



D7

Track-Type Tractor

Technical Specifications

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

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D7 Track-Type Tractor Specifications

Engine

Engine Model	Cat® C9.3B	
Emissions	Brazil MAR-1 and UN ECE R96 Stage IIIA emission standards, equivalent to U.S. EPA Tier 3/EU Stage IIIA	
Power Train	Fully Automatic 4-Speed	
Net Power (2,200 rpm)		
ISO 9249/SAE J1349	197 kW	265 hp
ISO 9249 (DIN)	268 mhp	
Engine Power (1,400 rpm)		
ISO 14396	230 kW	309 hp
ISO 14396 (DIN)	313 mhp	
Bore	115.0 mm	4.5 in
Stroke	149.0 mm	5.9 in
Displacement	9.3 L	567 in ³

- Net power advertised is the power available at the engine flywheel when the engine is equipped with a fan, air cleaner, clean emissions module and alternator.
- Advertised power is tested per the specified standard in effect at the time of manufacture.
- No derating required up to 3078 m (10,100 ft) altitude, beyond 3078 m (10,100 ft) automatic derating occurs.
- Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels up to:
 - ✓ 100% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details.

*For use of blends higher than 20% biodiesel, consult your Cat dealer.

Fluid/Refill Capacities

Fuel Tank	624 L	164.8 gal
Cooling System	62 L	16.3 gal
Engine Crankcase	28 L	7.4 gal
Power Train	187 L	49.4 gal
Roller Frames Standard/LGP (each)	85-96 L	22.4-25.3 gal
Final Drives (each)	13 L	3.4 gal
Hydraulic System	144 L	38 gal

Hydraulic Controls – Pressures

Maximum Implement Operating Pressure	31 000 kPa	4,496 psi
Maximum Steering Operating Pressure	38 000 kPa	5,510 psi

Hydraulic Controls – Pump

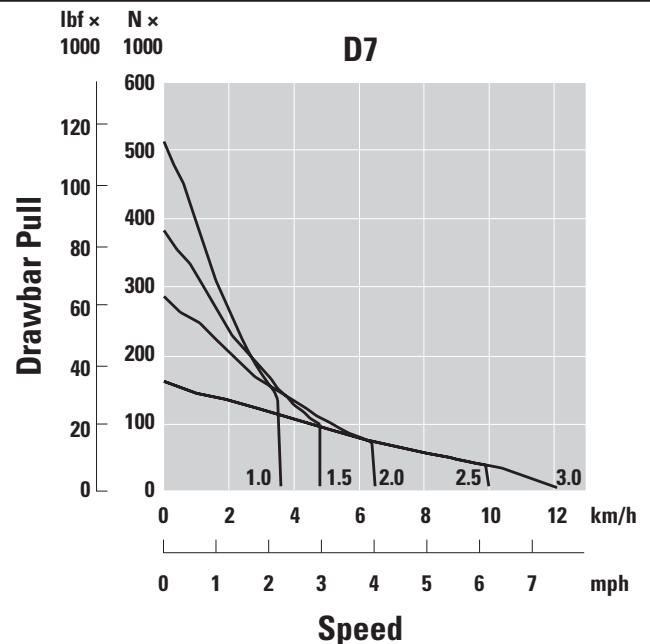
Pump Output (1,900 rpm engine speed*)		
Implement	220 L/min	58 gal/min
Steering	267 L/min	70 gal/min
Fan	56 L/min	15 gal/min
Lift Cylinder Flow	220 L/min	58 gal/min
Tilt Cylinder Flow	170 L/min	45 gal/min
Ripper Cylinder Flow	220 L/min	58 gal/min

*Engine speed varies with load and travel speed. A high idle/low working load speed shown.

Transmission

1.0 Forward	3.5 km/h	2.2 mph
1.5 Forward	4.8 km/h	3.0 mph
2.0 Forward	6.4 km/h	4.0 mph
2.5 Forward	9.0 km/h	5.6 mph
3.0 Forward	11.4 km/h	7.1 mph
1.0 Reverse	3.5 km/h	2.2 mph
1.5 Reverse	4.8 km/h	3.0 mph
2.0 Reverse	6.3 km/h	3.9 mph
2.5 Reverse	8.5 km/h	5.3 mph
3.0 Reverse	11.4 km/h	7.1 mph

Drawbar Pull



D7 Track-Type Tractor Specifications

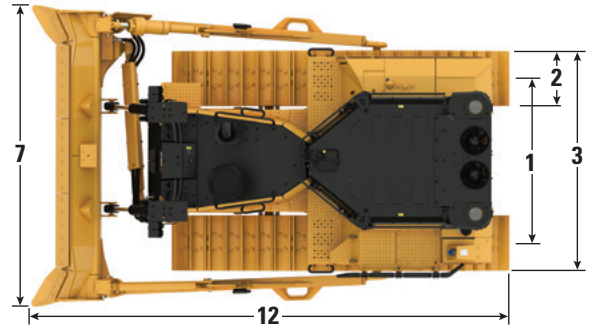
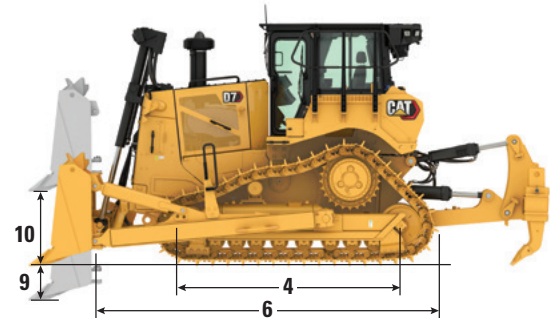
D7 SU/U

Operating Weight*	29 776 kg	65,644 lb
Shipping Weight**	26 043 kg	57,415 lb
Ground Pressure (ISO 16754)	72.1 kPa	10.5 psi
Undercarriage	41 Sections with 7 Bottom Rollers	
1 Track Gauge	1.98 m	78 in
2 Width of Track Shoe (Standard)	0.61 m	24 in
3 Width of Tractor (without trunnions)	2.59 m	102 in
4 Length of Track on Ground	2.97 m	117 in
Ground Contact Area (ISO 16754)	4.05 m ²	6,274 in ²
Grouser Height (Moderate Service)	0.07 m	2.9 in
Ground Clearance	0.44 m	17.5 in
5 Machine Height***	3.43 m	134.9 in
6 Length of Basic Tractor	4.66 m	183.4 in
With Ripper, add	1570 mm	61.8 in

*Operating weight includes blade, lubricants, coolant, full fuel tank, ROPS/FOPS cab, adjustable parallelogram ripper, and 75 kg (165 lb) operator.

**Shipping weight includes blade lift cylinders, lubricants, coolant, 10% fuel, ROPS/FOPS cab, and adjustable parallelogram ripper.

***Machine height from tip of grouser to top of Product Link™ Antenna. For sweeps, add 64 mm (2.5 in) to overall machine height. With Extreme Service, add 9 mm (0.4 in). When Cat Grade with 3D antennas are installed there is no added machine height.



