

Cat® AP500

Asphalt Paver

The Cat® AP500 Asphalt Paver is designed for urban streets, car parks, rural roads and many other small to intermediate-type applications. This paver provides high throughput capability as-well-as application versatility, easy set-up, and a wide paving range.

More Performance and Flexibility

- Powerful C4.4 engine supports increased feeder system capacity as well as hopper inserts for continuous paving
- Tight 90° turning capability enables the paver to rotate and cover its tracks on a return paving pass
- Standard paving range utilizing the SE47 VT screed is 2.4 m - 4.7 m (7' 10" - 15' 4") with a maximum width of 6 m (19' 8")
- Standard paving range utilizing the the SE50 VT is 2.55 m - 5.0 m (8' - 15'6") with a maximum width of 6.77 m (22' 3")
- Paving depths up to 300 mm (12") supports aggregate paving applications

Transport Made Easy

- Machine weight of less than 14.5 mt (32,000 lb) paver and screed combination enables easy transport on a variety of trailer types
- Length of less than 5.7 m (18' 9") and width of 2.55 m (8' 4") when equipped with the SE47 VT accommodates machine transport without special permits
- Length of less than 6.0 m (19' 6") and width of 2.55 m (8' 4") when equipped with the SE50 VT and folding end-gates accommodates machine transport without special permits
- The front-loading angle of 17° and high front bumper clearance reduces the need for additional blocking when loading onto various trailer designs
- Front, middle, and rear tie-down locations make securing the paver highly efficient for quick travel to the next job site

Exceptional Mobility With Fast Travel Speed

- Wheel undercarriage provides exceptional mobility and fast travel speeds for unmatched maneuverability around the job site
- Excellent traction is delivered through the 17.5 R25 radial drive tires
- Front-wheel assist option provides power to the rear set of bogie wheels for excellent performance in tough conditions
- All-wheel drive option utilizes a flow divider to deliver power to both sets of front bogie wheels for additional pulling power
- High ground clearance of 197 mm (7.8") helps avoid storm drains, curbs, and other obstacles

Smooth Material Flow

- Optimized hopper design with low truck entry height and short front apron enhances material flow while simplifying clean-out
- Enhanced feeder system with 355 mm (14") diameter augers provides consistent material flow across the screed for efficient flow at both narrow and wide paving widths
- Confined auger chamber keeps material moving and helps eliminate stagnate patches
- Independent control of each material feed sensor when utilizing a cut-off shoe, simply turn off the sensor for manual proportional feed control

More Comfort

- Ventilation system option draws fumes from the auger chamber and redirects them away from the operator for a more comfortable working environment
- The single sliding console provides operation from either side of the machine for optimal visibility to curbs, edges, and transverse joints
- Dual independent seats swing out 40º beyond the platform for good visibility to curbs and obstacles
- Optimized height and integrated exhaust provide unobstructed visibility around the machine
- Optional screed and paver mounted umbrellas offer protection from direct sunlight
- Heated seat option delivers comfort in cool weather
- High visibility 76 mm (3") seat belt assists with crew safety compliance

Easy Viewing Displays, Simple Operation

- High-definition, touchscreen displays with adjustable brightness control for all types of lighting conditions, including direct sunlight
- High-visibility touch screen operating display with simplified menu structures, intuitive graphics, and short-cut keys help simplify machine adjustments
- Single-touch functions from main screen include screed heat, wash-down system, vibratory activation, ventilation system, accessory panel
- Cat® Grade Control or Basic Grade Control options available
- Operating displays can be tailored to specific language requirements with multiple options available
- Wash-down system includes level indication

Cat Electronics

- Cat Electronic Control Modules (ECM) and Electronic Technician (ET) compatibility simplifies diagnostics and trouble-shooting procedures
- Dedicated auto reset circuit breaker for material sensors

Low Owning and Operating Costs

- Durable Cat C4.4 engine provides 110 kW (148 hp) of power with variations that meet U.S. EPA Tier 4 Final and EU Stage V emission standards. The Cat C4.4 engine also meets Brazil MAR-1 and UN ECE R96 Stage IIIA emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
- Single source supplier of Cat engines and machine parts helps maximize uptime
- Exclusive Eco-mode and Automatic Engine Speed Control reduce fuel consumption and lower sound levels for better comfort and communication
- Conveyor bed plates and chain guards designed to minimize labor requirements and provide lower cost replacement
- Maintenance-free high torque motors reduce service requirements for the auger and conveyor drive systems

