

# AP300D

Paver



## Cat® C4.4 ACERT™ Engine

|                                   |         |         |
|-----------------------------------|---------|---------|
| Gross Power (SAE J1995)           | 55.5 kW | 74.4 hp |
| Net Power (ISO 9249, EEC 80/1269) | 50.9 kW | 68.2 hp |

## Operating Weight

|                 |         |           |
|-----------------|---------|-----------|
| w/AS3173 Screed | 7400 kg | 16,314 lb |
|-----------------|---------|-----------|

## Paving Widths

|                           |                   |                |
|---------------------------|-------------------|----------------|
| Standard Extendable Range | 1700 mm - 3200 mm | 5' 7" - 10' 6" |
| Maximum w/Extensions      | 4000 mm           | 13' 1"         |
| Paving Reduction Range    | 650 mm - 3200 mm  | 26" - 10' 6"   |

## VERSATILE PAVING CAPABILITY IN A HIGHLY PRODUCTIVE MACHINE

One look at the AP300D reveals exceptional maneuverability. Operators are reminded of this as they navigate around the twists and turns of urban environments and mountain roads.

What the crews also quickly discover is the wide paving range of the AP300D. Extensions can increase paving width to 4000 mm (13' 1"), while an optional reduction attachment delivers a narrow paving capability of 0.65 m (26").

Easy installation/removal of extension packages and grade and slope capability make this machine a perfect combination of productivity and versatility.

A comfortable operating environment with dual seats that can be easily positioned outside of the machine frame as well as a convenient sliding control panel delivers efficient performance in a variety of conditions.

The AP300D a great fit for city streets, mountain roads, town centers, parkways, and general maintenance and repair applications.

### CONTENTS

|                                  |        |
|----------------------------------|--------|
| AP300D Features . . . . .        | 2, 3   |
| Machine Overview. . . . .        | 4, 5   |
| Smooth Delivery. . . . .         | 6      |
| Cat C4.4 Engine. . . . .         | 7      |
| Operating Environment. . . . .   | 8, 9   |
| Wheel Undercarriage . . . . .    | 10, 11 |
| Electric Screed Heat. . . . .    | 12     |
| Service and Reliability. . . . . | 13     |
| Screed Specifications. . . . .   | 14     |
| Paver Specifications. . . . .    | 15     |

# FEATURES

## MULTI-PURPOSE, EXTREMELY MANEUVERABLE PAVER.

### OPTIMAL MANEUVERABILITY

- Hydrostatic drive
- Tight turning capability
- High travel speeds
- Excellent traction on soft or hard base materials
- Optional front wheel assist

### UNMATCHED COMFORT

- Dual operating stations slide out for better all-around visibility
- Machine controls are conveniently positioned on a sliding control panel
- Exhaust stack provides fumes evacuation above the canopy
- Folding canopy with choice of manual or hydraulic assist
- Quiet operation supports easy communication

### PRECISE MATERIAL CONTROL

- Independent control of each auger and each conveyor leads to consistent material flow in front of the screed
- 4 sensor system allows the operator to fine tune mix delivery
- Reversible augers and conveyors limit spillage
- AS3173 hydraulic power, extendible screed, available with variable frequency vibrating system and electric heating system





## SCREED VERSATILITY

- Hydraulically extendible from 1.7 m to 3.2 m (5' 7" to 10' 6")
- With mechanical bolt-on extensions, extendible from 1.7 m to 4.0 m (5' 7" to 13' 1")
- Hydraulic paving reduction attachment narrows the paving width to 650 mm (26")
- Crown adjustment of +4.5% to -2.5%
- Screed plate vibratory frequency of 3400 rpm (56.7 Hz)
- Fast installation/removal of screed extensions

## SIMPLIFIED SERVICE

- Large access doors provide quick and easy inspection
- Electrical system is color-coded, numbered, and wrapped in kevlar braid for easy identification and durability

## LEADING-EDGE TECHNOLOGY

- Cat C4.4 ACERT engine
- Automated Grade and Slope System
- Product Link™ capability