Blades

Configuration	Semi-Universal (SU)		Universal (U)	
	m	in	m	in
Capacity (ISO 9246)	7.42 m ³	9.7 yd ³	8.56 m ³	11.2 yd ³
7 Width across End Bits	3.64 m	143.3 in	3.92 m	154.3 in
Width without End Bits	3.50 m	138.0 in	3.78 m	149.0 in
8 Height	1.56 m	61.6 in	1.56 m	61.6 in
9 Dig Depth	0.58 m	22.8 in	0.58 m	22.8 in
10 Lift Height	1.21 m	47.8 in	1.21 m	47.8 in
11 Maximum Tilt at Blade Corner	0.52 m	20.4 in	0.56 m	22.2 in
Maximum Tilt Angle	8.5°		8.5°	
Pitch Adjustment	± 3.5°		± 3.5°	
12 Length of Machine with Blade	5.78 m	227.4 in	6.03 m	237.4 in
Blade Weight (blade + push arms installed)	3269 kg	7,207 lb	3473 kg	7,640 lb

Cat FirstCut™ cutting edges are available for for Semi-Universal (SU) blades. FirstCut edges provide superior penetration in tough compacted, rocky or frozen soils resulting in up to 35% larger payload mass and up to 17% improvement in productivity. Consult with your Cat dealer for more benefits and details.

D7 Track-Type Tractor Specifications

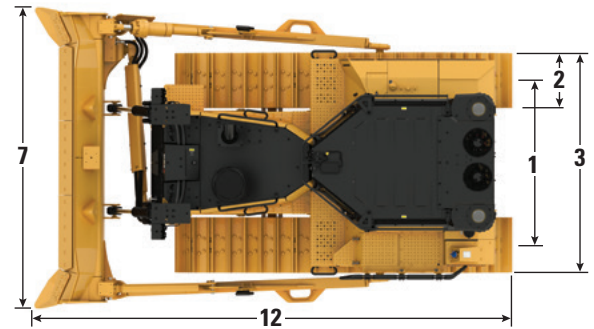
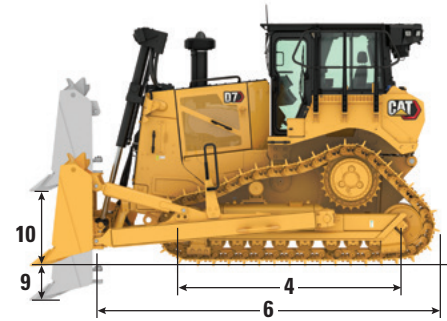
D7 LGP S/SU

Operating Weight*	28 677 kg	63,220 lb
Shipping Weight**	25 074 kg	55,278 lb
Ground Pressure (ISO 16754)	43.4 kPa	6.3 psi
Undercarriage	43 Sections with 9 Bottom Rollers	
1 Track Gauge	2.24 m	88 in
2 Width of Track Shoe (Standard)	0.91 m	36 in
3 Width of Tractor (without trunnions)	3.15 m	124 in
4 Length of Track on Ground	3.20 m	126 in
Ground Contact Area (ISO 16754)	6.47 m ²	10,036 in ²
Grouser Height (Moderate Service)	0.07 m	2.9 in
Ground Clearance	0.44 m	17.5 in
5 Machine Height***	3.43 m	135.0 in
6 Length of Basic Tractor	4.66 m	183.4 in

*Operating weight includes blade, lubricants, coolant, full fuel tank, ROPS/FOPS cab, drawbar, and 75 kg (165 lb) operator.

**Shipping weight includes blade lift cylinders, lubricants, coolant, 10% fuel, ROPS/FOPS cab, and drawbar.

***Machine height from tip of grouser to top of Product Link Antenna. For sweeps, add 64 mm (2.5 in) to overall machine height. With Extreme Service, add 9 mm (0.4 in). When Cat Grade with 3D antennas are installed there is no added machine height.



Standard SU Configuration Shown

Blades

Configuration	Straight (S)		Semi-Universal (SU)	
	m	in	m	in
Capacity (ISO 9246)	6.20 m ³	8.1 yd ³	8.79 m ³	11.5 yd ³
7 Width across End Bits	4.31 m	169.8 in	3.93 m	154.6 in
Width without End Bits	4.15 m	163.0 in	3.78 m	149.0 in
8 Height	1.37 m	53.8 in	1.56 m	61.6 in
9 Dig Depth	0.58 m	22.8 in	0.58 m	22.8 in
10 Lift Height	1.21 m	47.8 in	1.21 m	47.8 in
11 Maximum Tilt at Blade Corner	0.51 m	19.9 in	0.51 m	19.9 in
Maximum Tilt Angle	7.0°		7.0°	
Pitch Adjustment	± 3.5°		± 3.5°	
12 Length of Machine with Blade	5.50 m	216.4 in	5.79 m	227.8 in
Blade Weight (blade + push arms installed)	3521 kg	7,762 lb	3500 kg	7,700 lb

Cat FirstCut™ cutting edges are available for for Semi-Universal (SU) blades. FirstCut edges provide superior penetration in tough compacted, rocky or frozen soils resulting in up to 35% larger payload mass and up to 17% improvement in productivity. Consult with your Cat dealer for more benefits and details.

Some features and configurations may not be available in all areas. Please consult your Cat dealer for availability.

D7 Track-Type Tractor Specifications

Track Shoes

Some track shoes not available in all regions. Please consult your Cat dealer for details.

Heavy Duty Extended Life (HDXL)	Standard – 41 Section			LGP – 43 Section	
	560 mm (22 in)	610 mm (24 in)	660 mm (26 in)	760 mm (30 in)	915 mm (36 in)
Moderate Service			✓		✓
Extreme Service	✓	✓	✓		✓
Extreme Service Trapezoidal		✓		✓	✓
Self-Cleaning					✓
Rotating Bushing Track	560 mm (22 in)	610 mm (24 in)	660 mm (26 in)	760 mm (30 in)	915 mm (36 in)
Moderate Service		✓			

Dimensions – Rear Attachments

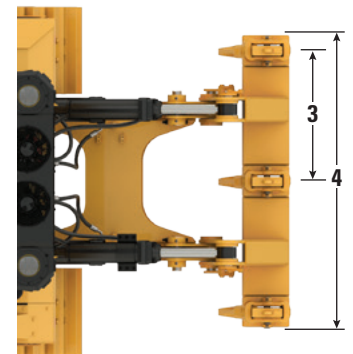
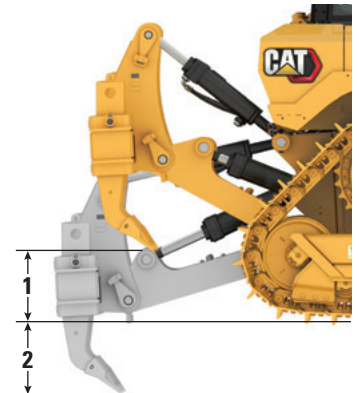
Add the following to the total length of the machine when these rear attachments are installed.

Drawbar		Winch		Ripper		Waste Striker Box	
276 mm	10.8 in	749.7 mm	29.5 in	1570 mm	61.8 in	450.5 mm	17.7 in

Ripper

Type	Adjustable Parallelogram	
Weight with Three Shanks	3607 kg	8,091 lb
Weight with One Shank	3307 kg	7,431 lb
4 Beam Width	2210 mm	87 in
Beam Cross Section	343 × 279 mm	13.5 × 11 in
1 Maximum Clearance, Raised (Shank Tip)	748 mm	29.4 in
2 Maximum Penetration	757 mm	29.8 in
3 Number of Pockets	3	
Maximum Penetration Force	8664 kg	19,100 lb
Maximum Pryout Force	17 138 kg	38,513 lb

Type	Fixed Parallelogram	
Weight with Three Shanks	3539 kg	7,802 lb
Weight with One Shank	3239 kg	7,141 lb
4 Beam Width	2210 mm	87 in
Beam Cross Section	343 × 279 mm	13.5 × 11 in
1 Maximum Clearance, Raised (Shank Tip)	748 mm	29.4 in
2 Maximum Penetration	757 mm	29.8 in
3 Number of Pockets	3	
Maximum Penetration Force	8664 kg	19,100 lb
Maximum Pryout Force	17 138 kg	38,513 lb



