

# D7E

## Track-Type Tractor



### Engine

Engine Model	Cat® C9.3 ACERT™	
Emissions	U.S. EPA Tier 4 Final/EU Stage IV/ Japan 2014 (Tier 4 Final)	
Net Power (Rated)		
ISO 9249/SAE J1349	178 kW	238 hp
ISO 9249/SAE J1349 (DIN)		241 hp

### Engine (continued)

Net Power (Maximum)		
ISO 9249	187 kW	251 hp
ISO 9249 (DIN)		254 hp
<b>Weights</b>		
Operating Weight – STD SU	26 055 kg	57,441 lb
Operating Weight – LGP S	28 525 kg	62,886 lb

## D7E Features

### Electric Drive Power Train

The D7E is built around a revolutionary electric drive system that delivers excellent dozing efficiency and performance. The D7E uses less fuel and fewer parts to help reduce lifetime owning and operating costs.\*

### Fuel/Fluid Efficiency

The D7E is up to 30 percent more fuel efficient than the D7R2. Efficient use of Diesel Exhaust Fluid (DEF) – typically 2-2.5 percent of fuel consumption – gives you excellent overall fluid efficiency.

### Integrated Technologies

Cat Connect makes smart use of technology and services like Cat AccuGrade™ and Product Link™/VisionLink® to help you monitor, manage and enhance job site operations.

### Powerful Productivity

New features like Stable Blade Control and Traction Control add to the overall productivity of the D7E.

\*Compared to the D7R2.

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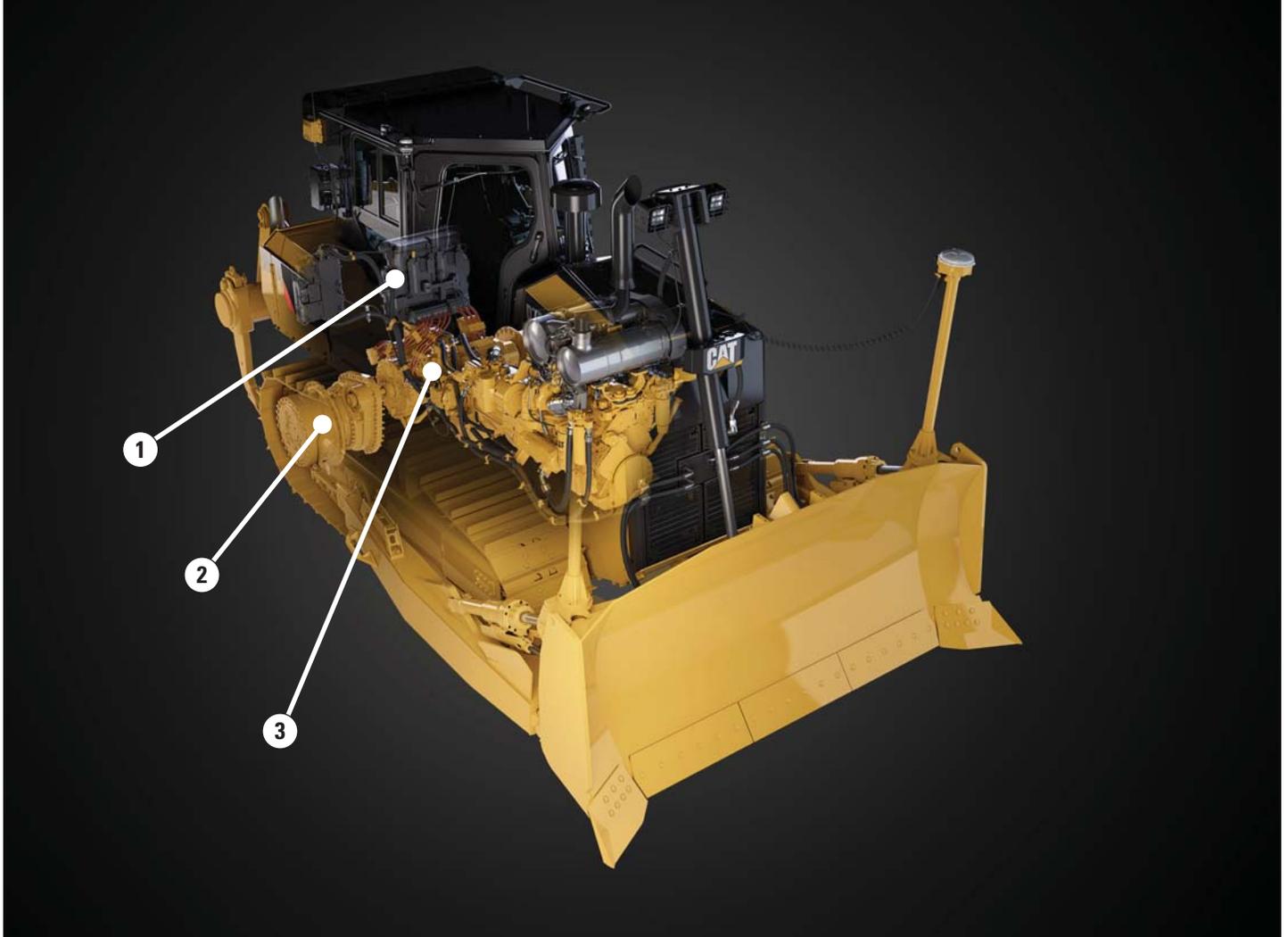
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Since the introduction of the D7E dozer, customers worldwide have saved millions of liters/gallons of diesel fuel and reduced overall emissions.\* The D7E features an innovative diesel-electric power train that helps you save money by getting more work done while using significantly less fuel. Electric drive gives you the power you need for dozing, along with the smooth operation and agile maneuverability suited to a wide variety of applications. The new D7E meets Tier 4 Final/Stage IV/Japan 2014 (Tier 4 Final) emission standards.

