D11 DOZER

Engine Power Net SAE J1349/IS09249

Operating Weight

Forward Reverse Standard Carrydozer 634 kW / 850 hp 714 kW / 957 hp 104 236 kg / 229,800 lb 113 700 kg / 250,665 lb



33355

GO THE DISTANCE WITH CAT® DOZERS

Caterpillar has the industry's broadest lineup of dozers working in dozens of applications, climates and environments. They're made to go the distance, with a proven design and durable construction that deliver multiple lives. And when it comes to productivity, they'll help your operation go the distance. They're infused with performance-enhancing technologies, easy to operate and service, and supported by the world-class Cat[®] dealer network. The result? High reliability, maximum productivity, long life — and the lowest cost of ownership of any material mover in the industry.

These benefits, and many more, make Cat dozers the ideal choice for every site or application. And they deliver a better bottom line to the most important mine in the world: yours.





How do you make the industry's best large dozer even better? By listening to your customers. You asked us to keep everything you love about the D11, but to make it more productive and efficient to lower your overall costs. **So we did.** The D11 is safer, performs better, lasts even longer and delivers a more positive impact to your bottom line.

INCREASE PRODUCTIVITY & EFFICIENCY **BY ALMOST 8%**

- + High Power in Reverse
- + Stator Clutch Torque Divider
- + Extended Tilt Cylinders

BOOST FUEL EFFICIENCY UP TO 8%

Load-sensing hydraulics and a new torque divider boost performance while lowering fuel costs.

LOWER MAINTENANCE & REPAIR COSTS **UP TO 5%**

Spend less time on maintenance thanks to a new case and frame design, improved bearings, redesigned pin joints, a 30% larger oil pan and more.

LOWER OVERALL COST/BANK CUBIC METER **UP TO 6%**

KEEP OPERATORS SAFER

FACTORY-INSTALLED FIRE SUPPRESSION





DELIVERING THE LOVEST COST OF OWNERSHIP

No other manufacturer has more experience moving material than Caterpillar. There are more Cat large dozers working around the world than any other brand. Our long history of evolution and innovation has helped us remain the leader for over a century.



A PROVEN DESIGN PHILOSOPHY

When it comes to making Cat large dozers, we follow a proven design philosophy that focuses around five main areas:

- 1. Keep operators safe, comfortable and in control
- 2. Ensure productivity in all applications
- 3. Take advantage of the latest technology
- 4. Make dozers that are easy to maintain and service
- 5. Make sure they are built to last

By following this philosophy — for every large dozer, every time — we ensure that our customers get what they expect from Caterpillar: the lowest cost of ownership of any material mover in the industry.

OPTIMIZE YOUR DOZING OPERATION

When it comes to productivity, the D11 will help your operation go the distance. Infused with performance-enhancing features, the D11 helps you improve the efficiency of your dozing operation.

UP TO 6% LOWER COST PER TON thanks to improved productivity and fuel efficiency, and reduced maintenance and repair costs

UP TO 8% HIGHER PRODUCTIVITY



thanks to high-horsepower reverse

UP TO 8% BETTER FUEL EFFICIENCY



with combined load-sensing hydraulics and stator clutch torque divider



That's equal to 30 10-hour shifts.

PERFORMANCE AND EFFICIENCY ENHANCEMENTS TO BOOST YOUR PRODUCTIVITY

Improved cooling system — enables better heat rejection and easier cooling core cleanout Torque divider with stator clutch automatically frees up the stator when torque is not required, delivering higher drivetrain efficiency for reduced fuel consumption

Load-sensing hydraulics deliver more power to the dozer, increasing responsiveness and boosting fuel efficiency

> High-horsepower reverse — speeds up non-productive traveling to reduce cycle time and boost overall productivity

Three cylinder options increase productivity:

- » Standard dual tilt
- » Extended pitch dual tilt
- » Carrydozer (shown)

Improved reversing fan function — speeds up reverse flow radiator cleanout

PRODUCTIVE DOZING BEGINS WITH A PRODUCTIVE OPERATOR

SAFETY-INFUSED

A confident operator is a productive operator. So we've infused the D11 with safety to help operators feel safe and confident on the job.

DESIGNED FOR COMFORT

Noise, vibration, stress and fatigue all have an effect on operator performance — so we've designed an environment that helps minimize them.