D7 Track-Type Tractor Specifications

Winch

Winch Model	PA110	
Weight ²	2046 kg	4,511 lb
Oil Refill Capacity	15 L	4 gal
Winch and Bracket Length	1628 mm	64.1 in
Winch Case Width ¹	1227 mm	48.3 in
Drum Diameter	320 mm	12.5 in
Drum Width	330 mm	13.0 in
Flange Diameter	610 mm	24 in
Winch Drive	Hydraulic (High Power)	
Control	Electric	
Rope Diameter (recommended)	28 mm	1.13 in
Rope Diameter (optional)	32 mm	1.25 in
Drum Capacity – Maximum Theoretical – 28 mm (1.13 in) ³	78 m	261 ft
Drum Capacity – Maximum Theoretical – 32 mm (1.25 in) ³	62 m	207 ft
Drum Capacity – Maximum Recommended – 28 mm (1.13 in) ⁴	55 m	185 ft
Drum Capacity – Maximum Recommended – 32 mm (1.25 in) ⁴	36 m	119 ft
Cable Ferrule Size (O.D. × Length)	60 mm × 70 mm	2.38 in × 2.75 in
Maximum Bare Drum		
Line Pull ⁵	489.3 kN	110,000 lb
Line Speed ⁶	17.7 m/min	58 ft/min
Maximum Full Drum ³		
Line Pull ⁵	296 kN	66,500 lb
Line Speed ⁶	29 m/min	96 ft/min

¹Winch width does not include mounting brackets/adapters.

²Weight shown is base winch, mounting arrangement, guards, and oil. Wire rope not included.

³Theoretical drum capacity as defined by SAE J1158.

⁴Recommended drum capacity per SAE J706 (K=0.9).

⁵Maximum line pull is lesser of winch catalog rating or calculated maximum line pull at maximum tractor hydraulic system pressure.

⁶Maximum line speed is calculated maximum no-load line speed at maximum tractor hydraulic system flow.

D7 Track-Type Tractor Specifications

Standards

ROPS/FOPS

- ROPS (Rollover Protective Structure) offered by Caterpillar for the machine meets ROPS criteria ISO 3471:2008.
- FOPS (Falling Object Protective Structure) meets ISO 3449:2005 Level II.

Brakes

- Brakes meet the standard ISO 10265:2008.

Sound Level Information

- The declared dynamic spectator sound power level when “ISO 6395:2008” is used to measure the value for a machine is 115 dBA. 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 declared dynamic operator sound pressure level when “ISO 6396:2008” is used to measure the value for an enclosed cab is 80 dBA. 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 declared sound levels listed above include both measurement uncertainty and uncertainty due to production variation.
- Hearing protection may be needed when the machine is operated with an open operator station, for extended periods, in a noisy environment, or with a cab that is not properly maintained.
- A sound-suppressed configuration is available that offers reduced spectator and operator sound levels and meets the Brazil MAR-1 sound requirements.

Sound Level Information for Machines in European Union Countries and in Countries That Adopt the “European Union Directives”

- If equipped, the certification label is used to verify the environmental sound certification of the machine to the requirements of the European Union. The value that is listed on the label indicates the guaranteed exterior sound power level (L_{WA}) of 112 dBA at the time of manufacture for the conditions that are specified in “2000/14/EC.”
- The declared dynamic operator sound pressure level when “ISO 6396:2008” is used to measure the value for an enclosed cab is 78 dBA. 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 declared sound levels listed above include both measurement uncertainty and uncertainty due to production variation.
- Hearing protection may be needed when the machine is operated with an open operator station, for extended periods, in a noisy environment, or with a cab that is not properly maintained.

Sound Level Information for Machines in Eurasian Economic Union Countries

- The declared dynamic spectator sound power level when “ISO 6395:2008” is used to measure the value for a machine is 115 dBA. 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 declared dynamic operator sound pressure level when “ISO 6396:2008” is used to measure the value for an enclosed cab is 80 dBA. 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 declared sound levels listed above include both measurement uncertainty and uncertainty due to production variation.
- Hearing protection may be needed when the machine is operated with an open operator station, for extended periods, in a noisy environment, or with a cab that is not properly maintained.

Advanced Cabin Filtration

Operator Cabin

- Distributed HVAC ducting with automatic temperature control and blower speed provides ultimate operator comfort with less user input.
- Reduced maintenance of the condenser core with automatic reversing fans.
- Cat Advanced Cabin Filtration is standard.

Cat Advanced Cabin Filtration

- Operator protection from respirable particulate (0.3-10-micron size).
- Sustainably pressurized cab (U.S. Silica compliant).
- Reduced maintenance with longer life, high efficiency filters.
- Protection for all cabin components: electronics, etc.
- Helps meet U.S. Occupational Safety and Health Administration Silica Rule Table 1 requirements for operator cabs.
- Multi-tiered filter offerings for optional efficiency upgrades. Contact Cat dealer for availability.
 - MERV 16 – Standard Equipment
 - HEPA
 - Activated Carbon + HEPA
 - ABEK1 + HEPA

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.36 kg of refrigerant which has a CO₂ equivalent of 1.946 metric tonnes.

Dozer Technology Features

Assist technology features to help operators of varied experience levels get the job done faster and more accurately. Grade and Command offerings help further enhance your productivity, efficiency and job site safety.

All Premium and High Debris cabs are Third Party Grade Control Ready, equipped with CAN interface, harness pass throughs and mounting features to make it easier to install the grade control system of your choice.

ARO with Assist Package

Attachment Ready Option (ARO)	ARO provides wiring and mounting provisions for dealer installation of Grade with 3D, AccuGrade, UTS, or other grade control systems.
Cat Grade with Slope Assist™	Slope Assist automatically maintains pre-established blade position without a GNSS/GPS signal – no additional hardware or software needed. For machines with 3D, operators can easily switch back and forth from full 3D automatics to Slope Assist.
Steer Assist	Steer Assist automates track and blade tilt steering. Helps reduce operator fatigue by automatically maintaining straight travel with light loads or heavy loads on flat ground and cross slopes. No GNSS/GPS required.
Stable Blade	Stable Blade works seamlessly with operator inputs to help produce a smoother surface when operating manually.
Slope Indicate	Slope Indicate is included in the main machine display and shows side slope and uphill/downhill grades to help operators with slope work.
Blade Load Monitor	Blade Load Monitor gives you real-time feedback on current load versus the optimal blade load based on your ground conditions. Actively monitors machine load and track slip to help you reach optimal pushing capacity. ¹
Traction Control	Traction Control automatically reduces track slip to save you time, fuel and track wear. ¹
AutoCarry™	AutoCarry automates blade lift to help you maintain consistent blade load and help reduce track slip. ¹

Grade 3D with Assist Package

Includes all features from the ARO with Assist Package listed above, plus:

Cat Grade with 3D	Factory integrated Cat Grade with 3D uses GNSS/GPS to control the blade so you can get to design plan faster. Low profile antennas are integrated into the cab roof and GNSS/GPS receivers are mounted inside the cab for better protection. ²
Steer Assist 3D	Automatically follow guidance lines from site design plans (or Infield designs) under light load or heavy load. ²
Dedicated Touchscreen Grade Display	Full-color Grade operator interface is intuitive and easier to use. The 254 mm (10 in) touchscreen uses an Android OS platform and operates like a smart phone.

