

D8T

Track-Type Tractor



Engine

| | | |
|--------------------------|---|--------|
| Engine Model | Cat® C15 ACERT™ | |
| Global Emissions | U.S. Tier 4 Interim/EU Stage IIIB/ Japan MLIT Step 4 | |
| Engine Power (Maximum) | | |
| ISO 14396 | 268 kW | 359 hp |
| ISO 14396 (DIN) | | 364 hp |
| Net Power (Rated) | | |
| ISO 9249/SAE J1349 | 237 kW | 317 hp |
| ISO 9249/SAE J1349 (DIN) | | 322 hp |
| Net Power (Maximum) | | |
| ISO 9249/SAE J1349 | 248 kW | 333 hp |
| ISO 9249/SAE J1349 (DIN) | | 338 hp |

Weights

| | | |
|------------------|-----------|-----------|
| Operating Weight | | |
| – Standard | 39 795 kg | 87,733 lb |
| – LGP | 37 795 kg | 83,324 lb |
| Shipping Weight | | |
| – Standard | 30 490 kg | 67,219 lb |
| – LGP | 33 600 kg | 74,075 lb |

D8T Features

Powerful Productivity

Standard electro-hydraulic controls improve precision and response. Dedicated hydraulics and machine control systems aid overall productivity. Features like Enhanced Auto Shift and a Hydraulic Demand Fan help reduce overall fuel use and operating costs.

Operator Station

Ease of operation, cab comfort and layout help keep operators focused and more productive.

Engine and Emissions Technology

Cat® engine and aftertreatment solutions meet U.S. EPA Tier 4 Interim/EU Stage IIIB/Japan MLIT Step 4 emission standards.

Integrated Electronic Solutions

Caterpillar offers a variety of technologies to significantly enhance machine performance. Cat Product Link™ helps fleet managers maximize utilization and control costs.

Serviceability and Customer Support

Ease of serviceability, Cat dealer support expertise and machine rebuild capability help reduce overall owning and operating costs.



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The Cat® D8T has a long history of best-in-class versatility, productivity and resale value. Because it excels across a wide range of dozing tasks, customers choose the D8T for everything from dozing, ripping, scraper work and land clearing to rough finish grading. And with features designed for even greater comfort, productivity and fuel efficiency, today's D8T does even more to help you meet your business objectives. The D8T meets U.S. Tier 4 Interim/EU Stage IIIB/ Japan MLIT Step 4 emission standards.

Operator Station

Comfort and convenience



The D8T cab is designed and equipped for operator productivity, safety and comfort. Large single-pane windows, tapered hood and notched fuel tank provide excellent visibility to all sides of the machine and around the job site. New standard and optional light packages extend the productive work day.

The D8T features an updated in-dash display with new functionalities. An improved Advisor Monitoring System tracks machine operating conditions in real time. An integrated grade control system display mount puts job site data conveniently in front of the operator.

Operators will enjoy comfort features like standard air-ride suspension seat, adjustable arm rests and well-positioned air vents. The cab is radio ready and includes a personal music player jack. A power converter supplies supplemental power for cellular phones and computers. New finishes make the cab easier to clean.

Engine

Power and reliability

The D8T features a Cat® C15 ACERT™ engine and a Cat Clean Emissions Module to deliver the performance and efficiency that customers demand, while meeting U.S. EPA Tier 4 Interim/EU Stage IIIB/Japan MLIT Step 4 emission standards.

The six-cylinder electronic engine is turbocharged and aftercooled. The displacement produces better lugging capability, lower internal stresses and longer component life.

ACERT Technology is a combination of building blocks that includes electronics, fuel systems, air management systems and aftertreatment components. The system is optimized based on engine size, the type of application and the geographic location in which it will work. The technologies are applied systematically and strategically to meet high customer expectations for productivity, fuel efficiency, reliability and service life.



Emissions Technology

Reliable, integrated solutions



Cat NO_x Reduction System

The Cat NO_x Reduction System captures and cools a small quantity of exhaust gas, then routes it into the combustion chamber where it drives down combustion temperatures and reduces NO_x emissions.

Aftertreatment Technologies

To meet Tier 4 Interim/Stage IIIB/Japan MLIT Step 4 emission standards and beyond, Cat aftertreatment components have been designed to match application needs. System components include a **Diesel Oxidation Catalyst (DOC)**, which uses a chemical process to convert regulated emissions in the exhaust system, and a **Diesel Particulate Filter (DPF)** that traps particulate matter that is carried into the exhaust stream.

The DOC, DPF and Cat Regeneration System are contained in a Caterpillar designed Clean Emissions Module (CEM) that protects the components, minimizes the aftertreatment footprint and simplifies maintenance. An optional insulated Clean Emissions Module is available for high debris applications that require thermal shields on exhaust components.

Cat Regeneration System

The Cat Regeneration System is designed to work transparently, without any interaction needed from the operator. Under most operating conditions, engine exhaust is hot enough to oxidize soot through passive regeneration. If supplemental regeneration is needed, the Cat Regeneration System elevates exhaust gas temperatures to burn off soot in the Diesel Particulate Filter (DPF). This is a process that happens automatically, but the operator can initiate the cycle when convenient or interrupt regeneration as needed. A soot level monitor and regeneration indicator lights are integrated into the D8T dash display.

Delayed Engine Shutdown

Delayed Engine Shutdown feature is available to allow the machine to cool immediately after a heavy work load or regeneration cycle.

Engine Idle Shutdown Timer

An optional Engine Idle Shutdown timer will sound a warning and shut down the engine after the machine has been idling for a pre-set period of time.