PRODUCTIVITY-ENHANCED

The operator environment in the D11 is more than a cab; it's an integrated electronic platform designed to maximize productivity.



UNPARALLELED OPERATOR ENVIRONMENT

The operator station in the D11 is designed to reduce effort and exposure. The suspended undercarriage absorbs impact and reduces the shock loads transferred to the undercarriage by up to 50 percent — resulting in a smoother, more comfortable ride. The cab is unparalleled, with enhanced ergonomics, a fully adjustable air suspension seat, and controls that are easy to access and operate. Low-effort electronic steering, ripper and dozer controls are easily accessible and provide sure, precise maneuvering. The standard isolation-mounted cab reduces noise and vibration, and conveniently located air circulation vents evenly distribute airflow for maximum comfort.

INTUITIVE TOUCHSCREEN DISPLAY

The operator's primary display screen is large, fast and powerful, with plenty of memory and an intuitive menu structure. The multifunction touchscreen display is the operator's gateway to monitoring machine performance and a convenient way to modify machine parameters to tailor performance to the current task. The Work Monitor menu screen collects machine data and provides real-time feedback on machine performance to optimize productivity.

KEEP OPERATORS SAFE, COMFORTABLE AND IN CONTROL



SAFETY ENHANCEMENTS

- + Additional platforms, rails and handles
- + Clean line of sight to front and rear work areas
- + Optional 360° vision system for a bird's-eye view
- + Factory-installed fire suppression system
- + Third-generation powered ladder, which deploys and stores in seconds
- + Cab door swing option for easy ladder access
- + Various safety glass options
- + Automatic engine shutoff if dozer is tipped or rolls over
- + Seat belt warning system
- + Operator Not Present monitoring system
- + Cat MineStar™ Detect and Command capabilities

TAKE INNOVATION

Cat large dozers became the industry leader by being innovative — and today's D11 takes innovation to a new level. Advanced technologies are completely integrated into the dozer, creating smart machines and more informed operators to maximize the productivity of your operation.

Products like Automated Blade Assist, Enhanced Auto Shift, Autocarry™, Cat Grade Control 3D, Automatic Ripper Control and Terrain with Automatic Blade Control are seamlessly integrated into the D11. In addition, the D11 comes out of the factory ready to integrate Cat MineStar™ technology, which takes accuracy, efficiency and safety even further.

CAT

WORK MORE ACCURATELY, SAFELY AND EFFICIENTLY

EL 00271

CAT MINESTAR SOLUTIONS FOR DOZING

RUN YOUR DOZERS REMOTELY COMMAND FOR DOZING

MineStar Command for dozing offers multiple levels of remote control and even semiautonomous operation, helping increase operator safety and comfort—as well as the productivity of your dozer fleet. Whether you choose the over-the-shoulder remote control console or the remote operator station, your operators can have full control of the dozer without being exposed to dust, noise, vibration or other hazards. With semiautonomous dozing, a single operator can manage up to four machines from a remote location—boosting productivity and safety.

SPEED THE WORK TERRAIN WITH AUTOMATIC BLADE CONTROL



Terrain's Automatic Blade Control feature provides full automatics, full blade load and overcut protection integrated into the machine control system on D11 dozers. These tools speed the work, decrease fuel burn and minimize overcut, overfill and rehandling.

INFORM YOUR OPERATORS TERRAIN FOR GRADING

With onboard guidance tools and realtime feedback, MineStar Terrain for grading gives operators the information to maximize machine efficiency by monitoring ore bodies, bench heights, cycle times and volume of material cut and filled. Inputs from the office tell operators where to dig or cut, how much material to move, when they've moved enough and even if they've moved too much.

AUTOCARRY

The Autocarry feature provides automatic blade control during the carry segment, reducing operator fatigue and helping to keep slip at the optimum level for best performance.

- + Increases productivity up to 15%
- + Lowers cost per unit of material moved
- + Delivers better performance in limited visibility



GET THE BENEFITS OF SEAMLESS INTEGRATION ONBOARD SOLUTIONS

DUAL-TILT AUTOMATED BLADE ASSIST

Automated Blade Assist (ABA) comes standard with the dual-tilt feature. This feature automates the movement of the blade to several key preset pitch positions. The positions of each segment — load, carry and spread — can be set through the Information Display or the push-button keypad.