*\*Compared to the D7R2.*



### **Electric Drive**

A revolutionary Electric Drive system is designed to deliver quantum leaps in improved productivity and fuel efficiency. The D7E is up to 30 percent more fuel efficient than the D7R2. Better fuel economy plus greater productivity means you can move up to 35 percent more material per gallon/liter of fuel. And the D7E is more productive – moving 10 percent more material per hour. Fewer moving parts, less fuel and fluid and longer service intervals help reduce lifetime owning and operating costs.

#### **① Advanced Electronics Control the Power**

Electric generator, power inverter and propulsion module replace traditional components like a torque converter and transmission. A Cat C9.3 ACERT engine turns a powerful electric generator that efficiently converts mechanical energy into AC electrical current.

#### **② Electric Propulsion Powers the Final Drives**

Current from the generator flows through specially armored cables and military grade connectors to a solid-state power inverter. Advanced electronics send AC current to the propulsion module to control the motors and provides DC current for the accessory systems. The propulsion module, featuring state-of-the-art AC electric motors, delivers well-modulated torque via axles to the final drives.

#### **③ Fully Sealed and Liquid Cooled**

Drive train electrical components are fully sealed, so the D7E can safely operate in a wide range of dozing conditions. Liquid cooling ensures that the electric drive components deliver peak performance in extreme-temperature conditions.

*Note: Productivity, efficiency and owning/operating cost compared to previous D7R2 model.*

# Power and Performance

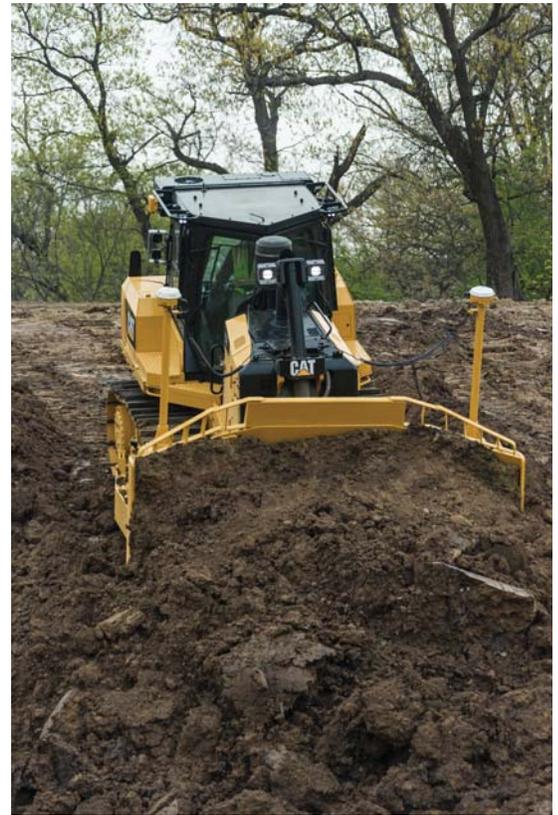
## Built to get the job done with less

### Powerful Maneuverability

Differential steering combines with electric drive to make the D7E so maneuverable that it can perform both uninterrupted power turns under load and “locked-track” pivot turns. A dedicated D8-size steering pump delivers improved performance. The electric drive system is highly efficient at delivering engine power to the ground, and an infinitely variable speed control means smooth operations with no gears to shift.

### Cooling System

The D7E uses a three-part, aluminum bar core radiator for charged air, jacket water and the separate circuit. The single-plane design allows for easier cleaning and a 6-fins-per-inch design helps reduce plugging. A molded shroud ensures efficient air flow and the fan utilizes lightweight, durable blades for high efficiency and quiet operation. In cooler conditions, the hydraulic demand fan reduces speed to conserve power, save fuel and decrease sound levels. An optional reversing fan is available for high debris conditions.



### Traction Control

New standard feature reduces track slip for improved productivity and reduced undercarriage wear.

### Stable Blade Control

Standard Stable Blade Control complements operator input to automatically make instantaneous adjustments for smoother grading results with less effort.

### Economy Mode

When in use, Economy Mode automatically adjusts engine speed when machine is not under load to save you fuel. The operator's selected machine speed is maintained.

### Load Sensing Hydraulics

Field-proven system senses the load and continuously adjusts hydraulic power to maximize your work tool efficiency.

# Operator Environment

## Comfort and productivity



The D7E features a quiet, spacious cab. The center-post design gives you outstanding visibility all around the machine to help operators work more confidently and safely. Operators can also enjoy added comforts like manually adjustable armrests and a heated/ventilated seat option.

The in-dash display monitors machine conditions in real time. Mount a grade control system display in the dash to put working information conveniently in front of the operator.

A new in-cab main fall/cross slope display shows you real-time grade percentage during slope work.

A single-unit cab-mounted heating, ventilation and air conditioning (HVAC) system is self contained and powered by the accessory power converter for more efficient cooling.

### Implement and Steering Controls

- Ergonomic controls are fully adjustable and designed for low-effort comfort. Switches and controls for various systems are located within easy reach of the operator.
- Speed recall feature allows operators to pre-set the desired forward and reverse travel speed, and then resume that speed simply by pressing a button.
- Implement Lock-Out prevents inadvertent operation of hydraulic attachments.



# Emissions Technology

## Proven, integrated solutions

Emissions reduction technology on the D7E is designed to be transparent, with no action required from the operator. Regeneration runs automatically in the background while you work.

### Aftertreatment Technologies

Caterpillar designed earlier models with Tier 4 Final/Stage IV/ Japan 2014 (Tier 4 Final) standards in mind. To meet the additional 80 percent reduction in NO<sub>x</sub> emissions, Caterpillar engineers added Selective Catalytic Reduction (SCR) to the already proven aftertreatment solution.

### Diesel Exhaust Fluid

Selective Catalytic Reduction utilizes Diesel Exhaust Fluid (DEF), which can be conveniently refilled when you refuel. A gauge on the dash shows your fluid level. The D7E offers excellent fluid efficiency. Across a variety of applications, the D7E typically has used DEF at a rate of 2-2.5 percent of fuel consumption.