Powertrain

Powerful efficiency

From engine to transmission to final drives, the D8T powertrain is designed to turn power into productive work. The D8T offers unmatched lugging capability and smooth shifting when changing gears under varying loads. The 3-speed forward, 3-speed reverse transmission, backed by differential steering, offers excellent run out speeds and accurate steering capability.

Torque Divider

A robust, high efficiency torque divider provides high torque multiplication to move heavy loads, while shielding the drive train from sudden torque shocks and vibration.

Differential Steering System

Differential steering maintains full power to both tracks for best-in-class turning under load. When one track speeds up, the other slows down an equal amount. Maneuverability – especially with large blade loads – is improved, as well as cycle times in some applications. Greater load capacity, power and speed control are possible in soft underfoot conditions on steep slopes because both tracks are powered during turns.

Planetary Power Shift Transmission

The planetary power shift transmission offers smooth shifting and quick speed and directional changes for maximum productivity. The transmission is built for long life, and a modular design allows for ease of service without removing other components.

Enhanced Auto Shift

The new Enhanced Auto Shift feature uses the simple “shift up, idle back” principle during forward and reverse travel to save fuel and improve overall dozing cycle fuel efficiency.

Auto-Shift/Auto-Kickdown

Auto-shift allows the operator, by just making a directional change, to go from preset forward to preset reverse gears. Auto-kickdown automatically downshifts the transmission when significant load increases are detected. These features are especially useful when backfilling or rough grading. Operators can select from a variety of settings, and can override the automatic shift features at any time.



Implement and Steering Controls

Ergonomically designed for ease of operation

Steering and Transmission Control

A new steering tiller is ergonomically designed to improve operator comfort. The new thumb roller on the steering control shifts the electronically controlled powershift transmission. The tiller allows precise steering in close areas with the finest modulation in the industry.

Dozer Control Lever

The D8T features an ergonomically designed dozer lever with low effort, electro-hydraulic controls for added operator comfort, ease of operation and precise work tool control. Features such as blade response, blade float, auto blade pitch and spread rate can be set up and adjusted using the Advisor panel. When equipped, single-handle convenience also controls functions like AccuGrade and Dual Tilt.

Electronic Ripper Control

A rigidly mounted handgrip provides firm support for the operator even when ripping in the roughest terrain. Thumb and fingertip controls direct ripper functions. Programmable features like Auto Lift, Shank-Out, Auto Stow and Automatic Ripper Control help increase operator efficiency.

Throttle Rocker Switch

One touch of the throttle rocker switch automatically adjusts engine speed to high or low idle. A new feature allows the operator to press and hold until desired engine speed is reached, then release for the machine to maintain the new chosen speed.

Integrated Technologies

Solutions to make work easier and more efficient

Caterpillar is the only manufacturer to offer fully-integrated electronic technology solutions that enable greater accuracy, higher productivity, lower operating costs and more profitability.

Cat AccuGrade™

AccuGrade uses laser, optical and satellite guidance technologies, machine sensors, and automatic blade control to help operators get to grade faster, easier and more efficiently. Digital design plans, real-time cut/fill data, and in-cab guidance give operators detailed information to work more confidently and achieve greater accuracy, in fewer passes, using less material. Operators can stay on grade and improve productivity and accuracy by nearly 50 percent over conventional methods. Grade stakes and checkers are minimized, helping to make the work site safer, more efficient, and more cost effective.

The D8T comes standard with wiring harnesses routed through the machine during assembly to protect from wear and simplify installation of the AccuGrade system. Deep integration optimizes machine and system performance and provides optimal mounting locations for easy operator interaction. Brackets and hardware are provided with the optional AccuGrade Ready Option (ARO).

Computer Aided Earthmoving System (CAES)

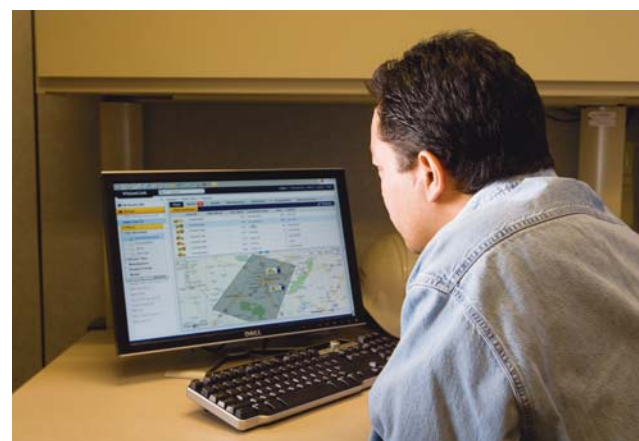
CAES uses satellite guidance technology, machine sensors, a radio network, and office management software to deliver real-time grading and productivity information to operators. Accurate cut and fill data ensures proper grade control and targeted removal of overburden in stockpile and quarrying operations. Data collection capabilities enable accurate recordkeeping of material placement and validation.

Cat Product Link™

Product Link helps take the guesswork out of equipment management with remote monitoring capabilities for one machine or your entire fleet. Track asset location, hours, fuel usage, diagnostic codes, idle time and more through the secure VisionLink™ user interface. Knowing where your equipment is, what it's doing and how it's performing enables you or your Cat dealer to manage your fleet in real-time so you can maximize efficiency, improve productivity, and lower operating costs.

VIMS™

VIMS uses deeply integrated sensors in the brake, transmission and engine systems to constantly provide machine condition and performance information. Actionable reports give you insight to proactively manage maintenance and repairs to help you maximize machine availability and uptime for greater fleet productivity and profit.