- + Increases efficiency
- + Reduces operator workload

GRADE CONTROL 3D

Using dual ROPS-mounted GNSS antennas and blade-mounted Inertial Measurement Unit (IMU) sensors, this feature provides precise positioning of the cutting edge, eliminating the need for masts and cables on the blade. The system also reduces the need for grade staking and grade checking.



AUTOMATIC RIPPER CONTROL

This optional feature monitors the dozer speed with the ROPS-mounted GNSS to automatically adjust engine speed and ripper depth to minimize track slip.

- + Decreases wear and tear on the machine
- + Reduces operator fatigue

REDUCE YOUR DOWNTIME. **REDUCE YOUR COSTS.**

The Cat D11 is designed to be easy to service and maintain — so your machines spend less time in the maintenance shop and more time on the job. We've grouped maintenance points to minimize movement around the machine, and provided groundlevel service access for all fluids and key electrical control.



LESS MAINTENANCE = LESS COSTS

New D11: 856 hours of M&R D11T: 947 hours of M&R TO MOVE 5.65M BANK CUBIC YARDS OF MATERIAL



THE NEW D11 GOES EVEN FURTHER TO IMPROVE SERVICEABILITY.

- + 30% larger oil sump capacity, which extends 500-hour planned maintenance intervals.
- + Redesigned pin joints eliminate the need for line boring and simplify replacement of the bearing inserts on the blade ripper and push-arm trunnions.
- + AutoLube system, with ground-level fill and automatic shutoff capability.

- + Continuous fluid monitoring on all compartments, including direct fluid monitoring of the hydraulic tank and pivot shaft reservoir.
- + Ground-level service fluid change for coolant, hydraulic, engine and powertrain oil.
- + Single-plane cooling system for easy cleaning.



THE MORE DURABLE D11



Redesigned case and frame to increase fatigue life



Larger equalizer bar with improved bearings



Replaceable push-arm trunnion bearing inserts



Ripper and blade pin bores with replaceable bearings



DOZE. REBUILD. REPEAT.

The D11 frame, powertrain and major components are built to be rebuilt—using new, remanufactured or rebuilt parts and components so you can take advantage of a costeffective second life of like-new performance at a fraction-of-new price.

The backbone of the machine is a heavy, strong and durable frame with high-strength steel castings and continuously rolled top and bottom frame rails. Frames provide durable support to the undercarriage, elevated final drives and other components.





CAT BLADES: THE IDEAL MATCH FOR CAT DOZERS

Decades of dozer research and development have made Caterpillar the leader in blade technology. Cat blades are designed for loadability and constructed of high-tensile strength materials to produce big numbers over a long life.

- + Optimal heel clearance and sharp cutting edge angle, which make the blade more aggressive in tough material
- + Superior loadability due to heavy moldboard construction and bolt-on hardened cutting edges and end bits
- + Ability to resist torsional bending and distortion
- + Material thickness chosen specifically to increase wear resistance and dozing effectiveness without sacrificing machine balance or performance



Easier blade loading in hard-to-penetrate materials Cat blades are designed with the optimal heel clearance. The D11 features a 29.3° interior angle between the back bottom of the blade and the ground. This clearance angle allows the blade to better penetrate and load.

BLADE OPTIONS for the D11





Semi-Universal (SU)



Carrydozer (CD)

REAR ATTACHMENTS



Single-shank Ripper



Multi-shank Ripper

SPECIALTY BLADES

Work-tool options are available for applications requiring high-capacity blades for light materials.

- + Coal Blades
- + Reclamation Blades

SPECIALTY ATTACHMENTS

- + Multi-shank Leach Pad Ripper
- + Multi-shank Coal Ripper (five shank)
- + Counterweight
- + Rear Drawbar with Counterweight

TECHNICAL SPECIFICATIONS

See cat.com for complete specifications.