When the machine is turned off, a pump will automatically purge the DEF lines to help prevent freezing. A symbol on the dash and a light/symbol on the Ground Level Service Center indicate when the purge is complete and that it is safe to turn off the electrical disconnect. If the engine/aftertreatment temperatures are high, a Delayed Engine Shutdown will activate automatically to cool the machine and then purge the lines. For complete aftertreatment information, please refer to your machine's Operation and Maintenance Manual.



# Integrated Technologies

Monitor, manage and enhance job site operations



Cat Connect makes smart use of technology and services to improve your job site efficiency. Using the data from technology equipped machines, you'll get more information and insight into your equipment and operations than ever before.

Cat Connect technologies offer improvements in these key areas:



EQUIPMENT  
MANAGEMENT

**Equipment Management** – increase uptime and reduce operating costs.



PRODUCTIVITY

**Productivity** – monitor production and manage job site efficiency.



SAFETY

**Safety** – enhance job site awareness to keep your people and equipment safe.





Featured Cat Connect technologies include:

### **LINK Technologies**

LINK technologies wirelessly connect you to your equipment giving you access to essential information you need to know to run your business. LINK data can give you valuable insight into how your machine or fleet is performing so you can make timely, fact-based decisions that can boost job site efficiency and productivity.

### **Product Link/VisionLink**

Product Link is deeply integrated into your machine, helping you take the guesswork out of equipment management. Easy access to timely information like machine location, hours, fuel usage, idle time and event codes via the online VisionLink user interface can help you effectively manage your fleet and lower operating costs.

### **GRADE Technologies**

GRADE technologies combine digital design data, in-cab guidance, and automatic controls to enhance grading accuracy, reduce rework, and lower costs related to production earthmoving and rough, fine and finish grade applications.

### **Cat AccuGrade**

AccuGrade is a dealer-installed aftermarket grade control system that provides higher accuracy capabilities by adding laser, GPS and UTS technology when required. The factory AccuGrade Ready Option provides optimal mounting locations, brackets, and hardware and simplifies installation. Deep Integration optimizes machine and system performance to maximize productivity.



# Equipped for the Job

## Optimize your machine

The D7E features a robust, single lift cylinder design. L-shaped push arms give you an advantage over diagonal brace designs by bringing the blade closer to the machine. This gives you better balance, stability, maneuverability and blade penetration.

### Blades

Semi-Universal, Universal, Straight and Angle blades are designed with a strong box section to stand up to the most severe applications. Heavy moldboard construction, hardened bolt-on cutting edges and end bits add strength and durability. Dual Tilt option is available on S/SU/U blades for more productive dozing. Specialty blades are also available for waste, coal and wood chip applications.

### Undercarriage

The D7E undercarriage is designed for performance in a wide range of applications. Enhanced visibility, especially to the sides, is only one of the many benefits of this highly efficient undercarriage system. D10-size sprocket bearings offer added durability. Shock loads are directed through the roller frame to reduce wear and tear on the machine – and on the operator. The Heavy Duty undercarriage components are designed for extended wear life in abrasive conditions and rocky or uneven terrain. Choose a Standard arrangement for versatility in a variety of soil conditions, or the Low Ground Pressure (LGP) configuration with increased track contact area for improved stability and excellent flotation in soft ground conditions.

### Rear Implements

To help you match your dozer to the task at hand, you can outfit your D7E with a multi-shank ripper, winch, drawbar or rear counterweight.

Ask your Cat dealer for available options to help you optimize your machine for the work you do.





## Special Arrangements

Purpose-built for performance

The D7E is especially popular in Waste and Stockpile applications because of its maneuverability and demonstrated fuel efficiency advantages. Equip your purpose-built machine from the factory to handle the unique challenges of landfill, coal and wood chip work. Special blades and track shoe offerings let you optimize the machine for the job.

### D7E WH LGP Waste Handler

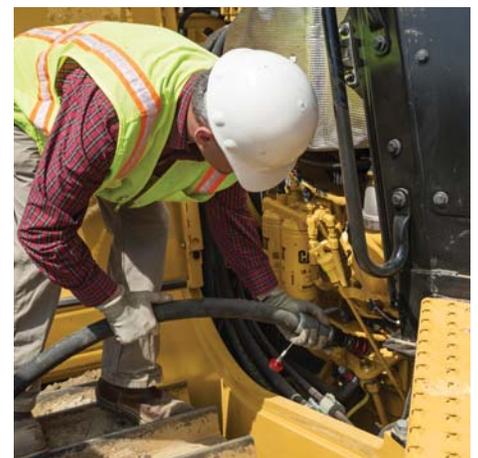
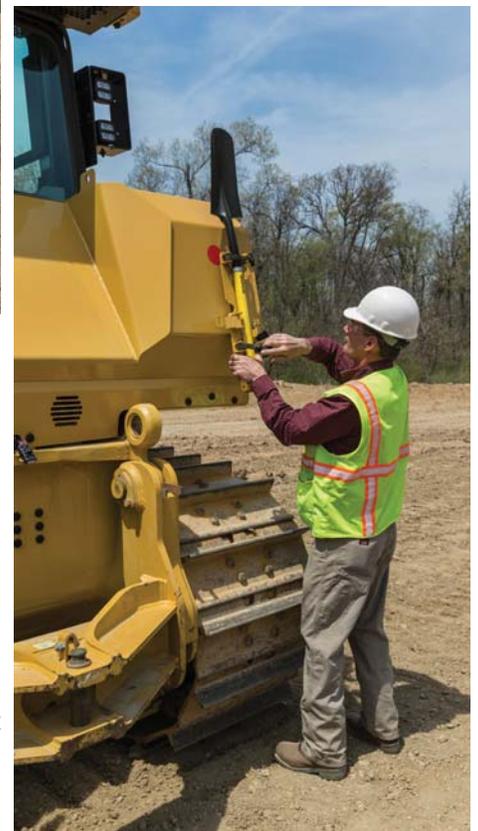
- Specialized guarding, striker bars and seals help protect the machine from impact and airborne debris.
- Purpose-built heavy duty final drive guarding help prevent wire, cables, rope and debris from wrapping into the final drive seals.
- Heavy duty sealed bottom guards protect the engine and power train system.
- Reversing fan and single plane cooling cores with 6 fins per inch are ideal for high debris environments. Easy access clean out.
- Insulated Clean Emissions Module for thermal protection.
- Lights are mounted up and away from main debris area for protection, while still giving you plenty of light on the work area.
- Specialized air handling features help deliver cleaner air to the machine and to the cab.