Work Tools

Equipped for versatility



Bulldozers

High tensile strength steel with a strong box-section design stands up to the most severe applications. Heavy moldboard construction and hardened bolt-on cutting edges and end bits add strength and durability. Optional rock guards and deflector shields help protect cylinders. **High-Capacity Universal**, **Semi-Universal** and **Angle Blades** are available, as well as special configurations for coal and woodchip stockpile applications.

Optional Dual Tilt

Dual Tilt improves load control and allows the operator to optimize the blade pitch angle for better balance and productivity. Tilt the blade forward for better penetration, then tilt back to increase carrying capacity.

Optional Auto Blade Assist

Auto Blade Assist automates blade pitch and lift control during a typical dozing cycle to help reduce operator fatigue.

Rippers

The standard D8T implement valve is ready for ripper installation, giving you the flexibility to use one, two or three shanks. A **Single-Shank Ripper** is recommended in severe applications. A **Multi-Shank Ripper** is best in less severe applications or if ripping near a high wall.

Hydraulics

Field-proven load-sensing hydraulics continually respond to operating requirements by automatically adjusting attachment hydraulic power for maximum efficiency. High efficiency, variable displacement pumps supply maximum flow rates for tough applications, implement power on demand, and consistent pressure output for quick response. Variable flow design minimizes hydraulic oil temperatures and helps save fuel.

Rear Counterweights

Rear counterweights provide proper tractor balance to maximize dozing production and are recommended when tractor is not equipped with any other rear attachment.

Winches

Please consult your Cat dealer for available winch options.



Undercarriage

Engineered for performance

The D8T is available in Standard and Low Ground Pressure (LGP) configurations to suit your application needs.

The machine features the Cat elevated sprocket design that isolates final drives, axles, and steering components from harsh impacts. The modular design aids serviceability to help reduce maintenance costs. A variety of undercarriage configurations and track shoe designs help optimize performance and undercarriage life.

Heavy Duty Undercarriage with Positive Pin Retention Moderate Service Sealed and Lubricated Track is standard. This undercarriage is well suited to aggressive applications like land clearing, side-slopes, or working in rocky or uneven terrain. Components are designed for extended wear life in abrasive conditions and high impact applications.

SystemOne™ Undercarriage is available as an option and can help reduce total undercarriage owning and operating costs in many applications. SystemOne features lifetime sealed and lubricated cartridges to eliminate bushing turns, and sprockets require no replacement during the life of the chain. All SystemOne undercarriage components are designed to work and wear as a system for longer track life.

Cooling System

Durable and efficient

The engine radiator, Air To Air After Cooler (ATAAC) and hydraulic oil cooler are packaged in a single plane. Aluminum bar plate construction aids durability and allows for higher heat transfer and superior corrosion resistance. The standard cores feature 6 fins per inch to allow debris to pass through and reduce plugging concerns.

In cooler conditions, a **Hydraulically Driven Demand Fan** reduces speed to conserve power, save fuel, and decrease sound levels.

An optional **Reversing Fan** can be set to change air flow direction, efficiently removing debris from the cooling cores without the operator leaving the cab. To improve core serviceability, the cooling package also includes air wand or brush access slots. The ROPS mounted air conditioning system works with the reversing fan for optimum fan purging and ambient cooling capability.



Structures

Engineered for maximum production and service life



The D8T mainframe is built industry-leading tough – heavy steel castings, full box section frame rails and continuous rolled sections on top and bottom frame rails provide the strength to absorb high impact shock loads and twisting forces.

The D8T pivot shaft runs through the mainframe and connects to the roller frames, allowing independent oscillation. The full-length pivot shaft distributes impact loads throughout the case, reducing the bending stress on the case. The Tag-Link brings the blade closer to the machine for more precise dozing and load control. The design provides solid lateral stability and better cylinder positions for constant break out force, independent of blade height.

Cat track-type tractor frames set the industry standard for durability. Major structures and components are built to be rebuilt, reducing waste and replacement costs.

Sustainability

Thinking generations ahead

- Meets U.S. EPA Tier 4 Interim/EU Stage IIIB/ Japan MLIT Step 4 emission standards.
- Features like Enhanced Auto Shift and a Hydraulic Demand Fan help decrease overall fuel consumption.
- Technologies like AccuGrade and Product Link help improve overall efficiency, saving fuel and fluids, as well as wear and tear.
- New grab handles, steps, lighting packages and a ground level service center help enhance job site safety.
- Major components are built to be rebuilt, eliminating waste and saving customers money by giving the machine a second – and even third – life.
- Approximately 98% of machine materials can be recycled (ISO 16714), conserving valuable natural resources and further enhancing machine end-of-life value.



Serviceability and Customer Support

When uptime counts

Ease of Serviceability

The D8T offers full left-side engine serviceability, including fill tube, dipstick, air cleaner, fuel filters, oil filter and coolant level check. Cooling system access is also improved for inspection and cleaning. To reduce maintenance cost and time, the D8T features a new high capacity filter element and improved powertrain filter bypass strategy to extend service intervals. The in-cab monitoring system also provides electronic fluid level verification at startup for the coolant, powertrain and engine oil systems.

Ground Level Service Center

The new ground level service center is accessible on the left hand fender without setting foot on the machine, giving easy access to the battery disconnect, secondary engine shutdown and access light switches. A digital hour meter is also available.

