system contains 1.6 kg (3.5 lb) of refrigerant which has a CO<sub>2</sub> equivalent of 2.288 metric tonnes (2.521 tons).</li> </ul>		

SERVICE REFILL CAPACITIES		
Standard Circle Drive	7 L	1.8 gal
Cooling System	53 L	14.0 gal
Diesel Exhaust Fluid	11 L	2.9 gal
Engine Crankcase	18 L	4.8 gal
Fuel Tank	246 L	65.0 gal
Hydraulic System (Non-AWD)	94 L	24.8 gal
Hydraulic System (AWD)	124 L	32.8 gal
Tandem Housing (each)	60 L	15.9 gal
Transmission and Differential	64 L	16.9 gal
MOLDBOARD		
Height	490 mm	19.3 in
Width	3556 mm	12 ft
Thickness	22 mm	0.9 in
Arc Radius	413 mm	16.3 in
Throat Clearance	105 mm	4.1 in
BLADE RANGE		
Circle Center Shift		
Left	656 mm	25.8 in
Right	656 mm	25.8 in
Moldboard Side Shift with 17.5/R25 tires		
Left	512 mm	20.2 in
Right	663 mm	26.1 in
Maximum Shoulder Reach Outside of Tires (12 ft moldboard)		
Left	141 mm	5.6 in
Right	1579 mm	62.2 in
Maximum Blade Tip		
Forward		40°
Rear		5°

# STANDARD AND OPTIONAL EQUIPMENT

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

POWERTRAIN	STANDARD	OPTIONAL
Cat® C7.1 Engine	•	
Eco mode	•	
All-Wheel Drive (AWD)		•
50° C (122° F) Ambient Capacity	•	
Engine Idle Shutdown Timer	•	
Differential Lock	•	
Hydraulic Demand Fan	•	
Reversing Fan		•
CAB	STANDARD	OPTIONAL
ROPS/FOPS	•	
Mechanical Suspension Seat	•	
Touchscreen Display	•	
Adjustable Control Console (Levers)	•	
Entertainment Radio Ready	•	
Halogen Lighting	•	
LED Lighting		•
USB/Auxiliary Radio		•
CAT TECHNOLOGY	STANDARD	OPTIONAL
VisionLink™	•	
Cat Grade Attachment Ready Option (ARO)		•
Cat Grade Cross Slope		•
Stable Blade		•
Remote Services		•

DRAWBAR CIRCLE MOLDBOARD	STANDARD	OPTIONAL
Blade Lift Accumulators		•
Circle Drive Slip Clutch	•	
Circle Saver		•
Cutting Edges		•
Grader Bits		•
Moldboard 12 ft	•	
Moldboard 14 ft		•
Standard Drawbar Circle Moldboard	•	
Top Adjust Drawbar Circle Moldboard		•
SAFETY AND SECURITY	STANDARD	OPTIONAL
Rearview Mirror	•	
Side-View Mirror	•	
Signaling/Warning Horn	•	
Secondary Steering System (JOY)	•	
Secondary Steering System (LVR)		•
Rearview Camera		•
Hydraulic Brakes	•	
Seat Belt	•	
Seat Belt Indicator (LVR)		•
SERVICE AND MAINTENANCE	STANDARD	OPTIONAL
Ground-Level and Fuel Fill	•	
Grouped Location for Engine Oil and Fuel Filters	•	
Extended Life Coolant	•	
ATTACHMENTS	STANDARD	OPTIONAL
Broom (JOY)		•
Counterweight		•
Front Blade		•
Heavy Duty Ripper		•
Lift Groups		•
Mid-machine Scarifier		•
Push Block		•
Rear Ripper/Scarifier		•
Straight Plow		•
V-Plow		•

For more complete information on Cat products, dealer services and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com).

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

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AEXQ4463-00 (02-2026)  
LVR Build Number 15A  
JOY Build Number 14B  
(N Am, Chile, Colombia,  
Europe, Korea, Türkiye)