Remote Control/Cat Command

Remote Control Ready Cab	Premium and High Debris cabs are Remote Control Ready from the factory with external connector for dealer installation of the Cat Command remote control system.
Command for Dozing ² (Optional)	Cat Command remote control technology provides full dozer maneuverability from a safe distance when working in hazardous environments. Command offers the choice of line-of-sight consoles or long-distance operator stations (non-line-of-sight).

¹Feature not operational indoors or in areas where a GNSS/GPS signal is not available.

²Requires Software Enabled Attachment (SEA) installation when not configured from the factory.

Note: Grade and Assist technologies, except Slope Indicate, Blade Load Monitor and Traction Control, are not compatible with Angle blades or specialty blades from Cat Work Tools. Please consult with your Cat dealer for details.

D7 Standard and Optional Equipment

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
POWER TRAIN			CAT TECHNOLOGY (continued)		
Cat® C9.3B diesel engine	✓		Operator ID		✓
Fully-automatic 4-speed transmission with Lock-Up Clutch (LUC) torque divider	✓		Machine Security – Passcode	✓	
Air-to-air aftercooler (ATAAC)	✓		Machine Security – Bluetooth		✓
Aluminum bar plate radiator	✓		Remote Control Ready		✓
Differential steering with dedicated hydraulic pump	✓		Cat Command for Dozing		✓
Engine air precleaner with dust ejection	✓		OPERATOR ENVIRONMENT		
Engine air precleaner with screen and dust ejection		✓	Standard cab with Integrated ROPS and FOPS, laminated safety glass, sliding windows, basic display/non-ARO, standard seat	✓	
Engine with thermal shield		✓	Premium cab with integrated ROPS and FOPS, laminated safety glass, sliding windows, adjustable armrests. Cab is technology- and remote control-ready.		✓
Engine idle shutdown		✓	High debris cab with integrated ROPS and FOPS, impact resistant polycarbonate doors, solid side windows for improved sealing, powered precleaner with Cat Advanced Cabin Filtration for improved performance and filter life. Cab is technology- and remote control-ready.		✓
Extended life coolant	✓		8-inch (203 mm) gauge cluster display	✓	
Double Reduction Final Drives – Standard or LGP	✓		Full-color 10-inch (254 mm) liquid crystal touchscreen display		✓
Double Reduction Final Drives – Arctic, Waste		✓	High Definition rear view camera with backup lines		✓
Fuel water separator	✓		In-display key machine features		✓
Electric fuel priming pump	✓		Cloth seat with mechanical adjustable lumbar support	✓	
Hydraulic demand fan	✓		Deluxe leather heated/ventilated seat with electronic adjustable lumbar support		✓
Hydraulic reversing fan		✓	Electrohydraulic implement and steering controls	✓	
Sound suppression		✓	Joystick control	✓	
Debris resistant radiator cores	✓		Joystick control – ARO		✓
Automatic ether starting aid	✓		Fresh air filter	✓	
Engine air filter with electronic service indicator	✓		Powered fresh air filter precleaner		✓
Jacket water heater (110V or 220V)		✓	Cab mounted modular HVAC system with automatic reversing fans. Automatic temperature and blower control with distributed ducting.	✓	
CAT TECHNOLOGY			Communication radio ready		✓
Slope Indicate	✓		Rearview mirror	✓	
ARO with Assist Package		✓	Retractable 76 mm (3 in) seat belt	✓	
– ARO			Cup holders	✓	
– Slope Assist			Dash foot pads	✓	
– Steer Assist			Entertainment radio with Bluetooth and microphone		✓
– Stable Blade			Lunchbox storage	✓	
– Blade Load Monitor			Wipers	✓	
– Traction Control			USB and AUX Ports		✓
– AutoCarry			Operator presence switch	✓	
Grade 3D with Assist Package		✓			
– Full-color 10-inch (254 mm) touchscreen grade display					
– Steer Assist 3D					
– Grade receivers and antennas					
– Grade Software Enabled Attachment (SEA)					
– ARO with Assist package features					
Compatibility with radios and base stations from Trimble, Topcon, and Leica	✓				
Capability to install 3D grade systems from Trimble, Topcon, and Leica	✓				
Product Link, Cellular	✓				
Product Link – Dual Cellular/Satellite		✓			
Remote Flash/Troubleshoot	✓				
Grade Connectivity		✓			

(continued on next page)

Standard and Optional Equipment (continued)

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

	Standard	Optional		Standard	Optional
UNDERCARRIAGE			SERVICE AND MAINTENANCE		
Standard undercarriage	✓		30-minute cab removal		✓
Low Ground Pressure (LGP) undercarriage*		✓	Centralized, remote mounted pressure taps	✓	
Heavy Duty (HDXL with DuraLink™)	✓		Ecology drains		✓
Rotating bushing track		✓	Extended service intervals (500 hours engine, 1,000-hour power train)	✓	
Waste undercarriage		✓	Ground level service center (remote electrical disconnect, secondary shutdown switch, optional hour meter)	✓	
Carrier rollers	✓		Fuel tank (624 L/164.8 gal)	✓	
Hydraulic track adjusters	✓		High capacity fuel tank* (821 L/216.8 gal)		✓
Lifetime lubricated track and roller	✓		Fast fuel fill		✓
Moderate service track shoes (see chart on page 6)	✓		High-speed oil change		✓
Extreme service track shoes (see chart on page 6)		✓	Heavy duty perforated radiator doors, louvered and hinged	✓	
Track roller frame – 7 bottom rollers	✓		Quick access cab floor		✓
Track roller frame – 8 bottom rollers		✓	Under hood work light		✓
Track roller frame guiding guards: center, partial or full (NOTE: center guiding guards standard on LGP machine)		✓	Removable engine enclosures, perforated and hinged	✓	
BLADES			S-O-S SM sampling ports	✓	
Semi-Universal		✓	Fender access guard rail with built-in shovel holder		✓
Semi-Universal with Performance Cutting Edges		✓	BATTERIES, STARTERS, ALTERNATORS AND COOLANT		
Straight Blade		✓	95 Amp alternator	✓	
Angle Blade		✓	150 Amp alternator		✓
Universal Blade – Standard configuration only		✓	150 Amp ducted alternator		✓
Waste/Landfill Blade		✓	24 Volt starter	✓	
Forestry/Land Clearing Blade		✓	Engine coolant, –37° C (–35° F)	✓	
Cat FirstCut™ cutting edges (SU blades)		✓	Arctic engine coolant, –51° C (–60° F)		✓
HYDRAULICS			ATTACHMENTS		
Load sensing hydraulics	✓		Fixed parallelogram ripper/curved shanks		✓
Independent steering and implement pumps	✓		Adjustable parallelogram ripper/curved shanks		✓
ELECTRICAL			Winch: – PACCAR PA110		✓
Lights – 4 LED	✓		Rear counterweight		✓
Lights – 6 LED		✓	Drawbar		✓
Premium lights – 12 LED		✓	Rear striker box with striker bar		✓
Backup alarm	✓		GUARDING AND SCREENS		
Integrated warning lights		✓	Bottom guards – standard	✓	
Converter: 15 Amp, 12V outlet	✓		Bottom guards – heavy-duty and sealed		✓
Forward warning horn	✓		Fuel tank guards		✓
			Grab handles	✓	
			Guards for premium lights, front and side		✓
			Sweeps package		✓
			Rear fixed screen		✓
			Hinged rear screen		✓
			Hinged side screen		✓

*Not available in all areas. Please consult your Cat dealer for availability.

D7 Environmental Declaration

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit <https://www.caterpillar.com/en/company/sustainability>.