## CAT C4.4 ENGINE

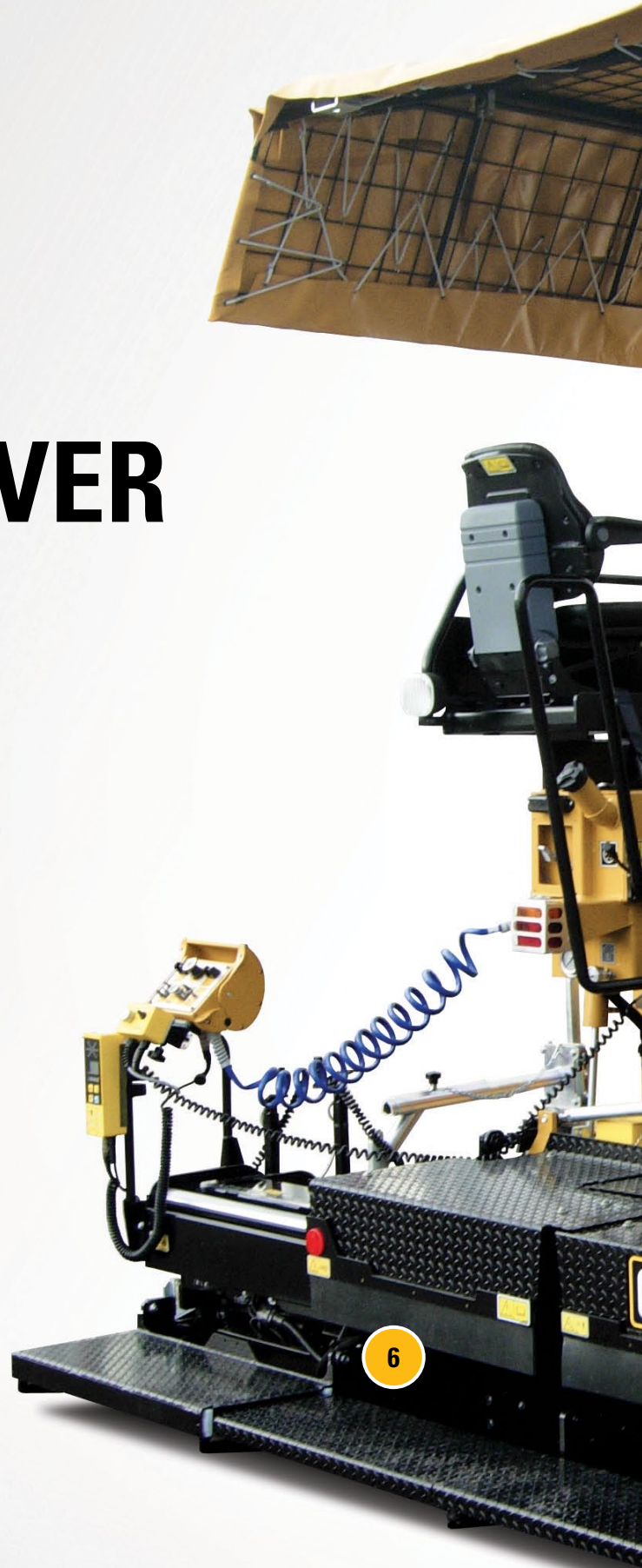
- Powerful Cat C4.4 engine meets emissions equivalent to U.S. EPA Tier 3 and E.U. Stage IIIA standards, delivers a gross power of 55.5 kW (74.4 hp)
- Engine power management modifies output for good machine control
- Automatic engine speed control improves fuel efficiency and lowers sound levels



# MID-SIZED, VERSATILE PAVER

RELIABLE, QUIET, POWERFUL.

1. Exceptional Visibility
2. Intuitive Console Design
3. Cat C4.4 Engine w/ACERT™ Technology
4. Tractor-mounted, 12 kW Generator
5. Advanced Mix Delivery
6. Versatile Paving Range
7. Electrically Heated Screed
8. Tight Turning Wheel Undercarriage
9. Front Wheel Assist (option)











# SMOOTH DELIVERY

CONTINUOUS FLOW LEADS TO BETTER MAT QUALITY.