Product Link™ Elite

- Make timely, fact-based decisions to maximize efficiency, improve productivity, and lower owning and operating costs
- Easily track location, machine hours, fuel usage, and idle time in real time
- Diagnostic codes are made available through online web applications
- Remote flash for easy software updates
- Scheduled maintenance and Scheduled Oil Sampling notification
- Remote disable deactivates the engine for enhanced security

Service and Repair Kits

- Paver and screed service and repair kits include the parts necessary to complete specific repairs
- Cat genuine parts are manufactured to precise specifications and designed for optimal performance and maximum uptime
- Repair kits are identified by a single part number to make ordering easy
- Select kits are available to be packaged as a kit by the dealer for over-the-counter purchases or through the dealer service shop

Standard and Optional Equipment

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

	Standard	Optional
OPERATING ENVIRONMENT		
Canopy – hydraulic lift – manual		✓
Canopy – hydraulic lift – power		✓
Deceleration pedal		✓
Dual operating consoles		✓
Heated seat		✓
Side shields		✓
Single operating console	✓	
Steering guide	✓	
Umbrella – tractor or screed		✓
Ventilation system		✓
Windshield – requires canopy		✓
TECHNOLOGY		
Cat® Grade Control		✓
Basic Grade Control		✓
Product Link™ Elite 643 (cellular)	✓	
Product Link Elite 683 (cellular/satellite)		✓
POWERTRAIN		
All-wheel drive		✓
Ballast – front weights		✓
Cat C4.4 – four-cylinder	✓	
Cooling fan – variable speed	✓	
Front-wheel assist		✓
Radial drive tires	✓	
ELECTRICAL SYSTEM		
1400 CCA battery – maintenance free	✓	
150-amp alternator	✓	
12-volt charging system	✓	
Automotive-type fuse system	✓	
Auto-reset breaker for material feed sensors	✓	
Cat Electronic Technician (Cat ET)	✓	

	Standard	Optional
MATERIAL DELIVERY		
Auger extensions – 0.15 m (6")	✓	
Auger extensions – 0.46 m (1.5')		✓
Mainframe extensions – power		✓
Mainframe extensions – manual		✓
Material feed sensors – contact	✓	
Material feed sensors – sonic		✓
Push-roller – adjustable	✓	
Tamper bar system	✓	
Wash-down pump and reel		✓
SERVICE AND MAINTENANCE		
Hydraulic oil – Cat® HYDO™ Advanced	✓	
Remote access drains	✓	
Remote flash	✓	
Service repair kits	✓	
Sampling ports for Scheduled Oil Sampling (S·O·S℠)	✓	
Sight Gauges - engine coolant, hydraulic oil	✓	
SAFETY		
Alarm – back-up	✓	
Horn – warning (front & rear)	✓	
Lights – LED Working	✓	
Lights – LED Roading		✓
Mirror package	✓	
Warning beacon – LED		✓

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Technical Specifications

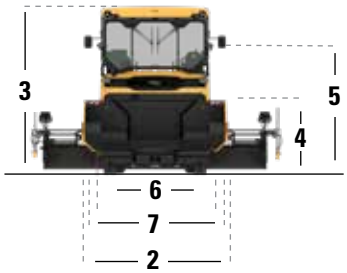
PowerTrain		
Engine Model	Cat C4.4	
Engine Power @ 2200 rpm (ISO 14396-2002)	110 kW	148 hp
Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.		
Engine Model	Cat C4.4	
Engine Power @ 2200 rpm (ISO 14396-2002)	106 kW	142 hp
Meets Brazil MAR-1 and UN ECE R96 Stage IIIA emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.		
Speed – paving	61 m/min	200 ft/min
Speed – travel	16 km/hr	10 mph
Tire size	17.5 R25	

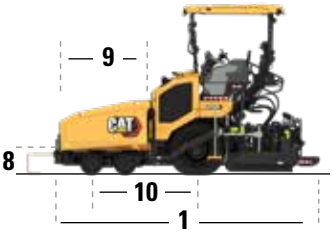
Machine Weight		
Paver only (shipping)	12 026 kg	26,513 lb
w/SE47 VT screed (operating)	15 351 kg	33,843 lb
w/SE50 VT screed (operating)	15 430 kg	34,017 lb
Operating Weights are approximate and include canopy, coolant, lubricants, full fuel tank , 75 kg (165 lb) operator, and grade control components.		