### D7E Stockpile

- Specialized guarding and seals help protect the machine from damage and debris build-up.
- Single-plane cooling package for cooling efficiency, reduced plugging and easier clean-out. Hydraulic demand fan offers efficient cooling and reverses to reject debris.
- Insulated Clean Emissions Module and thermal shields.
- Additional features like a turbine precleaner and roof-mounted filter help protect both the machine and the operator in high debris conditions.

# Serviceability and Customer Support

When uptime counts



## Ease of Service

The D7E redefines serviceability. With easy access to service points, fewer moving parts and longer service intervals, the D7E can significantly reduce total owning and operating costs. A tilt cab allows easy access to modular major components, such as generator, propulsion module, power electronics and hydraulics. The heating, ventilation and air conditioning (HVAC) system is self contained for improved performance, increased service intervals and ease of serviceability.

Service points are grouped on the left side of the machine for quick and easy routine maintenance. Ground-level sight gauges let you inspect fluid levels at a glance. Modular final drives can be easily accessed for maintenance. The optional high-speed oil change attachment can help make servicing even faster. And for quick undercarriage cleanouts on the go, a new shovel mounting bracket has been added to the back of the machine.

## Ground Level Service Center

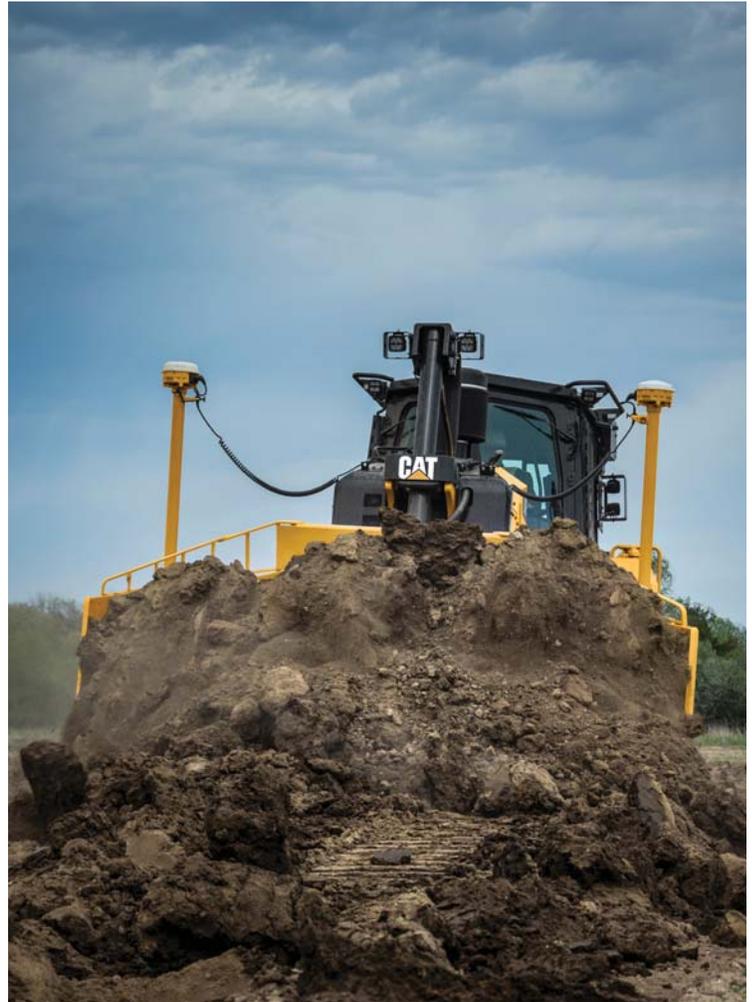
You can reach the ground level service center on the left fender without setting foot on the machine, giving easy access to the battery disconnect, hour meter, remote engine shutdown and access light switches. It also houses an LED warning indicator showing that the power train and accessory systems are energized. When the systems are de-energized and safe for maintenance, the indicator turns off.

## Cat EMSolutions (Equipment Management Solutions)

EMSolutions lets you take control of your fleet with a solution specific to your equipment management needs. Comprehensive, technology-enabled equipment management – combined with the knowledge and expertise of your Cat dealer – can provide ways to help you achieve gains that go straight to your bottom line.

- Improve availability
- Reduce owning and operating costs
- Streamline maintenance practices
- Maximize equipment life
- Increase resale value

Consisting of five levels of support, from remote access to equipment data to complete, proactive management of your fleet, EMSolutions allows you to choose the amount of support that's right for you.



## Renowned Cat Dealer Support

Knowledgeable Cat dealers have a global reputation for providing outstanding sales and service. Maximize your equipment investment with a Customer Support Agreement tailored to meet your business needs. Take advantage of preventive maintenance programs like Custom Track Service, Scheduled Oil Sampling (S-O-S<sup>SM</sup>) analysis, and guaranteed maintenance contracts. Cat dealers can even help you with operator training to help boost your profits.