Engine

- The Cat® C9.3B engine meets Brazil MAR-1 and UN ECE R96 Stage IIIA emission standards, equivalent to U.S. EPA Tier 3/ EU Stage IIIA
- Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels up to:
 - ✓ 100% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels
 Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.
**For use of blends higher than 20% biodiesel, consult your Cat dealer.*

Air Conditioning System

- The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.36 kg (2.99 lb) of refrigerant which has a CO₂ equivalent of 1.946 metric tonnes (2.145 tons).

Paint

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
 - Barium < 0.01%
 - Cadmium < 0.01%
 - Chromium < 0.01%
 - Lead < 0.01%

Sound Performance

Operator Sound Pressure Level (ISO 6396:2008) – 80 dB(A)

Exterior Sound Power Level (ISO 6395:2008) – 115 dB(A)

Operator Sound Pressure Level (ISO 6396:2008) – 78 dB(A)*

Exterior Sound Power Level (ISO 6395:1988) – 112 dB(A)*

- *For machines required to meet applicable regional regulations of Ukraine and Countries that adopt the "EU Directives"; and machines equipped with the sound-suppression package.
- Measurements conducted at 70% of the maximum engine cooling fan speed, with cab doors and windows closed, and the cab properly maintained.
- Sound levels listed above include both measurement and production variation uncertainties.
- Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/windows open) for extended periods or in a noisy environment.

Oils and Fluids

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

Features and Technology

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
 - Move up to 11% more material per hour than the D7R
 - Fully automatic 4-speed powershift transmission continuously adjusts for maximum efficiency
 - Assist technology features help operators work faster and more accurately to save time, materials and fuel
 - Boost productivity up to 50% with Cat technologies like Cat Grade with Slope Assist and Cat Grade with 3D
 - Remote Flash and Remote Troubleshoot

Recycling

- The materials included in machines are categorized as below with approximate weight percentage. Because of variations of product configurations, the following values in the table may vary.

Material Type	Weight Percentage
Steel	81.94%
Iron	7.19%
Nonferrous Metal	1.79%
Mixed Metal	0.18%
Mixed-Metal and Nonmetal	1.94%
Plastic	0.37%
Rubber	0.37%
Mixed Nonmetallic	0.04%
Fluid	0.59%
Other	0.29%
Uncategorized	5.30%
Total	100%

- A machine with higher recyclability rate will ensure more efficient usage of valuable natural resources and enhance End-of-Life value of the product. According to ISO 16714 (Earthmoving machinery – Recyclability and recoverability – Terminology and calculation method), recyclability rate is defined as percentage by mass (mass fraction in percent) of the new machine potentially able to be recycled, reused, or both.

All parts in the bill of material are first evaluated by component type based on a list of components defined by the ISO 16714 and Japan CEMA (Construction Equipment Manufacturers Association) standards. Remaining parts are further evaluated for recyclability based on material type.

Because of variations of product configurations, the following value in the table may vary.

Recyclability – 98%



D7

Waste Handler

Waste Handling package provides added features to help protect the machine and operator in harsh waste applications. Specialized guarding, striker bars and seals help protect the machine from impact, wrapping and airborne debris.

Fully Automatic, Next Generation Performance

- Harness more weight and horsepower than D7R.
- Fully automatic 4-speed powershift transmission continuously adjusts for maximum efficiency and power to the ground without added operator input.
- Elevated sprocket gives you better ride and balance, plus more penetration force.

Added Machine Protection

- High-debris cab option has impact-resistant polycarbonate doors and dual pane windows – eliminates the need for door screens.
- Powered air precleaner helps keep cab air cleaner and pressurized for greater operator comfort.
- Fuel tank guard and heavy duty bottom guards shield major machine components.
- Internal sealing keeps the trash away from the inner compartments.
- Rear striker bar helps protect against trash climbing up the tracks.
- Guarded final drives give added protection against wrapping and impact.
- 12 premium LED lights illuminate the work area.

Ease of Maintenance

- High-debris cooling system with automatic reversing fan and slots for easy cleanout access.
- Trash resistant radiator, with 6 fins per inch, helps reduce plugging.
- Quick access cab floor option offers tool-less access to the floor plate opening.
- Laminated thermal shields on engine and aftertreatment (when equipped) provide added thermal protection in high debris applications.
- Ducted and sealed alternator for longer life.
- Engine precleaner with screen delivers cleaner air to the power train.

Equipped for the Job

- Landfill blades are equipped with a trash rack to increase productive capacity when machine works in lighter material like waste.
- Wear plate helps extend blade life.
- Heavy Duty Extended Life (HDXL) undercarriage includes Kevlar® guarded, sealed idlers to help prevent debris such as wire, string or plastic bags from wrapping into seals.
- Press-fit bushings and Positive Pin Retention (PPR2) are particularly well suited for impact applications such as forestry, waste, rock, or V-ditching.
- Center-hole track helps eject debris.

D7 Waste Handler Specifications

Engine

Engine Model	Cat® C9.3B	
Emissions	Brazil MAR-1 and UN ECE R96 Stage IIIA emission standards, equivalent to U.S. EPA Tier 3/EU Stage IIIA	
Power Train	Fully Automatic 4-Speed	
Net Power (2,200 rpm)		
ISO 9249/SAE J1349	197 kW	265 hp
ISO 9249 (DIN)	268 mhp	
Engine Power (1,400 rpm)		
ISO 14396	230 kW	309 hp
ISO 14396 (DIN)	313 mhp	
Bore	115.0 mm	4.5 in
Stroke	149.0 mm	5.9 in
Displacement	9.3 L	567 in ³

- Net power advertised is the power available at the engine flywheel when the engine is equipped with a fan, air cleaner, clean emissions module and alternator.
- Advertised power is tested per the specified standard in effect at the time of manufacture.
- No derating required up to 3078 m (10,100 ft) altitude, beyond 3078 m (10,100 ft) automatic derating occurs.
- Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels up to:
 - ✓ 100% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details.

*For use of blends higher than 20% biodiesel, consult your Cat dealer.

Fluid/Refill Capacities

Fuel Tank	624 L	164.8 gal
Cooling System	62 L	16.3 gal
Engine Crankcase	28 L	7.4 gal
Power Train	187 L	49.4 gal
Roller Frames Standard/LGP (each)	85-96 L	22.4-25.3 gal
Final Drives (each)	13 L	3.4 gal
Hydraulic System	144 L	38 gal

Hydraulic Controls – Pressures

Maximum Implement Operating Pressure	31 000 kPa	4,496 psi
Maximum Steering Operating Pressure	38 000 kPa	5,510 psi

Hydraulic Controls – Pump

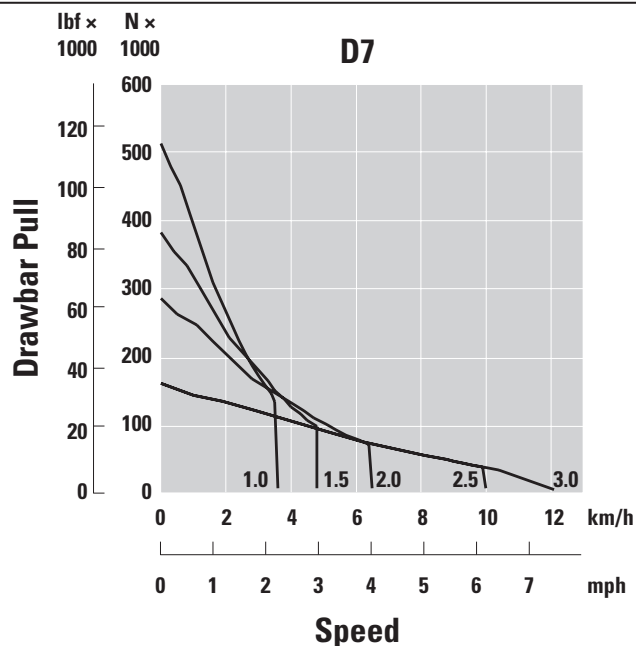
Pump Output (1,900 rpm engine speed*)		
Implement	220 L/min	58 gal/min
Steering	267 L/min	70 gal/min
Fan	56 L/min	15 gal/min
Lift Cylinder Flow	220 L/min	58 gal/min
Tilt Cylinder Flow	170 L/min	45 gal/min
Ripper Cylinder Flow	220 L/min	58 gal/min

*Engine speed varies with load and travel speed. A high idle/low working load speed shown.