Service Refill Capacities		
Maximum throughput capacity	1000 Tonnes	1100 US Tons
Hopper capacity	6.1 m^3	215 ft^3
Fuel Tank	200 L	53 gal
Cooling System	24 L	6.3 gal
Engine Oil	9 L	2.4 gal
Hydraulic Tank	121 L	32 gal
DEF Tank *(U.S. Tier 4 Final, EU Stage V only)*	19 L	5 gal
Washdown Spray Tank	32 L	8.5 gal

Paving Range		
SE47 VT		
Standard range	2.4 m - 4.7 m	7' 10" - 15' 4"
Maximum width w/extensions	6.0 m	19' 8"
SE50 VT		
Standard range	2.55 m - 5.0 m	8' 4" - 16' 4"
Maximum width w/extensions	6.77 m	22' 3"

Dimensions			
1	Operating length – SE47 VT screed	5938 mm	19' 6"
	Shipping length – SE47 VT screed	5707 mm	18' 9"
1	Operating length – SE50 VT screed	5944 mm	19' 6"
	Shipping length – SE50 VT screed	5712 mm	18' 9"
	Shipping length – SE50 VT screed, folding end gate	5952 mm	19' 6"
2	Operating width (hoppers lowered)	3281 mm	10' 9"
3	Operating height	3903 mm	12' 9"
4	Operating platform height	1731 mm	5' 8"
5	Transport height	2999 mm	9' 10"
6	Transport width – SE47 VT	2550 mm	8' 4"
	Transport width – SE50 VT, folding end gates	2550 mm	8' 4"
7	Truck entry width	3149 mm	10' 4"
8	Truck entry height (hopper)	537 mm	21"
	Truck entry height (apron)	507 mm	20"
	Ground clearance	182 mm	7"
9	Hopper length	1925 mm	6' 4"
10	Axle to axle - center drive to front idler	2338 mm	7' 8"
	Auger diameter	355 mm	14"





Environmental Declaration

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit www.caterpillar.com/en/company/sustainability.html.

ENGINE

- The Cat® C4.4 engine is available in configurations that meet U.S. EPA Tier 4 Final and EU Stage V emission standards.
- The Cat® C4.4 engine is available in configurations that meet Brazil MAR-1 and UN ECE R96 Stage IIIA emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
- Cat U.S. EPA Tier 4 Final and EU Stage V diesel engines are required to use ULSD (ultra-low sulfur diesel fuel with 15 ppm of sulfur or less) or ULSD blended with the following lower-carbon intensity fuels up to:
  - ✓ 20% biodiesel FAME (fatty acid methyl ester)*
  - ✓ 100% renewable diesel, HVO (hydrogenated vegetable oil) and GTL (gas-to-liquid) fuels
- Cat engines meeting Brazil Mar-1 or UN ECE R96 Stage IIIA, equivalent to U.S. EPA Tier 3 and EU Stage IIIA, are compatible with diesel fuel blended with the following lower-carbon intensity fuels up to:
  - ✓ 100% biodiesel FAME (fatty acid methyl ester)**
  - ✓ 100% renewable diesel, HVO (hydrogenated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

**Engines with no aftertreatment devices can use higher blends, up to 100% biodiesel.*
*** For use of blends higher than 20% biodiesel, consult your Cat dealer.*

PAINT

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
  – Barium < 0.01%
  – Cadmium < 0.01%
  – Chromium < 0.01%
  – Lead < 0.01%

SOUND PERFORMANCE

With cooling fan speed at 70% of maximum value, engines meeting U.S. EPA Tier 4 Final or EU Stage V, and tamper bar screeds:

Operator Sound Pressure Level – 91 dB(A) European Directive 2000/14/EC, ISO 11201, EN 500-1, and EN 500-6
Exterior Sound Power Level – 104 dB(A) European Directive 2000/14/EC, European Directive 2005/88/EC, ISO 3744, EN 500-1, and EN 500-6

With cooling fan speed at 70% of maximum value, engines meeting Brazil MAR-1 or UN ECE R96 Stage IIIA, equivalent to U.S. EPA Tier 3 and EU Stage IIIA, and tamper bar screeds:

Operator Sound Pressure Level – 89 dB(A) European Directive 2000/14/EC, ISO 11201, EN 500-1, and EN 500-6
Exterior Sound Power Level – 104 dB(A) European Directive 2000/14/EC, European Directive 2005/88/EC, ISO 3744, EN 500-1, and EN 500-6

- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in a noisy environment.

OILS AND FLUIDS

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO™ Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

FEATURES AND TECHNOLOGY

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
  – Eco-mode operates at a lower rpm to minimize fuel consumption
  – Automatic engine speed control modifies engine speed when moved to and from neutral to enhance fuel efficiency
  – Advanced Eco-mode combines automatic engine speed control and Eco-mode to modify engine speed based on engine load, conserving fuel and increasing efficiency
  – Extended maintenance intervals reduce fluid and filter consumption

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