When you need repairs, Cat dealers and our unmatched Caterpillar distribution network excel at getting you the right parts you need quickly. Many times the right part is a genuine Cat Reman part. Remanufactured parts offer you the same warranty and reliability as new parts at a fraction of the cost. The breadth of the Reman offering ensures cost effective repairs or rebuilds of your engine and hydraulic components on the D7E. Rebuilt electric drive components such as the APC and Inverter are also currently available with additional options in the works. Caterpillar strives to provide customers the lowest owning and operating costs over the life of their machine.

# Safety

Designed with protection in mind



- New pull-down ladder provides convenient access for fueling and to the back of the machine.
- New seat belt indicator registers a fault code through Product Link if the operator fails to buckle up, helping to improve your job site safety.
- Center-post cab with angled doors offers excellent visibility to help operators work more safely.
- Rear vision camera is available to enhance visibility behind the machine.
- Standard Operator Presence detection system allows the machine to idle when the operator is not seated, but locks out the power train and front implements to avoid unintentional movement.
- Convenient steps and handles help you get on and off the tractor with greater ease. Access lighting can be turned on from a ground level switch.

# Sustainability

Built for the next generation

- Meets Tier 4 Final/Stage IV/Japan 2014 (Tier 4 Final) emission standards.
- Up to 30 percent more fuel efficient than the D7R2. Efficient use of Diesel Exhaust Fluid (DEF) gives you excellent overall fluid efficiency.
- In the first four years of production, D7E customers saved more than 13.25 million liters (3.5 million gallons) of diesel fuel compared to the D7R2. Significant fuel savings means reduced emissions and lower costs.
- The D7E earned a 2009 Clean Air Excellence Award from the U.S. Environmental Protection Agency.
- Major components are built to be rebuilt, reducing waste and saving you money by giving your dozer a second – and even third – life.



# D7E Track-Type Tractor Specifications

## Engine

Engine Model	Cat C9.3 ACERT	
Global Emissions	Tier 4 Final/Stage IV/ Japan 2014 (Tier 4 Final)	
Engine Power (Maximum)		
SAE J1995	201 kW	270 hp
ISO 14396	198 kW	266 hp
ISO 14396 (DIN)	270 hp	
Net Power (Rated)		
ISO 9249/SAE J1349	178 kW	238 hp
ISO 9249/SAE J1349 (DIN)	241 hp	
Net Power (Maximum)		
ISO 9249/SAE J1349	187 kW	251 hp
ISO 9249/SAE J1349 (DIN)	254 hp	
Bore	115 mm	4.5 in
Stroke	149 mm	5.9 in
Displacement	9.3 L	567 in <sup>3</sup>

- Maximum Engine Power at 1,600 rpm, Rated Net Power at 1,700 rpm, Maximum Net Power at 1,450 rpm.
- Net power advertised is the power available at the flywheel when engine is equipped with fan, air cleaner, and muffler.
- No derating required up to 3200 m (10,500 ft) altitude, beyond 3200 m (10,500 ft) automatic derating occurs.
- All non road Tier 4 Interim and Final, Stage IIIB and IV, and Japan 2011 and 2014 (Tier 4 Interim and Tier 4 Final) diesel engines are required to use only Ultra Low Sulfur Diesel (ULSD) fuels containing 15 ppm (mg/kg) sulfur or less. Biodiesel blends up to B20 (20% blend by volume) are acceptable when blended with 15 ppm (mg/kg) sulfur or less ULSD. B20 should meet ASTM D7467 specification (biodiesel blend stock should meet Cat biodiesel spec, ASTM D6751 or EN 14214). Cat DEO-ULS™ or oils that meet the Cat ECF-3, API CJ-4, and ACEA E9 specification are required. Consult your OMM for further machine specific fuel recommendations.
- DEF used in Cat Selective Catalytic Reduction (SCR) systems must meet the requirements outlined in the International Organization for Standardization (ISO) standard 22241.

## Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.2 kg of refrigerant which has a CO<sub>2</sub> equivalent of 1.716 metric tonnes.

## Service Refill Capacities

Fuel Tank	409 L	108 gal
DEF Tank	17.5 L	4.6 gal
Cooling System	87 L	22.5 gal
Engine Crankcase	30 L	8 gal
Power Train	60 L	16 gal
Final Drives (each)	28 L	7 gal
Final Drive (LGP each)	34 L	9 gal
Pivot Shaft Compartment	7 L	1.8 gal
Hydraulic Tank	76 L	20 gal

## Weights

Shipping Weight	21 955 kg	48,402 lb
Operating Weight – STD SU	26 055 kg	57,441 lb
Operating Weight – LGP S	28 525 kg	62,886 lb
Shipping Weight – LGP	24 335 kg	53,649 lb

- Shipping Weight includes lubricants, coolant, ROPS/FOPS cab, standard track and 10% fuel.
- Operating Weight includes blade, lubricants, coolant, full fuel tank, standard track, ROPS/FOPS cab, drawbar and operator.

## Hydraulic Controls – Pump

Pump Output – Steering	312 L/min	82.4 gal/min
Pump Output – Implement	200 L/min	52.8 gal/min
Lift Cylinder Flow	200 L/min	52.8 gal/min
Ripper Cylinder Flow	200 L/min	52.8 gal/min
Pump Type	Piston, Variable Displacement	
Tilt Cylinder Flow – Head End Flow	93 L/min	24.6 gal/min
Tilt Cylinder Flow – Rod End Flow	66 L/min	17.4 gal/min

## Hydraulic Controls – Main Relief Valve

Pressure Setting – Steering	27 600 kPa	4,000 psi
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- Rated Implement Pump Speed 2,000 rpm.
- Rated Steering Pump Speed 2,500 rpm.