Access/Egress

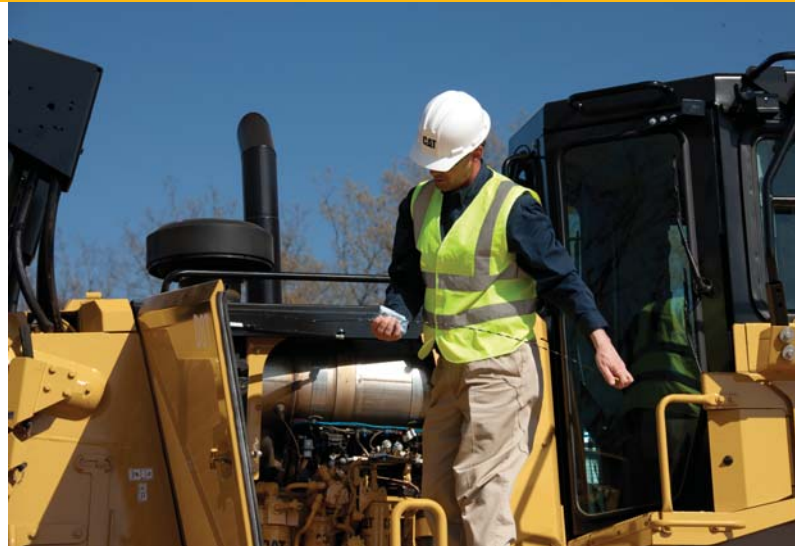
Newly designed steps and handrails make climbing on and off the tractor easier than ever. An access light switch turns on the cab or exterior light for night time visibility when mounting/dismounting the machine.

An Operator Not Present Monitoring system allows the machine to idle when an operator is not in the seat. The system locks out the powertrain so any unintentional movements during ingress or egress will not physically move the machine.

Renowned Cat Dealer Support

From helping you choose the right machine to knowledgeable ongoing support, Cat dealers provide the best in sales and service. Manage costs with preventive maintenance programs like Custom Track Service, Scheduled Oil Sampling (S·O·SSM) analysis, and guaranteed maintenance contracts. Stay productive with best-in-class parts availability. Cat dealers can even help you with operator training to help you boost your profits.

And when it's time for machine replacement, your Cat dealer can help you save even more with Genuine Cat Reman parts. Receive the same warranty and reliability as new products at cost savings of 40 to 70 percent for powertrain and hydraulic components.



D8T Specifications

Engine

| | | |
|--------------------------|--|---------------------|
| Engine Model | Cat® C15 ACERT™ | |
| Global Emissions | U.S. Tier 4 Interim/ EU Stage IIIB/Japan MLIT Step 4 | |
| Engine Power (Maximum*) | | |
| SAE J1995 | 271 kW | 363 hp |
| ISO 14396 | 268 kW | 359 hp |
| ISO 14396 (DIN) | 364 hp | |
| Net Power (Rated**) | | |
| ISO 9249/SAE J1349 | 237 kW | 317 hp |
| ISO 9249/SAE J1349 (DIN) | 322 hp | |
| Net Power (Maximum*) | | |
| ISO 9249/SAE J1349 | 248 kW | 333 hp |
| ISO 9249/SAE J1349 (DIN) | 338 hp | |
| Bore | 137 mm | 5.4 in |
| Stroke | 172 mm | 6.75 in |
| Displacement | 15.2 L | 928 in ³ |

*Maximum speed 1,700 rpm.

**Rated speed 1,850 rpm.

- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air cleaner, muffler, and alternator.
- No derating required up to 3566 m (11,700 ft) altitude, beyond 3566 m (11,700 ft) automatic derating occurs.
- All non-road U.S. EPA Tier 4, European Union (EU) Stage IIIB and IV, and Japan (MLIT) Step 4 certified diesel engines are required to use:
 - Ultra Low Sulfur Diesel (ULSD) and Sulfur-Free fuels that are 15 ppm (mg/kg) sulfur or less.
 - Cat DEO-ULS™ or oils that meet the Cat ECF-3, API CJ-4, and ACEA E9 specification.

Service Refill Capacities

| | | |
|-------------------------|--------|----------|
| Fuel Tank | 643 L | 170 gal |
| Cooling System | 77 L | 20.3 gal |
| Engine Crankcase* | 38 L | 10 gal |
| Powertrain | 155 L | 41 gal |
| Final Drives (each) | 12.5 L | 3.3 gal |
| Roller Frames (each) | 65 L | 17.2 gal |
| Pivot Shaft Compartment | 40 L | 10.6 gal |
| Hydraulic Tank | 75 L | 19.8 gal |

* With oil filters.

Weights

| | | |
|------------------|-----------|-----------|
| Operating Weight | | |
| – Standard | 39 795 kg | 87,733 lb |
| – LGP | 37 795 kg | 83,324 lb |

| | | |
|-----------------|-----------|-----------|
| Shipping Weight | | |
| – Standard | 30 490 kg | 67,219 lb |
| – LGP | 33 600 kg | 74,075 lb |

- Operating Weight – Standard: Includes hydraulic controls, blade tilt cylinder, coolant, lubricants, 100% fuel, ROPS, FOPS cab, SU-Blade, Single-Shank Ripper, 610 mm (24 in) MS shoes, and operator.
- Operating Weight – LGP: Includes hydraulic controls, blade tilt cylinder, drawbar, coolant, lubricants, 100% fuel, ROPS, FOPS cab, SU-Blade, 965 mm (38 in) MS shoes, and operator.
- Shipping Weight – Standard: Includes coolant, lubricants, 20% fuel, ROPS, FOPS cab, and 610 mm (24 in) MS shoes.
- Shipping Weight – LGP: Includes coolant, lubricants, 20% fuel, ROPS, FOPS cab, and 965 mm (38 in) MS shoes.