Transmission

1.0 Forward	3.5 km/h	2.2 mph
1.5 Forward	4.8 km/h	3.0 mph
2.0 Forward	6.4 km/h	4.0 mph
2.5 Forward	9.0 km/h	5.6 mph
3.0 Forward	11.4 km/h	7.1 mph
1.0 Reverse	3.5 km/h	2.2 mph
1.5 Reverse	4.8 km/h	3.0 mph
2.0 Reverse	6.3 km/h	3.9 mph
2.5 Reverse	8.5 km/h	5.3 mph
3.0 Reverse	11.4 km/h	7.1 mph

Drawbar Pull



D7 Waste Handler Specifications

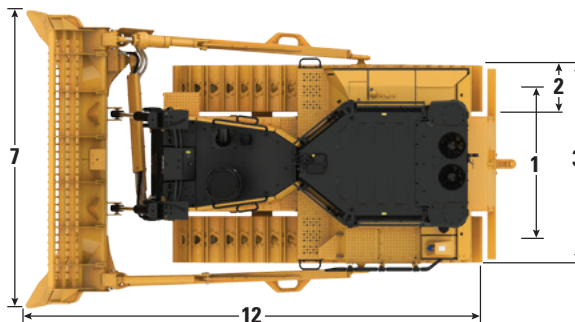
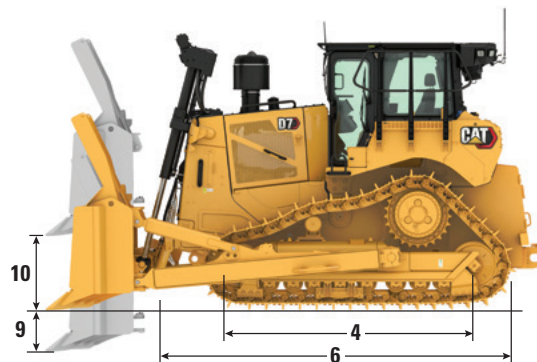
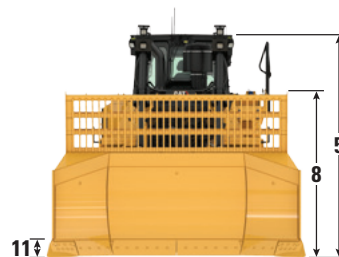
D7 Waste Handler

Operating Weight*	28 140 kg	62,035 lb
Shipping Weight**	24 026 kg	52,969 lb
Ground Pressure (ISO 16754)	68.3 kPa	9.9 psi
Undercarriage	41 Sections with 7 Bottom Rollers Guarded	
1 Track Gauge	1.98 m	78 in
2 Width of Track Shoe (Standard)	0.61 m	24 in
3 Width of Tractor (without trunnions)	2.59 m	102 in
4 Length of Track on Ground	2.97 m	117 in
Ground Contact Area (ISO 16754)	4.05 m ²	6,274 in ²
Grouser Height (Moderate Service)	0.07 m	2.9 in
Ground Clearance	0.44 m	17.4 in
5 Machine Height***	3.43 m	134.9 in
6 Length of Basic Tractor	4.66 m	183.4 in
With Striker Bar Box, add	450.5 mm	17.7 in

*Operating weight includes SU Landfill blade, lubricants, coolant, full fuel tank, ROPS/FOPS cab, rear striker box and one counterweight, and 75 kg (165 lb) operator.

**Shipping weight includes blade lift cylinders, lubricants, coolant, 10% fuel, ROPS/FOPS cab, and rear striker box and one counterweight.

***Machine height from tip of grouser to top of Product Link Antenna. For sweeps, add 64 mm (2.5 in) to overall machine height. With Extreme Service, add 9 mm (0.4 in). When Cat Grade with 3D antennas are installed there is no added machine height.



Blades

Configuration	SU Landfill		U Landfill	
Capacity (ISO 9246)	17.74 m ³	23.2 yd ³	19.34 m ³	25.3 yd ³
7 Width across End Bits	3.64 m	143.3 in	3.93 m	154.6 in
Width without End Bits	3.51 m	138.0 in	3.78 m	149.0 in
8 Height	2.50 m	98.4 in	2.45 m	96.4 in
9 Dig Depth	0.58 m	22.8 in	0.58 m	22.8 in
10 Lift Height	1.21 m	47.8 in	1.21 m	47.8 in
11 Maximum Tilt at Blade Corner	0.52 m	20.4 in	0.56 m	22.2 in
Maximum Tilt Angle	8.5°		8.5°	
Pitch Adjustment	± 3.5°		± 3.5°	
12 Length of Machine with Blade	5.78 m	227.4 in	6.01 m	237.4 in
Blade Weight (blade + push arms installed)	4050 kg	8,910 lb	4303 kg	9,467 lb

Cat FirstCut™ cutting edges are available for for Semi-Universal (SU) blades. FirstCut edges provide superior penetration in tough compacted, rocky or frozen soils resulting in up to 35% larger payload mass and up to 17% improvement in productivity. Consult with your Cat dealer for more benefits and details.

D7 Waste Handler Specifications

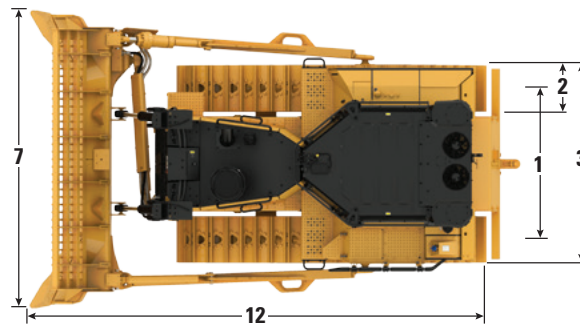
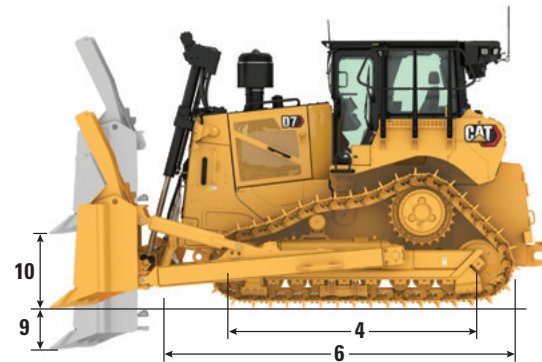
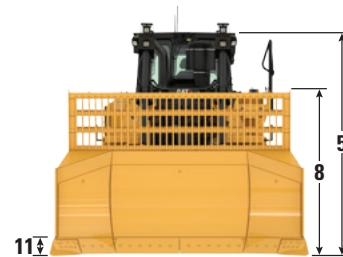
D7 LGP Waste Handler

Operating Weight*	32 557 kg	71,775 lb
Shipping Weight**	27 831 kg	61,356 lb
Ground Pressure (ISO 16754)	53.8 kPa	7.8 psi
Undercarriage	43 Sections with 9 Bottom Rollers	
1 Track Gauge	2.24 m	88 in
2 Width of Track Shoe (Standard)	0.91 m	36 in
3 Width of Tractor (without trunnions)	3.15 m	124 in
4 Length of Track on Ground	3.20 m	126 in
Ground Contact Area (ISO 16754)	6.47 m ²	10,036 in ²
Grouser Height (Moderate Service)	0.07 m	2.9 in
Ground Clearance	0.44 m	17.5 in
5 Machine Height***	3.43 m	135.0 in
6 Length of Basic Tractor	4.66 m	183.4 in

*Operating weight includes S Landfill Blade, lubricants, coolant, full fuel tank, ROPS/FOPS cab, rear striker box and one counterweight, and 75 kg (165 lb) operator.