| | ENGINE | | |
|--|---|-----------------------------|--|
| Engine Model | U.S. EPA Tier 2 Equiva U.S. EPA Tier 4 Final/EU Stag | | |
| Bore | 145 | mm 5.7 in | |
| Stroke | 162 | mm 6.4 in | |
| Displacement | 32 | 2.1 L 1,959 in ³ | |
| Engine Power | | | |
| Gross SAE J1995* | | | |
| Forward | 670 | kW 899 hp | |
| Reverse | 757 | kW 1,015 hp | |
| ISO 14396 | | | |
| Forward | 657 | kW 882 hp | |
| Reverse (U.S. EF | PA Tier 2 Equivalent) 744 | kW 998 hp | |
| Reverse (U.S. EF | PA Tier 4/EU Stage V) 745 | kW 999 hp | |
| Net SAE J1349/ISC |)9249 | | |
| Forward | 634 | kW 850 hp | |
| Reverse | 714 | kW 957 hp | |
| *Excludes all fan lo | DSSES. | | |
| Engine ratings ap | ply at 1,800 rpm. | | |
| Net power advertised is the power available at the fly wheel when the engine is equipped with air cleaner, muffler, alternator, fan and engine emissions controls as required. | | | |

| SERVICE REFILL CAPACITIES | | | | | |
|--|--|-----------------------|--|--|--|
| Fuel Tank Cooling System – Tier 4 Cooling System – Tier 2 Engine Crankcase Sump Powertrain Final Drives (each) Track Roller Frames (each) Pivot Shaft Oil Hydraulic System Tank Only | 1800 L 177 L 158 L 133 L 391 L 47 L 94 L 104 L 160 L | 103.3 gal 12.4 gal | | | |
| WEIGHTS | | | | | |
| Operating Weight Single-shank ripper, U blade, 28" ES shoes | 104 236 kg | 229,800 lb | | | |
| Operating Weight – Carrydozer Single-shank heavy ripper, carrydozer blade, 36″ ES shoes | 113 700 kg | 250,665 lb | | | |
| TRANSMISSION | | | | | |
| 1.0 Forward | 4.0 km/h | 2.5 mph | | | |
| 2.0 Forward | 7.0 km/h | 4.4 mph | | | |
| 3.0 Forward | 12.2 km/h | 7.6 mph | | | |
| 1.0 Reverse | 4.8 km/h | 3.0 mph | | | |
| 2.0 Reverse | 8.5 km/h | 5.3 mph | | | |
| 3.0 Reverse | 14.7 km/h | 9.1 mph | | | |

| D11 BLADE | CAPACITY | WIDTH OVER ENDBITS | HEIGHT | |
|-----------------------|--------------------|--------------------|-------------------|--|
| Semi-Universal | 27.2 m³ 35.6 yd³ | 5567 mm 18.3 ft | 2421 mm 7.9 ft | |
| Universal | 34.4 m³ 45.0 yd³ | 6320 mm 20.7 ft | 2421 mm 7.9 ft | |
| Carrydozer | 43.6 m³ 57 yd³ | 6704 mm 22.0 ft | 2517 mm 8.3 ft | |
| Reclamation Universal | 42 m³ 55 yd³ | 6395 mm 21.0 ft | 2725 mm 8.9 ft | |
| Reclamation Universal | 53.5 m³ 70 yd³ | 7277 mm 23.9 ft | 27.68 mm 9.1 ft | |
| Coal Universal | 75 m³ 98.0 yd³ | 8155 mm 26.8 ft | 3064 mm 10.1 ft | |
| Coal Universal | 65 m³ 85.5 yd³ | 7277 mm 23.9 ft | 3064 mm 10.1 ft | |

| DIMENSIONS | D11 | D11 CD |
|---|----------------------|----------------------|
| Ground Clearance* | 798 mm 31.4 in | 798 mm 31.4 in |
| Track Gauge | 2896 mm 114 in | 2896 mm 114 in |
| Width Without Trunnions (standard shoe) | 3782 mm 148.9 in | 3806 mm 149.8 in |
| Height (ROPS cab)* | 4405 mm 173.4 in | 4405 mm 173.4 in |
| Length of Track on Ground | 4444 mm 175 in | 4444 mm 175 in |
| Overall Length – Basic Dozer | 6160 mm 242.5 in | 6160 mm 242.5 in |
| Overall Length with SU Blade and SS Ripper** | 10 525 mm 414.4 in | 10 712 mm 421.7 in |
| *Includes grouser height for total dimensions on hard surfaces. | | |
| **CD Blade on D11 CD | | |