Undercarriage

Standard

| | | |
|-----------------------------|---------------------|-----------------------|
| Shoe Type | Moderate Service | |
| Width of Shoe | 610 mm | 24 in |
| Shoes/Side | 44 | |
| Track Rollers per Side | 8 | |
| Grouser Height | 78 mm | 3.1 in |
| Pitch | 216 mm | 8.5 in |
| Ground Clearance | 613 mm | 24.1 in |
| Track Gauge | 2083 mm | 82 in |
| Length of Track on Ground | 3206 mm | 126 in |
| Ground Contact Area | 3.91 m ² | 6,060 in ² |
| Ground Pressure (ISO 16754) | 89.6 kPa | 13.0 psi |

LGP

| | | |
|-----------------------------|---------------------|-----------------------|
| Shoe Type | Moderate Service | |
| Width of Shoe | 965 mm | 38 in |
| Shoes/Side | 44 | |
| Track Rollers per Side | 8 | |
| Grouser Height | 78 mm | 3.1 in |
| Pitch | 216 mm | 8.5 in |
| Ground Clearance | 613 mm | 24.1 in |
| Track Gauge | 2337 mm | 92 in |
| Length of Track on Ground | 3206 mm | 126 in |
| Ground Contact Area | 6.19 m ² | 9,593 in ² |
| Ground Pressure (ISO 16754) | 54.0 kPa | 7.8 psi |

- Heavy Duty Undercarriage

Hydraulic Controls

| Pump Type | Piston-type, Variable Displacement | |
|-------------------------------------|------------------------------------|------------|
| Pump Output (Steering) | 276 L/min | 73 gal/min |
| Pump Output (Implement) | 226 L/min | 60 gal/min |
| Tilt Cylinder Rod End Flow | 130 L/min | 34 gal/min |
| Tilt Cylinder Head End Flow | 170 L/min | 45 gal/min |
| Bulldozer Relief Valve Setting | 24 000 kPa | 3,480 psi |
| Tilt Cylinder Relief Valve Setting | 24 000 kPa | 3,480 psi |
| Ripper (Lift) Relief Valve Setting | 24 000 kPa | 3,480 psi |
| Ripper (Pitch) Relief Valve Setting | 24 000 kPa | 3,480 psi |
| Steering | 39 200 kPa | 5,700 psi |

- Steering Pump output measured at 2,300 rpm (pump speed) and 30 000 kPa (4,351 psi).
- Implement Pump output measured at 1,850 rpm and 6895 kPa (1,000 psi).
- Electro-hydraulic pilot valve assists operations of ripper and dozer controls. A standard hydraulic system includes four valves.
- Complete system consists of pump, tank with filter, oil cooler, valves, lines, linkage and control levers.

Transmission

| | | |
|---------------------------------|-----------|---------|
| 1 Forward | 3.4 km/h | 2.1 mph |
| 2 Forward | 6.1 km/h | 3.8 mph |
| 3 Forward | 10.6 km/h | 6.6 mph |
| 1 Reverse | 4.5 km/h | 2.8 mph |
| 2 Reverse | 8 km/h | 5 mph |
| 3 Reverse | 14.2 km/h | 8.8 mph |
| 1 Forward – Drawbar Pull (1000) | 618.5 N | 139 lbf |
| 2 Forward – Drawbar Pull (1000) | 338.2 N | 76 lbf |
| 3 Forward – Drawbar Pull (1000) | 186.9 N | 42 lbf |

Blades

| Type | 8SU | |
|---|--------------------|----------------------|
| Capacity (SAE J1265) | 8.7 m ³ | 11.4 yd ³ |
| Width (over end bits) | 3940 mm | 12.9 ft |
| Height | 1690 mm | 5.5 ft |
| Digging Depth | 575 mm | 22.6 in |
| Ground Clearance | 1225 mm | 48.2 in |
| Maximum Tilt | 883 mm | 34.8 in |
| Weight* (without hydraulic controls) | 4789 kg | 10,557 lb |
| Total Operating Weight** (with Blade and Single-Shank Ripper) | 39 795 kg | 87,733 lb |

| Type | 8U | |
|---|---------------------|----------------------|
| Capacity (SAE J1265) | 11.7 m ³ | 15.3 yd ³ |
| Width (over end bits) | 4267 mm | 14 ft |
| Height | 1740 mm | 5.71 ft |
| Digging Depth | 575 mm | 22.6 in |
| Ground Clearance | 1225 mm | 48.2 in |
| Maximum Tilt | 954 mm | 37.5 in |
| Weight* (without hydraulic controls) | 5352 kg | 11,800 lb |
| Total Operating Weight** (with Blade and Single-Shank Ripper) | 40 358 kg | 88,974 lb |

| Type | 8A | |
|---|--------------------|---------------------|
| Capacity (SAE J1265) | 4.7 m ³ | 6.1 yd ³ |
| Width (over end bits) | 4990 mm | 16.3 ft |
| Height | 1174 mm | 3.85 ft |
| Digging Depth | 628 mm | 24.7 in |
| Ground Clearance | 1308 mm | 51.5 in |
| Maximum Tilt | 729 mm | 28.7 in |
| Weight* (without hydraulic controls) | 5459 kg | 12,035 lb |
| Total Operating Weight** (with Blade and Single-Shank Ripper) | 40 465 kg | 89,210 lb |

| Type | 8SU LGP | |
|---|--------------------|----------------------|
| Capacity (SAE J1265) | 8.5 m ³ | 11.1 yd ³ |
| Width (over end bits) | 4530 mm | 14.8 ft |
| Height | 1622 mm | 5.32 ft |
| Digging Depth | 577 mm | 22.7 in |
| Ground Clearance | 1222 mm | 48.1 in |
| Maximum Tilt | 914 mm | 36 in |
| Weight* (without hydraulic controls) | 5146 kg | 11,345 lb |
| Total Operating Weight** (with Blade and Single-Shank Ripper) | 37 795 kg | 83,324 lb |

*Includes blade tilt cylinder.