## **AUTOMATED DELIVERY**

- 73 metric tph (80 tph) throughput capacity
- Four material feed sensors, one mounted over each conveyor and one at each extender ensure precise delivery
- Adjustable speeds for each auger and each conveyor maintains desired mix height in front of the screed
- Reversible augers and conveyors minimize spillage at the end of the paving pass; control switches are located on the main control panel and both screed control panels
- Hydraulically adjustable auger height promotes mat consistency and simplifies transport
- 28 L (7.4 gal) washdown tank
- Deck-mounted tow point indicators

## **SMOOTH FLOW**

- 3.8 m<sup>3</sup> (134 ft<sup>3</sup>) hopper capacity
- Wide hopper width of 3200 mm (10' 6") enables smooth truck delivery
- Truck discharge height of 570 mm (22") and adjustable push-roller easily accept a variety of trucking fleets
- Independent hopper wing control simplifies operation next to buildings and other obstacles
- Narrow chain guards and optimally spaced flight bars promote smooth mix flow



# CAT C4.4 ENGINE

RELIABLE, QUIET, POWERFUL.

## C4.4 WITH ACERT TECHNOLOGY

- Meets emissions standards equivalent to U.S. EPA Tier 3 and E.U. Stage IIIA requirements
- Provides a gross power of 55.5 kW (74.4 hp)
- High capacity cooling system keeps engine cool for optimal fuel efficiency and lower emissions
- Proven core engine design ensures reliability and quiet operation

## ENGINE COMPARTMENT

- Easily accessible service components include:
  - Air cleaner
  - Fuel filter w/water separator and priming pump
  - Engine oil filter and level check
  - Coolant level







*Good visibility and comfort enables effective communication leading to steady material flow and efficient operation.*



# OPERATING ENVIRONMENT

OPERATE WITH CONFIDENCE.

## OPERATING ENVIRONMENT

- Dual suspension seats swing out beyond the machine frame for optimal visibility
- Sliding console with single rail design provides easy side to side movement
- Canopy with side extensions is available with manual or hydraulic folding capability
- Electric screed heat promotes cleaner working conditions for the crew
- Large capacity cooling system directs warm air away from the operating platform for increased comfort

## INTUITIVE CONSOLE

- Comprehensive controls and analog gauges enable the operator to easily monitor essential functions
- Grouped toggle switches ensure efficiency and performance
- Automatic speed control maintains paving speed for smoother mats
- Warning indicators keep the operator informed
- Electronic throttle provides on-demand control
- Lockable vandal cover provides protection
- 12 volt power receptacle supports communication devices

## ELECTRONIC CONTROL MODULE (ECM)

- Enables independent auger and conveyor speeds
- Integrates performance functions



# WHEEL UNDERCARRIAGE

EXCELLENT TRACTION AND DURABILITY.



*The wheel undercarriage offers quick reacting speed control, responsive power, and high speed capability when moving around the job site.*

## EXCELLENT MANEUVERABILITY

- Two, 365/80 R20 hydro-flated drive tyres
- Four 455 mm x 260 mm, solid rubber steering wheels
- Tight outside turning radius for quick mobility
- Quick reacting speed control ensures responsive power
- High flotation delivers excellent performance on soft base applications
- The oscillating front bogie design easily overcomes obstacles, eliminates jarring effects and minimizes tow-point movement





1. 365/80 R20 Hydroflated Rear Tires
2. Oscillating Bogies
3. 455 mm x 260 Solid Rubber, Front Wheels
4. Front Wheel Assist (optional)

## MOBILITY

- Hydrostatic propel system
- Pave, Travel and Maneuver modes
- Pave: Improved steering control when paving
- Travel: Speeds of 0 - 16 km/hr (0 - 10 mph)
- Manouver: Optimizes steering control and delivers an outside turning radius of 1.65 m (5' 5")

## FRONT WHEEL ASSIST (OPTION)

- Front wheel assist option provides added traction when pushing trucks or working on soft base

# ADVANCED ELECTRIC SCREED HEAT

TOUCH-PAD TECHNOLOGY WITH MULTI-ZONE HEATING AND EVEN-HEAT DISTRIBUTION.



