

# Cat® AP455

Asphalt Paver

The Cat® AP455 Mobil-trac™ Asphalt Paver delivers excellent traction and mobility as-well-as, easy set-up, and a wide paving range, making it the perfect fit for urban streets, parking lots, rural roads and many other small to intermediate-type applications.

### **Compact Size With Big Opportunities**

- The compact size and small footprint simplify maneuverability in tight spaces for efficient work in urban-type applictions
- Tight 90° turning capability enables the paver to rotate and cover 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")
- Paving depths up to 300 mm (12") supports aggregate paving applications

### **Transport Made Easy**

- Machine weight of 14.9 mt (32,913 lb) paver and screed combination enables easy transport on a variety of trailer types
- Length of less than 5.6 m (18' 4") and width of 2.55 m (8' 4") accommodates machine transport without special permits. When equipped with 225 mm (9') extensions, transport width is 3 m (10') and paving width extends to 5.1 m (16')
- The front-loading angle of 18° and high front bumper clearance reduces the need for additional blocking when loading onto various trailer designs
- Raising or retracting the canopy is fast and easy with both electric or manual options available
- Front, middle, and rear tie-down locations make securing the paver efficient for quick travel to the next job site

### **Exceptional Mobility With Fast Travel Speed**

- Mobil-trac<sup>™</sup> undercarriage provides exceptional mobility, outstanding traction, and fast travel speeds for unmatched maneuverability around the job site
- Counter-rotating tracks provide excellent maneuverability in tight quarters
- Self-tensioning accumulators, center guide blocks, and rugged internal belt cables help ensure durability
- Rubber-coated components help shed asphalt and prevent accumulation
- Efficient track plow design pushes material away from the tracks and helps eliminate cold patches caused by track compression

#### **Smooth Material Flow**

- Single amplitude tamper system with variable frequency screed plate vibration delivers excellent material flow and tight mat textures
- Low truck entry height and short front apron enhances material flow while simplifying clean-out
- Feeder system design with 355 mm (14") diameter augers provides consistent material flow across the screed for efficient flow at both narrow and wide paving widths
- Narrow auger chamber keeps material moving and helps eliminate stagnate patches
- Independent control of each material feed sensor, simply turn off the sensor for manual proportional feed control



#### **More Comfort**

- Optional ventilation system draws fumes from the auger chamber and redirects them away from the operator for a more comfortable working environment
- Single sliding console enables operation from either side of the machine
- Dual independent seats swing out 40° 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 conditions
- High visibility 76 mm (3") seat belt helps 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
- New 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, and the 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 C3.6 engine provides 90 kW (120 hp) of power with variations that meet U.S. EPA Tier 4 Final and EU Stage V emission standards. The Cat 3.6 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 all 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 overthe-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 lif t – manual		✓
Canopy – hydraulic lif t – power		✓
Deceleration pedal		✓
Heated Seat		✓
Single sliding console	✓	
Steering guide	✓	
Steering – friction		✓
Steering – spring return	✓	
Umbrella – tractor or screed		✓
Ventilation system		✓
Side shields		✓
Windshield – requires canopy		✓
TECHNOLOGY		
Cat® Grade Control		✓
Basic Grade Control		✓
Product Link™ Elite 643 (cellular)	✓	
Product Link Elite 683 (cellular/satellite)		✓
POWERTRAIN		
Ballast – front weights		✓
Cat C3.6 – four-cylinder	✓	
Cooling fan- variable speed	✓	
Mobil-trac™ belt – smooth belt	✓	
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	Optiona
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 – single amplitude	✓	
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 $(S \cdot O \cdot S^{SM})$	✓	
Sight Gauges – engine coolant, hydraulic oil	<b>√</b>	
SAFETY		
Alarm, back-up	✓	
Horn, warning (front & rear)	✓	
Lights – LED Working	✓	
Lights – LED Roading		✓
Mirror package	✓	
Warning beacon – LED		

### **Technical Specifications**

Washdown Spray Tank

Power Train			
Engine model	Cat C3.6		
Engine power @ 2200 rpm (ISO 14396-2002)	90 kW	120 hp	
Meets U.S. EPA Tier 4 Final and EU Stage V emission standards.			
Engine model	Cat C3.6		
Engine power @ 2200 rpm (ISO 14396-2002)	90 kW	120 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	11 km/hr	7 mph	

Machine Weight		
Paver only (shipping)	11 266 kg	24,837 lb
w/SE47 VT screed (operating)	14 929 kg	32,913 lb
Operating weights are approximate and include coolant, lubricants, full fuel tank , 75 kg (165 lb) operator, and grade control components.		

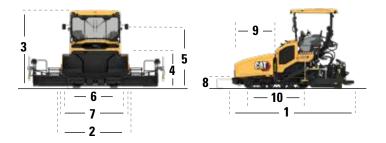
Service Refill Capacities			
Maximum throughput capacity	774 Tonnes	853 US Tons	
Hopper capacity	5.8 m <sup>3</sup>	205 ft <sup>3</sup>	
Fuel Tank	200 L	53 gal	
Cooling System	24 L	6.3 gal	
Engine Oil	11 L	2.9 gal	
Hydraulic Tank	121 L	32 gal	
DEF Tank	19 L	5 gal	

Paving Range		
SE47 VT		
Standard range	2.4 m - 4.7 m	7' 10" - 15' 4"
Maximum width w/extensions	6 m	19' 8"

32 L

8.5 gal

	Dimensions		
1	Operating length – SE47 VT screed	5811 mm	19' 1"
	Shipping length – SE47 VT screed	5585 mm	18' 4"
2	Operating width (hoppers lowered)	3281 mm	10' 9"
3	Operating height	3806 mm	12' 6"
4	Operating platform height	1655 mm	5' 5"
5	Transport height (canopy lowered)	2933 mm	9' 7"
6	Transport width	2550 mm	8' 4"
7	Truck entry width	3161 mm	10' 4"
8	Truck entry height (hopper)	567 mm	22"
	Truck entry height (apron)	525 mm	21"
	Ground clearance	210 mm	8"
9	Hopper length	1803 mm	5' 11"
10	Axle to axle - center drive to front idler	2533 mm	100"
	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® C3.6 engine is available in configurations that meet U.S. EPA Tier 4 Final and EU Stage V emission standards.
- The Cat® C3.6 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%</li>
- 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 -87 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  $-87~\mathrm{dB(A)}$  European Directive 2000/14/EC, ISO 11201, EN 500-1, and EN 500-6

Exterior Sound Power Level – 103 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 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



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

© 2022 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 Corporate 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.

QEHQ3012 (9-2022) Build Number:07A