**Operating Weight: Includes hydraulic controls, blade tilt cylinder, coolant, lubricants, 100% fuel, ROPS, FOPS cab, blade, single-shank ripper, 610 mm (24 in) MS shoes, and operator.

D8T Specifications

Rippers

| Type | Single-Shank, Adjustable Parallelogram | |
|---|--|-----------|
| Number of Pockets | 1 | |
| Maximum Clearance Raised (under tip, pinned in bottom hole) | 636 mm | 25 in |
| Maximum Penetration (standard tip) | 1130 mm | 44.4 in |
| Maximum Penetration Force (shank vertical) | 127.3 kN | 28,620 lb |
| Pry out Force | 222.7 kN | 50,070 lb |
| Weight (without hydraulic controls) | 4085 kg | 9,005 lb |
| Total Operating Weight* (with SU-Blade and Ripper) | 39 795 kg | 87,733 lb |
| Type | Multi-Shank, Adjustable Parallelogram | |
| Number of Pockets | 3 | |
| Overall Beam Width | 2464 mm | 97 in |
| Maximum Clearance Raised (under tip, pinned in bottom hole) | 593 mm | 23.35 in |
| Maximum Penetration (standard tip) | 780 mm | 30.7 in |
| Maximum Penetration Force (shank vertical) | 124.2 kN | 27,920 lb |
| Pry out Force (Multi-Shank Ripper with one tooth) | 227.9 kN | 51,230 lb |
| Weight (one shank, without hydraulic controls) | 4877 kg | 10,752 lb |
| Additional Shank | 332 kg | 732 lb |
| Total Operating Weight* (with SU-Blade and Ripper) | 40 587 kg | 89,479 lb |

*Total Operating Weight: Includes hydraulic controls, blade tilt cylinder, coolant, lubricants, 100% fuel, ROPS, FOPS cab, blade, single-shank ripper, 610 mm (24 in) MS shoes, and operator.

Winches

| Winch Model | PA14OVS | |
|--|---------|----------|
| Weight* | 1790 kg | 3,947 lb |
| Oil Capacity | 15 L | 4 gal |
| Increased Tractor Length | 563 mm | 22.2 in |
| Winch Length | 1430 mm | 56.3 in |
| Winch Case Width | 1160 mm | 45.6 in |
| Drum Width | 320 mm | 12.6 in |
| Flange Diameter | 457 mm | 18 in |
| Recommended Cable Size | 29 mm | 1.13 in |
| Optional Cable Size | 32 mm | 1.25 in |
| Drum Capacity – Recommended Cable Size | 84 m | 276 ft |
| Drum Capacity – Optional Cable | 59 m | 193 ft |
| Cable Ferrule Sizes – Outside Diameter | 60 mm | 2.36 in |
| Cable Ferrule Sizes – Length | 70 mm | 2.76 in |

- Variable speed, hydraulically driven, dual braking system, three roller fairlead.

* Weight: Includes pump and operator controls.

Standards

- The operator sound exposure Leq (equivalent sound pressure level) measured according to the work cycle procedures specified in ANSI/SAE J1166 OCT98 is 81 dB(A). As measured by ISO 6396: 2008 is 77 dB(A) (North America) and 76 dB(A) (Europe), for cab offered by Caterpillar, when properly installed and maintained and tested with the doors and windows closed.
- Hearing protection may be needed when operating with an open cab (when not properly maintained or doors/windows open) for extended periods and noisy environment.
- The exterior sound pressure level for the standard machine measured at a distance of 15 m (49 ft) according to the test procedures specified in SAE J88 APR95, mid-gear-moving operation, is 89 dB(A) for North America. For Europe, the exterior sound pressure level for the machine measured by ISO 6395:2008 is 113 dB(A).

ROPS/FOPS

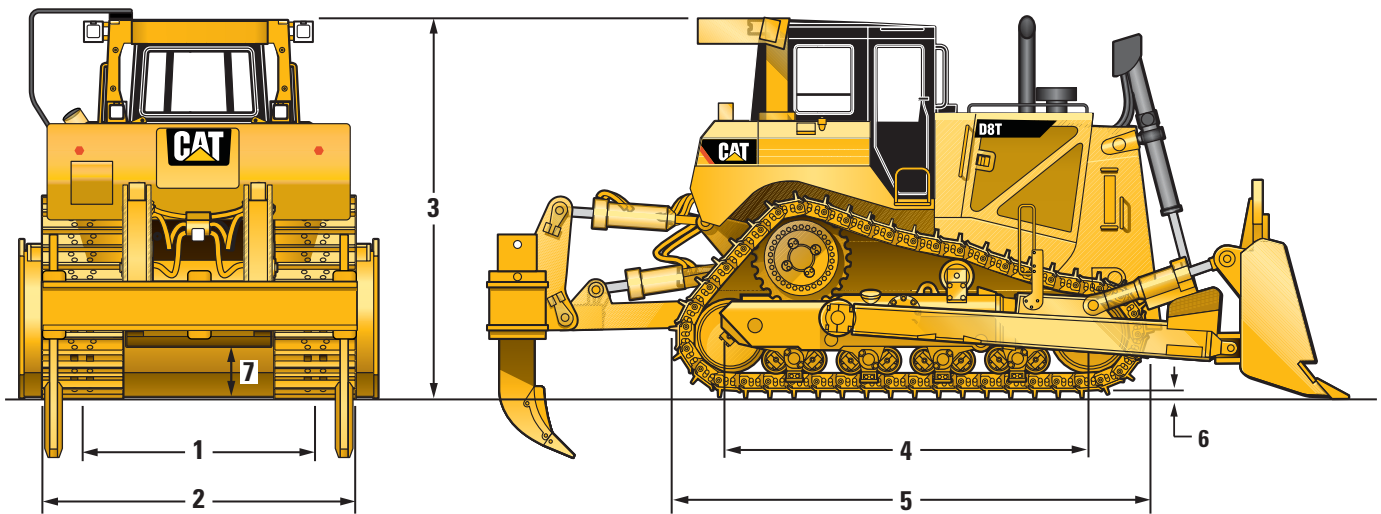
- Rollover Protective Structure (ROPS) meets the following criteria: ISO 3471:2008.
- Falling Object Protective Structure (FOPS) meets the following criteria: ISO 3449:2005 Level II.