1. Screed Controls
2. Electric Heat Panel
3. Auxiliary Power Supply

## AS3173 SCREED

- AS3173 screed is available with variable frequency vibrating system
- Screed panels include mix delivery controls for easy ground level access
- Screed lock function prevents settling, eliminates bumps in the mat
- Grade and slope control available

## ELECTRIC HEAT FEATURES

- Touch-pad technology and LED indicator lights create a user-friendly interface
- Three pre-set temperature settings for each screed section ensure even-heat distribution
- Manual adjustments provide override capability
- Flattened bar-type heating elements deliver reliability
- Temperature sensors in each screed section, including extensions
- On-board diagnostics enable operator to verify fault indicators

## TRACTOR-MOUNTED GENERATOR

- Ground Fault Circuit Interrupter (GFCI) circuit breaker protection
- Fast heat-up
- Manual breaker reset
- 12 kW belt-driven generator
  - Supplies 12 kW @ 230 volts AC
  - Provides power to the electric screed and auxiliary power panel

## AUXILIARY POWER

- 1.5 kW of available power
- Supports standard lighting and power tools
- Panel is available with one, 240-volt receptacle



# SERVICE AND RELIABILITY

RELIABLE, QUIET, POWERFUL.

*Maintaining productivity requires durable components that limit wear and extend equipment life.*

## LARGE ACCESS DOORS AND PANELS

- Quick and easy inspection
- Accessible pumps and components
- Outboard mounted auger drives for easy access
- Visual indicators simplify routine service checks

## HYDRAULIC SYSTEM

- Grouped and centrally located solenoids
- Manual overrides simplify troubleshooting by eliminating functioning systems
- Hydraulic hoses are cleanly routed and clamped for long-term reliability
- Exposed hoses are wrapped in nylon sleeve for protection against abrasion
- Pressure test ports and oil sampling ports simplify hydraulic system diagnosis

## ELECTRICAL SYSTEM

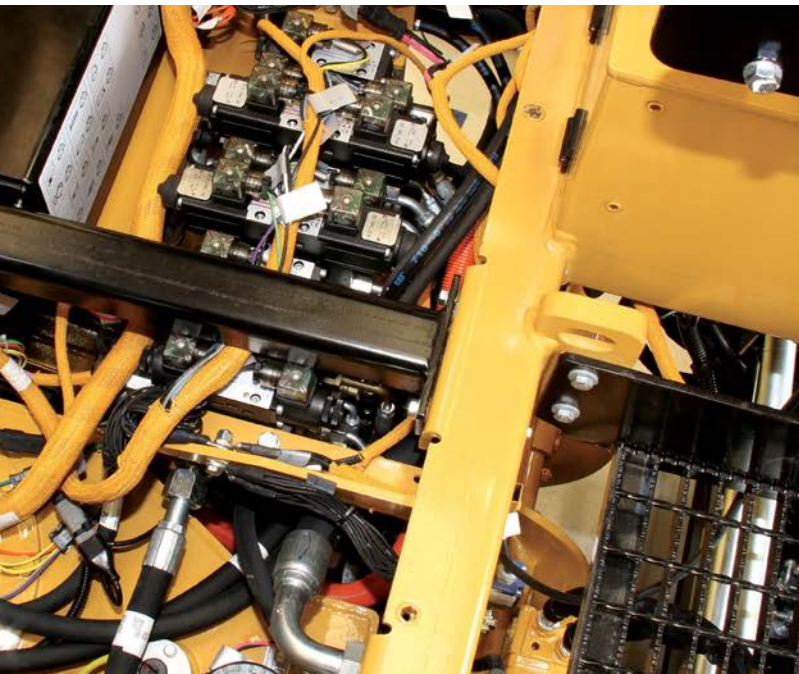
- 12-volt system w/85 amp alternator
- Color-coded and numbered electrical wiring simplifies troubleshooting
- Harnesses are wrapped in abrasion resistant kevlar braid