STANDARD & OPTIONAL EQUIPMENT

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

| OPERATOR EQUIPMENT | STANDARD | OPTIONAL | UNDERCARRIAGE | STANDARD | OPTIONAL |
|---|-----------------|-----------------|---|-----------------|-----------------|
| ROPS/ FOPS, Sound-Suppressed Cab | • | | Suspension-Type Undercarriage | • | |
| High-Definition Primary | • | | Sleeve Bearing Track | • | |
| Touchscreen Display | | | Lifetime-Lubricated Rollers and Idlers | • | |
| MineStar Terrain Display | | • | Track Shoe (ES): 710 mm (28 in) Width | • | |
| Visibility – Rearview Mirrors | • | | Track Shoes (ES): 810 / 915 mm (32 / 36 in) | | • |
| Visibility – Dual Camera: Back-up & Ripper | | • | Width (various configurations) | | |
| Visibility – Four Cameras, 360 Degree View and Ripper Camera | | • | Track Links – Heavy-Duty XL – Duralink | | • |
| Air Conditioner and Heater | | | Track Shoe – Abrasion Resistant | | • |
| with Automatic Climate Control | | | Track Shoe – Anti-Packing Round Hole | | • |
| Seat – Cloth with Air Suspension | • | | Abrasion Rollers and Idlers | | • |
| Seat – Heated, Cooled, Adjustable Lumbar and Bolsters | | • | Cold-Weather Rollers and Idlers Sound-Suppression Undercarriage | | • |
| Cab Glass – Single-Pane Tinted Safety | • | | Carrier Roller | | • |
| Cab Glass – Dual-Pane Laminated Impact Safety | | • | ELECTRICAL | STANDARD | OPTIONAL |
| Cab Glass – High-Pressure Safety | | • | 24V Electric Start, Dual Starters | • | |
| (4 0 psi / 275 kPa) | | | Batteries – 4x4, 200-Amp Hour, 12V | • | |
| Cab Access – Blade Push-Arm Steps | • | | Battery Isolation | • | |
| and Grab Handle | | | Battery Isolation – Dual Pole | | • |
| Cab Access – Powered Ladder | | • | Lights – Halogen – 13 Positions | • | |
| CAT TECHNOLOGY PRODUCTS | STANDARD | OPTIONAL | Lights – LED – 13 Positions | • | |
| VIMS SM | • | | Lights – LED – Premium Package | | • |
| Automated Blade Assist (ABA) | • | | HYDRAULICS | STANDARD | OPTIONAL |
| AutoCarry™ | | • | Electronically Controlled, Load-Sensing | • | |
| Auto Ripper Control | | • | Dozer Lift and Tilt | | |
| Cat Terrain with 3D Blade Control | | • | Electronically Controlled, Load-Sensing | • | |
| Cat Terrain Ready | | • | Ripper Lift and Pitch | | |
| Cat Product Link™ Elite (cellular) | • | | Dozer Blade – Dual Tilt | • | |
| Cat Product Link™ Elite Dual Mode | | • | Dozer Extended Blade Pitch Electronically Enabled Blade – Quick Drop | | • |
| (cellular + satellite) | | | Ripper Pin Puller | • | • |
| Cat Command for Dozing Ready | | • | | | |
| MAINTENANCE AND SERVICE | STANDARD | OPTIONAL | OTHER | STANDARD | OPTIONAL |
| Ecology Fluid Drains – | • | | Fire Suppression Ready | | • |
| All Compartments | | | Fire Suppression Installed | | • |
| Hinged Bottom Guards Sound-Reduction Sealed Bottom Guards | • | | CAT POWERTRAIN | STANDARD | OPTIONAL |
| High-Speed Oil Change – | • | • | Cat C32 Engine – US EPA Tier 4 Final, US EPA Tier 2 Equivalent, EU Stage V | • | |
| Engine and Transmission | | | Enhanced Auto Shifting (EAS) | • | |
| Ground-Level Fast Fuel Fill | • | | Auto Engine Idle Shutdown | • | |
| Ground-Level Fluid Fill and Drain | | • | Thermal Manifold and Turbo Shields | • | |
| Ground-Level Electrical Service Station | • | | High-Performance Single-Plane | • | |
| S•O•S [™] Fluid Sampling Ports Diagnostic Connector | • | | Cooling Module | | |
| Ripper Lubrication – | • | | Stator Clutch Torque Divider – Electronic Control | • | |
| Autolube with Ground-Level Fill | | | Powershift Transmission – | • | |
| | | | Three-Speed Electronic Shift | | |
| | | | Hydraulic Cooling Fan – Automatic Reversing | | • |





For more complete information on Cat products, dealer services and industry solutions, visit us 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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