## Hydraulic Controls – Maximum Operating Pressure

Bulldozer	27 600 kPa	4,000 psi
Tilt Cylinder	27 600 kPa	4,000 psi
Ripper (Lift)	27 600 kPa	4,000 psi
Ripper (Pitch)	27 600 kPa	4,000 psi
Steering	41 000 kPa	5,950 psi

# D7E Track-Type Tractor Specifications

## Ripper

Type	Multi-Shank	
Number of Pockets	3	
Overall Beam Width	2088 mm	82.2 in
Beam Cross Section	355 mm	14.0 in
Maximum Clearance Raised (under tip, pinned in bottom hole)	588 mm	23.1 in
Maximum Penetration	650 mm	25.6 in
Maximum Penetration Force	87.4 kN	19,639 lbf
Pryout Force	234.4 kN	52,695 lbf
Weight – with One Shank	1650 kg	3,572 lb
Each Additional Shank	150 kg	330 lb
Ramp Angle	26 Degrees	
Pocket Spacing	900 mm	35.4 in
Shank Gauge	1800 mm	70.9 in
Shank Section	72 mm × 228 mm	2.8 in × 9.0 in

## Winch

Winch Model	PA90	
Weight*	1520 kg	3,350 lb
Oil Capacity	12 L	3.2 gal
Winch and Bracket Length	1115 mm	93.9 in
Winch Case Length	1110 mm	43.7 in
Winch Case Width	826 mm	32.5 in
Increased Tractor Length – STD	1032 mm	93.9 in
Increased Tractor Length – LGP	1032 mm	93.9 in
Drum Diameter	318 mm	12.5 in
Drum Width	226 mm	8.9 in
Flange Diameter	610 mm	24 in
Drum Capacity – 24 mm (1 in)	62 m	203 ft
Drum Capacity – 29 mm (1.13 in)	56 m	185 ft
Ferrule Size (O.D. × Length)	60 mm × 65 mm	2.38 in × 2.56 in
Winch Drive	Hydraulic	
Control	Electronic/Hydraulic	
Installed Weight	1520 kg	3,350 lb
Winch Length	1115 mm	43.9 in
Overall Width	1090 mm	43 in
Throat Clearance	218 mm	8.6 in
Rope Diameter (recommended)	25 mm	1 in
Cable Ferrule Size (O.D. × Length)	60 mm × 65 mm	2.38 in × 2.56 in
Maximum Bare Drum Line Pull	400.3 kN	90,000 lbf
Maximum Bare Drum Line Speed	21 m/min	70 ft/min
Maximum Full Drum Line Pull	253.5 kN	57,000 lbf
Maximum Full Drum Line Speed	35 m/min	116 ft/min

\*Basic winch weight, mounting arrangement, hydraulic and electrical system weight.

## Standards

ROPS/FOPS	<ul style="list-style-type: none"> <li>• Rollover Protective Structure (ROPS) meets the following criteria: ISO 3471:2008</li> <li>• Falling Object Protective Structure (FOPS) meets the following criteria: ISO 3449:2005 Level II</li> </ul>
Brakes	<ul style="list-style-type: none"> <li>• Crawler Machine Brake Requirements meets the following criteria: ISO 10265:2008</li> </ul>
Cab	ANSI/SAE J1166 OCT98
	<ul style="list-style-type: none"> <li>• The declared dynamic operator sound pressure level is 75 dB(A) when “ISO 6396:2008” is used to measure the value for an enclosed cab. The measurement was conducted at 70% of the maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds. The cab was properly installed and maintained. The measurement was conducted with the cab doors and the cab windows closed. The cab was properly installed and maintained.</li> <li>• Hearing protection may be needed when the machine is operated with an open operator station for extended periods or in a noisy environment. Hearing protection may be needed when the machine is operated with a cab that is not properly maintained, or when the doors and windows are open for extended periods or in a noisy environment.</li> <li>• The declared exterior sound power level is 110 dB(A) when the value is measured according to the dynamic test procedures and the conditions that are specified in “ISO 6395:2008.” The measurement was conducted at 70% of the maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds.</li> <li>• The whole body vibration information is available in HEGQ3339 “Driving Down Vibration” available from your local Cat dealer. The hand/arm vibration of this machine is below 2.5 m/sec<sup>2</sup> (8.2 ft/sec<sup>2</sup>).</li> </ul>

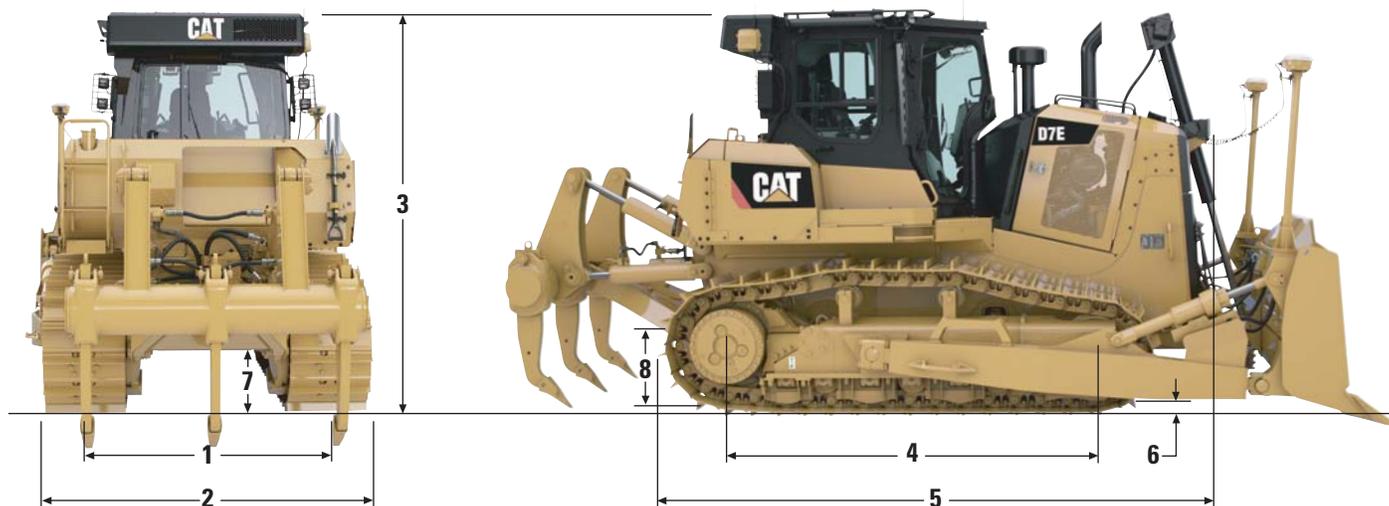
## Drive Train

Type	Electric Drive
AC Compressor Nominal Input Voltage	320 Volts
AC Compressor Maximum Input Current	12 Amps
AC Generator and Propulsion Module Voltage	480 Volts
	<ul style="list-style-type: none"> <li>• Nominal current dependent on heat/humidity loading on HVAC unit.</li> </ul>