## MACHINE TRACKING

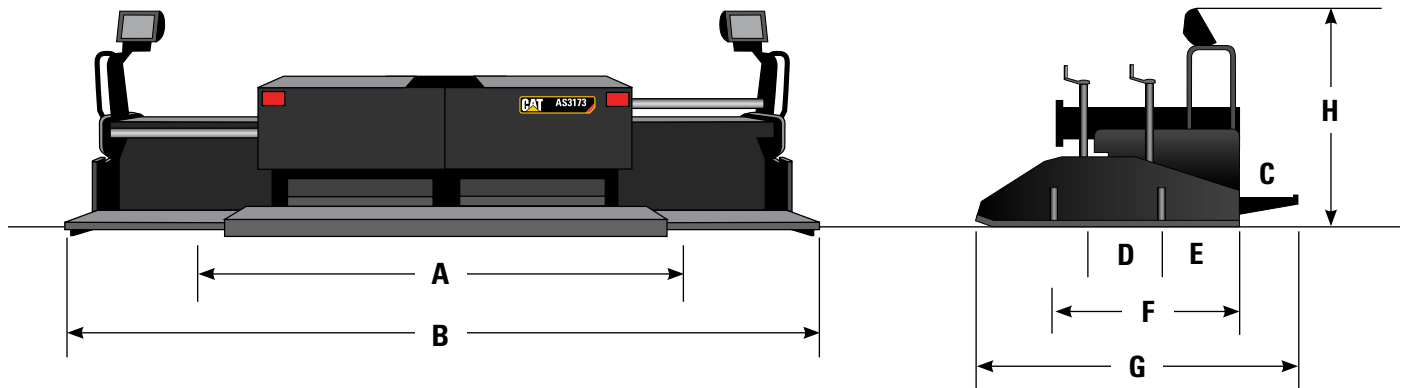
- Product Link option
  - Maximize up-time
  - Automatic machine location
  - Hour updates
  - Diagnostic codes
  - Schedule service requirements at more opportune times

## LONG SERVICE INTERVALS

- 500 hour engine oil service interval
- 1000 hour hydraulic oil service interval



# AS3173 SCREED SPECIFICATIONS



## Dimensions

|  |                 |
|--|-----------------|
| <b>A</b> Width with end gates                        | 1.73 m (5' 8")  |
| Width without end gates                              | 1.67 m (5' 6")  |
| <b>B</b> Hydraulically extendable width              | 3.20 m (10' 6") |
| Maximum w/extensions                                 | 4.0 m (13' 1")  |
| <b>C</b> Walkway width (main)                        | 350 mm (13.75") |
| <b>D</b> Main screed plate width (front to back)     | 254 mm (10")    |
| <b>E</b> Extender screed plate width (front to back) | 254 mm (10")    |
| Screed plate thickness                               | 12 mm (0.5")    |
| <b>F</b> Length without end gates (front to back)    | 1.0 m (3' 3")   |
| <b>G</b> Length with end gates (front to back)       | 1.70 m (5' 7")  |
| <b>H</b> Height                                      | 1.55 m (5' 8")  |

## Screed Weight

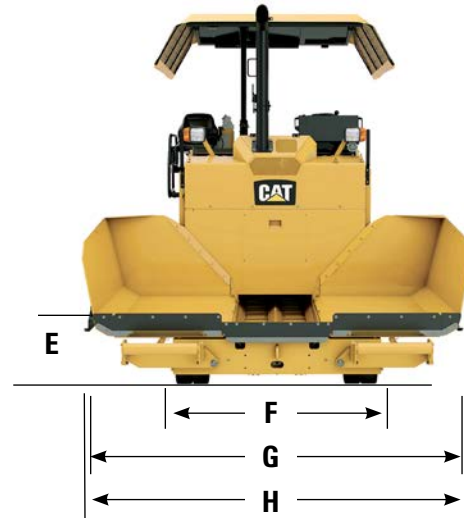
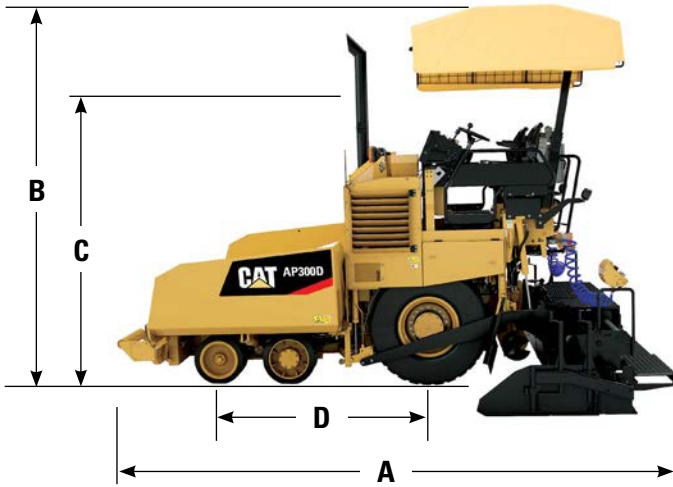
|                                 |                    |
|---------------------------------|--------------------|
| AS3173 screed - w/electric heat | 1100 kg (2,425 lb) |
|---------------------------------|--------------------|