Brakes

- Crawler Machine Brake Requirements meets the following criteria: ISO 10265:2008.

Dimensions

(approximate)



| | Standard | | Non-Suspended | | LGP* | |
|--|----------|----------|---------------|----------|---------|----------|
| 1 Track Gauge | 2083 mm | 82.0 in | 2082 mm | 82.0 in | 2337 mm | 92.0 in |
| 2 Width of Tractor | | | | | | |
| Over Trunnions | 3057 mm | 120.4 in | 3050 mm | 120.1 in | 3377 mm | 132.9 in |
| Without Trunnions (standard shoe width) | 2642 mm | 104.0 in | 2642 mm | 104.0 in | 3302 mm | 130.0 in |
| 3 Machine Height, from Tip of Grouser | | | | | | |
| Exhaust Stack | 3304 mm | 130.1 in | 3480 mm | 137.0 in | 3295 mm | 129.7 in |
| EROPS | 3500 mm | 137.8 in | 3491 mm | 137.4 in | 3491 mm | 137.4 in |
| 4 Length of Track on Ground | 3206 mm | 126.2 in | 3258 mm | 128.3 in | 3206 mm | 126.2 in |
| 5 Length of Basic Tractor (tag link trunnion to tip of rear grouser) | 4554 mm | 179.3 in | 4554 mm | 179.3 in | 4554 mm | 179.3 in |
| With following attachments add: | | | | | | |
| Ripper – Single Shank (with tip at ground line) | 1519 mm | 59.8 in | 1519 mm | 59.8 in | | N/A |
| Ripper – Multi Shank (with tip at ground line) | 1613 mm | 63.5 in | 1613 mm | 63.5 in | | N/A |
| SU Blade | 1844 mm | 72.6 in | 1844 mm | 72.6 in | 1844 mm | 72.6 in |
| U Blade | 2241 mm | 88.2 in | 2241 mm | 88.2 in | | N/A |
| A Blade (not angled) | 2027 mm | 79.8 in | 2027 mm | 79.8 in | | N/A |
| A Blade (angled 25 deg.) | 3068 mm | 120.8 in | 3068 mm | 120.8 in | | N/A |
| Drawbar | 406 mm | 16.0 in | 406 mm | 16.0 in | 406 mm | 16.0 in |
| 6 Height of Grouser | 78 mm | 3.1 in | 78 mm | 3.1 in | 78 mm | 3.1 in |
| 7 Ground Clearance | 613 mm | 24.1 in | 606 mm | 23.8 in | 613 mm | 24.1 in |

*Standard shoe width of D8T LGP with non-suspended undercarriage is 965 mm (38 in).

D8T Standard Equipment

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

POWERTRAIN

C15 ACERT diesel engine with
Electronic Unit Injection (EUI)
EPA/ARB Tier 4 Interim, EU Stage IIIB/
Japan MLIT Step 4 Certified Engine
with aftertreatment
24-volt electric start
High performance single plane
cooling system
Aftercooler, air-to-air (ATAAC)
Air filter, with electronic
service indicator
Coolant, extended life
Fan, suction, hydraulically driven
Fuel priming pump, electric
Sound attenuated exhaust system
Parking brake, electronic
Precleaner, strata-tube dust ejector
Prescreener
Shift management
– Automatic directional and downshift
– Controlled-throttle, load-compensated
– Enhanced Autoshift
Starting aid, automatic ether
Torque divider
Transmission, electronically-controlled
– Powershift, 3F/3R speed
Four planet, double-reduction
– Planetary final drives
Transmission control module, electronic
Turbocharger
Water separator

UNDERCARRIAGE

Rollers and idlers, lifetime lubricated
Sprocket rim segments, replaceable
Suspension-type undercarriage
8-roller tubular track roller frame
(Carrier roller ready)
Track adjusters, hydraulic
Track guide
610 mm (24 in) PPR moderate service
grouser with sealed and lubricated
track (44 section)
Two-piece master links

HYDRAULICS

Hydraulics, independent steering and
work tool pumps
Hydraulics, electronically controlled,
load-sensing dozer lift and tilt
Electronically enabled quick drop valve

STARTERS, BATTERIES, AND ALTERNATORS

Alternator, 150 amp
Batteries, heavy duty
Starting receptacle, auxiliary

ELECTRICAL

Alarm, back-up
Converter, 24V to 12V
Diagnostic connector
Horn, forward warning

OPERATOR ENVIRONMENT

ROPS mounted air conditioner
Armrest, adjustable
Advisor operator interface
– Electronic monitoring system
– Diagnostic service information
– Operator preferences
Cab, ROPS/FOPS, sound suppressed
Deactivation switch, hydraulic controls
Access/egress lighting with
shutdown timer
Decelerator pedal
Governor switch, electronic
Heater and ventilation
Mirror, rearview
Radio-ready
Provision for wire passage in/out of cab
Interior LED courtesy lights
Seat, cloth, air-suspension
Seatbelt, retractable
Steering control, direction and
speed control thumb switches
with recall button
Wipers, intermittent

OTHER STANDARD EQUIPMENT

CD ROM Parts Book
Engine enclosures
Equalizer bar, pinned
Front pull device
Guards, bottom hinged
Grade control ready
HVAC box – corrosive resistant
Mounting, lift cylinders
Oil cooler, hydraulic
Product Link
PL321 (Satellite)
PL522 (Cellular)
VIMS 3G (Satellite/Cellular Product Link)
S·O·SSM sampling ports
Steering, electronically controlled
power differential
Vandalism protection for fluid
compartments
Engine compartment service light
Six lights package

Optional equipment may vary. Consult your Cat dealer for details.