**Shipping weight includes blade lift cylinders, lubricants, coolant, 10% fuel, ROPS/FOPS cab, and rear striker box and one counterweight.

***Machine height from tip of grouser to top of Product Link Antenna. For sweeps, add 64 mm (2.5 in) to overall machine height. With Extreme Service, add 9 mm (0.4 in). When Cat Grade with 3D antennas are installed there is no added machine height.



Standard Waste Handler Shown

Blades

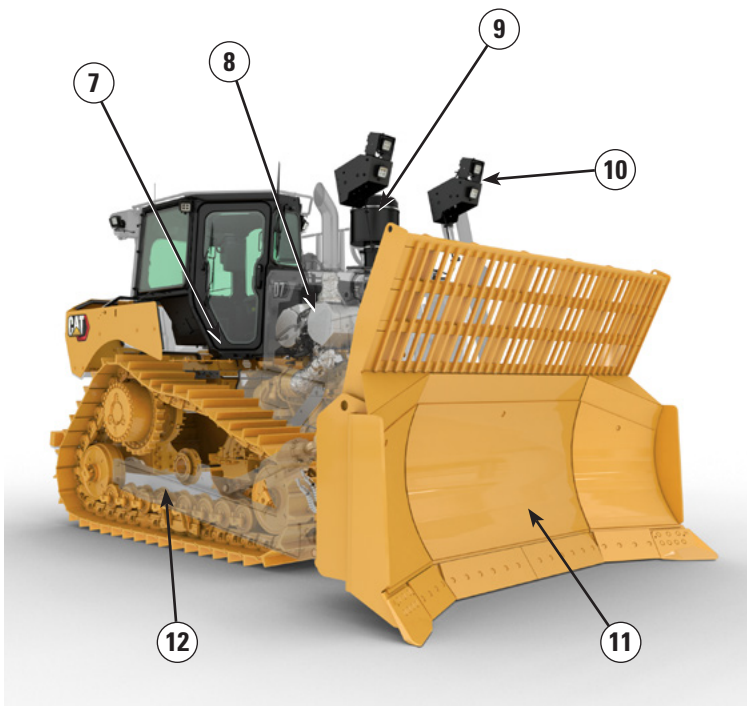
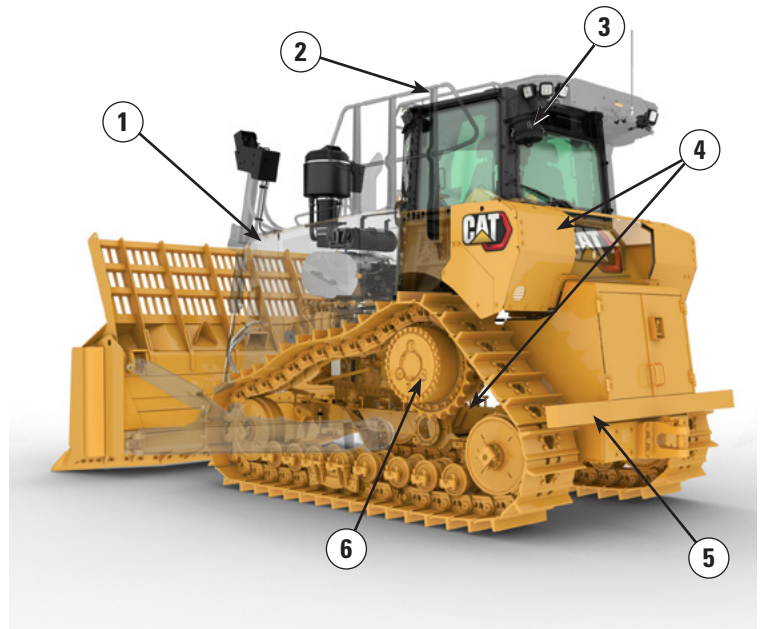
Configuration	Semi-Universal (SU) Landfill		LGP S Landfill	
Capacity (ISO 9246)	20.5 m ³	26.9 yd ³	16.7 m ³	21.8 yd ³
7 Width across End Bits	3.93 m	154.6 in	4.31 m	169.8 in
Width without End Bits	3.78 m	149.0 in	4.15 m	163.0 in
8 Height	1.91 m	75.1 in	2.35 m	92.5 in
9 Dig Depth	0.58 m	22.8 in	0.58 m	22.8 in
10 Lift Height	1.21 m	47.8 in	1.21 m	47.8 in
11 Maximum Tilt at Blade Corner	0.51 m	19.9 in	0.51 m	19.9 in
Maximum Tilt Angle	7.0°		7.0°	
Pitch Adjustment	± 3.5°		± 3.5°	
12 Length of Machine with Blade	5.79 m	227.8 in	5.50 m	216.4 in
Blade Weight (blade + push arms installed)	3500 kg	7,700 lb	4371 kg	9,635 lb

Cat FirstCut™ cutting edges are available for for Semi-Universal (SU) blades. FirstCut edges provide superior penetration in tough compacted, rocky or frozen soils resulting in up to 35% larger payload mass and up to 17% improvement in productivity. Consult with your Cat dealer for more benefits and details.

Some features and configurations may not be available in all areas. Please consult your Cat dealer for availability.

D7 Waste Handler Features

- 1) High-debris cooling system with optional automatic reversing fan and slots for easy cleanout access. Trash resistant radiator, with 6 fins per inch, helps reduce plugging.
- 2) High debris cab option has impact-resistant polycarbonate doors and dual pane windows, eliminate the need for door screens.
- 3) Recommended powered air precleaner helps keep cab air cleaner and pressurized for greater operator comfort.
- 4) Fuel tank guard and heavy duty bottom guards shield major machine components. Internal sealing keeps the trash away from the inner compartments.
- 5) Rear striker bar helps protect against trash climbing up the tracks.
- 6) Guarded final drives give added protection against wrapping and impact.



- 7) Quick access cab floor option offers tool-less access to the floor plate opening.
- 8) Laminated thermal shields on engine and aftertreatment (when equipped) provide added thermal protection in high debris applications. Ducted and sealed alternator for longer life.
- 9) Engine precleaner with screen delivers cleaner air to the power train.
- 10) 12 premium LED lights illuminate the work area.
- 11) Landfill Blades are equipped with a trash rack to increase productive capacity when machine works in lighter material like waste. Wear plate helps extend blade life.

12) Waste Undercarriage

- Heavy Duty Extended Life (HDXL) undercarriage includes Kevlar® guarded, sealed idlers to help prevent debris such as wire, string or plastic bags from wrapping into seals.
- Press-fit bushings and Positive Pin Retention (PPR2) are particularly well suited for impact applications such as forestry, waste, rock, or V-ditching.
- Center-hole track helps eject debris.