## Screed Specifications

|                     |                            |
|---------------------|----------------------------|
| Crown range         | -2.5% to +4.5%             |
| Heating system      | electric                   |
| Vibration frequency | 0 - 56.7 Hz (0 - 3400 vpm) |



# AP300D SPECIFICATIONS



## Dimensions

|                                    |                  |
|------------------------------------|------------------|
| <b>A</b> Overall length            | 4870 mm (16')    |
| <b>B</b> Operating height          | 3480 mm (11' 5") |
| <b>C</b> Transport height          | 2960 mm (9' 8")  |
| <b>D</b> Wheelbase                 | 1950 mm (6' 5")  |
| <b>E</b> Discharge height - hopper | 480 mm (19")     |
| <b>F</b> Transport width           | 1820 mm (6')     |
| <b>G</b> Truck entry width         | 2850 mm (9' 4")  |
| <b>H</b> Paver operating width     | 3180 mm (10' 5") |

## Material Delivery

|                                 |   |
|---------------------------------|---|
| Theoretical throughput capacity | 73 tonnes/h (80 tph)                      |
| Augers                          | independent, reversible                   |
| Auger flight diameter           | 260 mm (10")                              |
| Hopper capacity w/tunnels       | 3.8 m <sup>3</sup> (134 ft <sup>3</sup> ) |
|                                 | 6.6 tonnes (7.3 ton)                      |

## Powertrain

|                                       |                     |
|---------------------------------------|---------------------|
| Cat C4.4 engine with ACERT Technology |                     |
| Gross power - SAE J1995               | 55.5 kW (74.4 hp)   |
| Net power - ISO 9249, EEC 80/1269     | 50.9 kW (68.2 hp)   |
| Fuel capacity                         | 110 L (29 gal)      |
| Generator size                        | 12 kW @ 230 Volt AC |
| Electrical system                     | 12 V                |

## Weight

|                           |                     |
|---------------------------|---------------------|
| Operating weight w/screed | 7400 kg (16,314 lb) |
| Tractor only              | 6300 kg (13,889 lb) |
| Shipping weight w/screed  | 7300 kg (16,094 lb) |

Weights shown are approximate and include:

\* 75 kg operator, with mechanical canopy, fuel tank 50%, standard width screed

\*\* Base machine, canopy lowered, fuel tank 10%, standard screed end gates.

## Speed

|        |                   |
|--------|-------------------|
| Paving | 30 m/min (98 fpm) |
| Travel | 16 km/hr (10 mph) |

## Optional Equipment

|  |
|--|
| Canopy (Hydraulic or Manual Fold)                    |
| Central Paving Reduction Attachment - 0.65 m (26")   |
| CE Certificate                                       |
| Ecological Washdown System                           |
| Front Wheel Assist                                   |
| Grade and Slope Control                              |
| Italian Road Homologation                            |
| Mechanical Feed Sensor                               |
| Rigid Ski Leveling Device - 6 m (19.5')              |
| Screed Extensions - 3.6 m - 4.0 m (11' 10" - 13' 1") |
| Sonic Material Feed Sensors                          |

# AP300D Paver

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)

QEHQ1665 (02-2013)

©2013 Caterpillar Inc. 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, SAFETY.CAT.COM, their respective logos, "CaterpillarYellow" and the "PowerEdge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