# D7E Track-Type Tractor Specifications

## Dimensions

All dimensions are approximate



	STD		LGP	
<b>1</b> Track Gauge	1981 mm	78 in	2286 mm	90 in
<b>2</b> Width of Tractor over Trunnions	2880 mm	113 in	3423 mm	135 in
Width of Tractor without Trunnions (std. shoes)	2591 mm	102 in	3200 mm	126 in
<b>3</b> Machine Height from Tip of Grouser				
Top of Stack	3365 mm	132 in	3365 mm	132 in
Top of Standard Cab	3392 mm	134 in	3392 mm	134 in
From Ground Face of Shoe	3322 mm	131 in	3322 mm	131 in
<b>4</b> Length of Track on Ground	3016 mm	119 in	3450 mm	136 in
<b>5</b> Length of Basic Tractor	4608 mm	181 in	4608 mm	181 in
With the following attachments add to basic tractor length:				
Ripper (with tip at ground line)	1391 mm	55 in		N/A
Ripper (with tip fully raised)	1222 mm	48 in		N/A
Winch	1032 mm	41 in	1032 mm	41 in
Drawbar	270 mm	10.6 in	270 mm	10.6 in
S Blade	977 mm	38 in		N/A
SU Blade	1187 mm	47 in		N/A
U Blade	1425 mm	56 in		N/A
A Blade – Straight	1230 mm	48 in	1230 mm	48 in
A Blade – Angled 25°	964 mm	36 in	964 mm	36 in
<b>6</b> Height of Grouser	70 mm	2.75 in	70 mm	2.75 in
<b>7</b> Ground Clearance	472 mm	18.6 in	472 mm	18.6 in
Ground Contact Area (std. shoes)	3.68 m <sup>2</sup>	5,698 in <sup>2</sup>	6.31 m <sup>2</sup>	9,792 in <sup>2</sup>
Number of Shoes per Side		40		44
Standard Shoe Width (Moderate Service)	610 mm	24 in	915 mm	36 in
Ground Pressure	69.5 kPa	10.1 psi	44.3 kPa	6.4 psi
Pitch	215.9 mm	8.5 in	215.9 mm	8.5 in
Track Rollers/Side		7		8
Number of Carrier Rollers		2		2
<b>8</b> Drawbar Height (grouser tip to center of clevis)	719 mm	28 in	719 mm	28 in

# D7E Track-Type Tractor Specifications

## Bulldozer Specifications

Blade		7S	7SU	7U	7A		7S LGP
					Straight	Angled 25°	
Blade Capacity (SAE J1265)	m <sup>3</sup>	5.16	6.86	8.34	5.15	—	5.89
	yd <sup>3</sup>	6.75	8.98	10.91	6.74	—	7.7
Width (over end bits)	mm	3904	3713	3988	4503	4120	4545
	ft	12.81	12.18	13.08	14.77	13.52	14.91
Height	mm	1363	1524	1553	1373	1373	1343
	ft	4.5	5	5.1	4.5	4.5	4.4
Digging Depth	mm	586	586	586	711	711	644
	in	23.1	23.1	23.1	28	28	25.4
Ground Clearance	mm	1108	1108	1108	1120	1120	1264
	in	43.6	43.6	43.6	44.1	44.1	49.8
Maximum Tilt	mm	1045	987	1085	695	695	785
	in	41.1	38.9	42.7	27.4	27.4	30.9
Weight*	kg	3504	3832	3806	3790	3790	3970
	lb	7,709	8,431	8,373	8,330	8,330	8,734
Weight with Dual Tilt	kg	3563	3891	3865	—	—	4029
	lb	7,839	8,561	8,503	—	—	8,864

\*Weight includes cylinder mounting, lift cylinder and lines, blade, push arms, trunnions, and cylinder lines (Tilt).

## Undercarriage

Type	Heavy Duty Undercarriage			
Configuration	STD		LGP	
Number of Rollers (each side)	7		8	
Number of Shoes (each side)	40		44	
Pitch	216 mm	8.5 in	216 mm	8.5 in
Shoe Width	610 mm	24 in	915 mm	36 in
Grouser Height (MS)	70 mm	2.75 in	70 mm	2.75 in
Length of Track on Ground (Heavy Duty)	3016 mm	119 in	3450 mm	136 in
Track Gauge	1981 mm	78 in	2286 mm	90 in
Ground Contact Area (Heavy Duty)	3.68 m <sup>2</sup>	5,698 in <sup>2</sup>	6.31 m <sup>2</sup>	9,792 in <sup>2</sup>
Ground Pressure (Heavy Duty) – ISO 16754	69.5 kPa	10.1 psi	44.3 kPa	6.4 psi
Ground Clearance	472 mm	18.6 in	472 mm	18.6 in