POWERTRAIN

- Reversing fan (dual or single tilt)
- Oil change system, high speed
- Precleaner, turbine
- Fast fuel system
- Service package with powertrain and engine hour meter, ecology drains
- Thermal shield, including insulated CEM

ENGINE

- Standard with EU sound suppression
- Thermal shield
- Thermal shield with EU sound suppression
- Engine coolant – arctic (–51° C/–60° F)

RADIATOR

- 8.5 fins/inch
- 6.35 fins/inch high debris package

HYDRAULICS

- Hydraulics, dual tilt
- Hydraulics, pin puller
- Hydraulics, ripper
- Hydraulics, winch
- Hydraulic implement towing arrangement
- Hydraulic valve fan – cold weather

STARTERS, BATTERIES, AND ALTERNATORS

- Batteries, arctic
- Heater, engine coolant (240V)
- Alternator, 150 amps, ducted

ELECTRICAL

- Premium light package (3 HID, 7 halogen)
- Sweeps light package (8 halogen)
- Light, warning strobe

OPERATOR ENVIRONMENT

- Visibility arrangement, single camera (EU required)
- Enhanced dual pane glass
- Pressurized cab
- Seat, cloth heated/ventilated
- Window shades

INTEGRATED TECHNOLOGY

- AccuGrade Attachment Ready Option
- AccuGrade (dealer installed)
- Computer Aided Earthmoving System (CAES) (dealer installed)

UNDERCARRIAGE

- Standard configuration
- LGP configuration
- Heavy duty undercarriage
 - Suspended
 - Non-suspended
- SystemOne undercarriage
- Powered bottom guard (Standard or LGP)
- Track pairs (44-section) sealed and lubricated, single grouser shoes

POSITIVE PIN RETENTION TRACK

- PPR Track
- PPR Track – guarded
- PPR Track – arctic
- Extreme Service Track –
 - 610 mm, 660 mm, 710 mm, 965 mm (24 in, 26 in, 28 in, 38 in)
- Moderate Service Track –
 - 610 mm, 660 mm, 710 mm, 965 mm (24 in, 26 in, 28 in, 38 in)
- Super Extreme Service Track –
 - 610 mm (24 in)
- Extreme Service Track (trapezoidal hole) –
 - 610 mm, 660 mm, 710 mm, 965 mm (24 in, 26 in, 28 in, 38 in)
- Super Extreme Service Track (trapezoidal hole) –
 - 660 mm (26 in)
- Moderate Service Track (trapezoidal hole) –
 - 710 mm (28 in)

SYSTEMONE TRACK

- Center tread idler
- Conventional idler
- Extreme Service –
 - 610 mm, 660 mm, 710 mm (24 in, 26 in, 28 in)
- Super Extreme Service –
 - 610 mm, 660 mm, 710 mm (24 in, 26 in, 28 in)
- Extreme Service (center hole) –
 - 610 mm, 660 mm (24 in, 26 in)
- Super Extreme Service (center hole) –
 - 610 mm, 660 mm (24 in, 26 in)

ROLLER OPTIONS

- Carrier rollers
 - Suspended
 - Non-suspended
- Seals, arctic, idler/roller
- Rollers, arctic/pins
- Cartridge pins, arctic

GUARDS

- Guard, fuel tank
- Guard, fast fuel
- Guard, center tread idler seals
- Guard, transmission
- Guard, fan debris
- Front striker bars
- Sweeps group

OTHER ATTACHMENTS

- Grab handles, push arm

BLADES

- 8A Angle Blade
- 8U Universal Blade
- 8SU Semi-Universal Blade
- 8SU LGP Semi-Universal Blade
- 8SU Landfill Blade
- 8SU LGP Landfill Blade
- Coal Blade
- Woodchip Blade
- Rock and landfill guards, as well as push plates and wear plates, are available for specific applications

D8T Optional Equipment

Optional equipment may vary. Consult your Cat dealer for details.

BULLDOZER INSTALLATION PACKAGES

- Standard lift cylinders
- 8A bulldozer
- 8 SU/U dozer, single tilt
- 8 SU/U dozer, single tilt guarded
- 8 SU/U dozer, dual tilt guarded
- 8 LGP dozer single tilt
- 8 LGP dozer single tilt guarded
- 8 LGP dozer dual tilt guarded

OTHER BULLDOZER ATTACHMENTS

- Dual tilt arrangement
- Black paint on back of dozer blade

REAR ATTACHMENTS

- Drawbar, rigid
- Rear counterweight
- Rear counterweight, additional
- Rear striker bars
- Ripper single-shank
- Ripper multi-shank
- Ripper, single- or multi-shank with striker bar
- Pin puller
- Tooth, multi-shank ripper
- Tooth, deep ripping
- Winch – variable speed

SPECIAL ARRANGEMENTS

- Waste Handler Arrangement
- Stockpile Arrangement
- ROPS Omission Arrangement

D8T Track-Type Tractor

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