## Standard Equipment

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

### POWER TRAIN

- Aftercooler, Air to Air
- Air Cleaner, Precleaner with Strata
- Tube Dust Ejector
- C9.3 ACERT Engine
  - Tier 4 Final/Stage IV/Japan 2014 (Tier 4 Final)
  - Certified Engine with Aftertreatment
- Coolant, Extended Life
- Differential Steering
- Ecology Drains (Engine Oil, Coolant, Hydraulic Oil, Fuel Tank, Power Train Case)
- Electronic Air Cleaner Service Indicator
- Fan, Hydraulically Driven Demand
- Final Drives, Double Reduction
- Generator, AC
- Parking Brake
- Power Inverter
- Propulsion Module, Transmission, Continuously Variable
- Prescreener
- Radiator, Core, Aluminum Bar Plate
- Separate Circuit Core, Aluminum Bar Plate
- Starting Aid, Ether
- Transmission, Continuously Variable
- Turbocharger, Wastegated
- Water Separator, Primary Fuel Filter

### UNDERCARRIAGE

- Guards, End Track Guiding
- Heavy Duty Track (610 mm/24" Moderate Service)
- Master Link
- Rollers and Idlers, Lifetime Lubricated
- Sprocket Rim Segments, Replaceable
- Track Adjusters, Gas Spring Recoil
- Undercarriage, Heavy Duty

### ELECTRICAL

- Accessory Power Converter (APC)
- Alarm, Backup
- Batteries, Maintenance Free (1,000 CCA)
- Converter, 24V to 12V, 10 Amp
- Heater, Engine Coolant, 120V
- Horn, Forward Warning
- Starter, Heavy Duty

### OPERATOR ENVIRONMENT

- Armrest, Adjustable
- Bidirectional Shift Switch
- CB Ready
- Cab, Center Post, Integral ROPS/FOPS
- Continuously Variable Speed Control
- Controls, Electro-Hydraulic, Pilot
- Operated with Electronic Deactivation Switch
- Foot Supports, Dash
- Hour Meter, Electronic
- Machine Isolation
- Mirror, Rearview
- Modular HVAC, Cab Mounted
- Monitoring System, Electronic, with Coolant, Power Train Oil, and Hydraulic Oil Temperature, Fuel Gauge, Tachometer, Gear Indicator and Diagnostic Functions
- Operator Presence
- Pedal, Travel Control
- Radio Ready, 12V
- Seat Belt, Retractable, 76 mm (3 in)
- Seat, Cloth, Air Suspension
- Speed Recall Button
- Throttle Dial, Electronic with Eco Reverse
- Wipers, Intermittent

### OTHER STANDARD EQUIPMENT

- CD ROM Parts Book
- Cab, Tilt
- Engine Enclosures, Perforated
- Front Tow Hook
- Ground Level Hour Meter
- Ground Level Engine Shutdown
- Guards, Hinged Bottom
- Guard, Final Drive Flange
- Hood, Perforated
- Hydraulics, Load Sensing, Dozer Lift and Tilt
- Oil Cooler, Hydraulic
- Oil Cooler, Power Train
- Product Link
- Radiator Doors, Louvered, Double Hinged
- Screen, Grill Door Fan
- S·O·S Sampling Ports
- Vandalism Protection for Fluid Compartments and Battery Box

# D7E Optional Equipment

## Optional Equipment

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

### POWER TRAIN

- Final Drive
  - Cold Weather (STD, LGP)
  - Clamshell (STD, LGP)
- Engine
  - Sound Suppressed, Basic
  - Thermal Shield
  - Sound Suppressed and Thermal Shield
- High Speed Oil Change System
- Precleaner, with Screen
- Fuel Group, Heater
- Fast Fill Fuel System
- Heavy Duty Battery
- Cold Weather Fluids
- Arctic Engine Coolant (–51° C/–60° F)

### UNDERCARRIAGE

- Track
  - 610 mm (24 in)
    - Extreme Service
    - Extreme Service Rotating Bushing Track
    - Moderate Service
    - Moderate Service Rotating Bushing Track
    - Extreme Service Trapezoidal
    - Moderate Service Trapezoidal
  - 660 mm (26 in)
    - Extreme Service
    - Moderate Service
    - Extreme Service Trapezoidal
  - 915 mm (36 in)
    - Extreme Service
    - Extreme Service Trapezoidal
    - Self Cleaning
- Undercarriage (STD, LGP)
  - MS Guide
  - Full Guide
  - Guarded
  - Arctic

### ELECTRICAL

- Lights
  - Basic
  - Premium
  - Premium, Rear Screen
  - Sweeps
  - Sweeps, Rear Screen
- Converter, 24V to 12V
- Receptacle, Jump Start
- Strobe Light Warning

### OPERATOR ENVIRONMENT

- Enhanced Cab Air Cleaner, Roof Mounted
- Heated Seat
- Heated and Ventilated Seat
- Sliding Rear Window
- Single Camera Visibility Arrangement

### GUARDING

- Fast Fuel
- Lights
  - Basic
  - Premium
  - Screen
- Fuel Tank
- Fuel Tank, Waste
- Bottom, Sealed
- Screen
  - Rear
  - Rear and Side
  - Screen or Sweeps Ready
- Sweeps
- Door
  - Screen
  - Half Screen
- Final Drive Flange

### BLADES

- Single Tilt or Single Tilt Guarded (STD, LGP)
- Dual Tilt or Dual Tilt Guarded (STD, LGP)
- S (Straight)
- S LGP Landfill
- SU (Semi-Universal)
- U (Universal)
- A (Angle)
- SU Wear Plate
- SU Rock Guard and Wear Plate

### TECHNOLOGY

- Installation, AccuGrade Ready
- Mounting, AccuGrade Receivers (STD, LGP)

### HYDRAULICS

- Hydraulics, Dual Tilt
- Auto Reversing Hydraulic Fan
- Hydraulic Implement Towing Arrangement
- Hydraulics, Ripper
- PA90 Winch, Variable Speed

### ATTACHMENTS

- Ladder Group
  - Standard
  - Waste
- Multi Shank Ripper
- Drawbar, Rigid
- Ripper with Striker Bar
- Counterweight Box, Rear
- Striker Bar, Box
- Additional Ripper Tooth







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