D7 Waste Handler Specifications

Track Shoes – Heavy Duty Extended Life (HDXL)

Some track shoes not available in all regions. Please consult your Cat dealer for details.

	Standard – 41 Section			LGP – 43 Section	
	560 mm (22 in)	610 mm (24 in)	660 mm (26 in)	760 mm (30 in)	915 mm (36 in)
Moderate Service			✓		✓
Extreme Service	✓	✓	✓		✓
Extreme Service Trapezoidal		✓		✓	✓

Dimensions – Rear Attachments

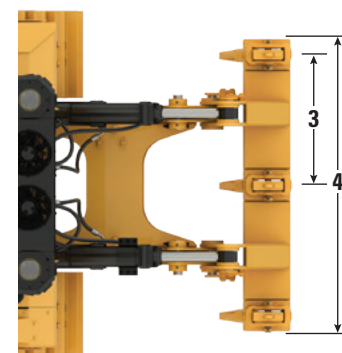
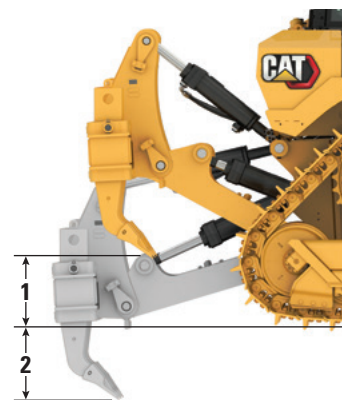
Add the following to the total length of the machine when these rear attachments are installed.

Drawbar		Winch		Ripper		Waste Striker Box	
276 mm	10.8 in	749.7 mm	29.5 in	1570 mm	61.8 in	450.5 mm	17.7 in

Ripper

Type	Adjustable Parallelogram	
Weight with Three Shanks	3607 kg	8,091 lb
Weight with One Shank	3307 kg	7,431 lb
4 Beam Width	2210 mm	87 in
Beam Cross Section	343 × 279 mm	13.5 × 11 in
1 Maximum Clearance, Raised (Shank Tip)	748 mm	29.4 in
2 Maximum Penetration	757 mm	29.8 in
3 Number of Pockets	3	
Maximum Penetration Force	8664 kg	19,100 lb
Maximum Pryout Force	17 138 kg	38,513 lb

Type	Fixed Parallelogram	
Weight with Three Shanks	3539 kg	7,802 lb
Weight with One Shank	3239 kg	7,141 lb
4 Beam Width	2210 mm	87 in
Beam Cross Section	343 × 279 mm	13.5 × 11 in
1 Maximum Clearance, Raised (Shank Tip)	748 mm	29.4 in
2 Maximum Penetration	757 mm	29.8 in
3 Number of Pockets	3	
Maximum Penetration Force	8664 kg	19,100 lb
Maximum Pryout Force	17 138 kg	38,513 lb



Standards

ROPS/FOPS

- ROPS (Rollover Protective Structure) offered by Caterpillar for the machine meets ROPS criteria ISO 3471:2008.
- FOPS (Falling Object Protective Structure) meets ISO 3449:2005 Level II.

Brakes

- Brakes meet the standard ISO 10265:2008.

Sound Level Information

- The declared dynamic spectator sound power level when “ISO 6395:2008” is used to measure the value for a machine is 115 dBA. 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 declared dynamic operator sound pressure level when “ISO 6396:2008” is used to measure the value for an enclosed cab is 80 dBA. 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 declared sound levels listed above include both measurement uncertainty and uncertainty due to production variation.
- Hearing protection may be needed when the machine is operated with an open operator station, for extended periods, in a noisy environment, or with a cab that is not properly maintained.
- A sound-suppressed configuration is available that offers reduced spectator and operator sound levels and meets the Brazil MAR-1 sound requirements.

Sound Level Information for Machines in European Union Countries and in Countries That Adopt the “European Union Directives”

- If equipped, the certification label is used to verify the environmental sound certification of the machine to the requirements of the European Union. The value that is listed on the label indicates the guaranteed exterior sound power level (L_{WA}) of 112 dBA at the time of manufacture for the conditions that are specified in “2000/14/EC.”
- The declared dynamic operator sound pressure level when “ISO 6396:2008” is used to measure the value for an enclosed cab is 78 dBA. 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 declared sound levels listed above include both measurement uncertainty and uncertainty due to production variation.
- Hearing protection may be needed when the machine is operated with an open operator station, for extended periods, in a noisy environment, or with a cab that is not properly maintained.

Sound Level Information for Machines in Eurasian Economic Union Countries

- The declared dynamic spectator sound power level when “ISO 6395:2008” is used to measure the value for a machine is 115 dBA. 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 declared dynamic operator sound pressure level when “ISO 6396:2008” is used to measure the value for an enclosed cab is 80 dBA. 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 declared sound levels listed above include both measurement uncertainty and uncertainty due to production variation.
- Hearing protection may be needed when the machine is operated with an open operator station, for extended periods, in a noisy environment, or with a cab that is not properly maintained.

Advanced Cabin Filtration

Operator Cabin

- Distributed HVAC ducting with automatic temperature control and blower speed provides ultimate operator comfort with less user input.
- Reduced maintenance of the condenser core with automatic reversing fans.
- Cat Advanced Cabin Filtration is standard.

Cat Advanced Cabin Filtration

- Operator protection from respirable particulate (0.3-10-micron size).
- Sustainably pressurized cab (U.S. Silica compliant).
- Reduced maintenance with longer life, high efficiency filters.
- Protection for all cabin components: electronics, etc.
- Helps meet U.S. Occupational Safety and Health Administration Silica Rule Table 1 requirements for operator cabs.
- Multi-tiered filter offerings for optional efficiency upgrades. Contact Cat dealer for availability.
 - MERV 16 – Standard Equipment
 - HEPA
 - Activated Carbon + HEPA
 - ABEK1 + HEPA

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.36 kg of refrigerant which has a CO₂ equivalent of 1.946 metric tonnes.

D7 Waste Handler Specifications

Dozer Technology Features

Assist technology features to help operators of varied experience levels get the job done faster and more accurately. Grade and Command offerings help further enhance your productivity, efficiency and job site safety.

All Premium and High Debris cabs are Third Party Grade Control Ready, equipped with CAN interface, harness pass throughs and mounting features to make it easier to install the grade control system of your choice.

ARO with Assist Package

Attachment Ready Option (ARO)	ARO provides wiring and mounting provisions for dealer installation of Grade with 3D, AccuGrade, UTS, or other grade control systems.
Cat Grade with Slope Assist™	Slope Assist automatically maintains pre-established blade position without a GNSS/GPS signal – no additional hardware or software needed. For machines with 3D, operators can easily switch back and forth from full 3D automatics to Slope Assist.
Steer Assist	Steer Assist automates track and blade tilt steering. Helps reduce operator fatigue by automatically maintaining straight travel with light loads or heavy loads on flat ground and cross slopes. No GNSS/GPS required.
Stable Blade	Stable Blade works seamlessly with operator inputs to help produce a smoother surface when operating manually.
Slope Indicate	Slope Indicate is included in the main machine display and shows side slope and uphill/downhill grades to help operators with slope work.
Blade Load Monitor	Blade Load Monitor gives you real-time feedback on current load versus the optimal blade load based on your ground conditions. Actively monitors machine load and track slip to help you reach optimal pushing capacity. ¹
Traction Control	Traction Control automatically reduces track slip to save you time, fuel and track wear. ¹
AutoCarry™	AutoCarry automates blade lift to help you maintain consistent blade load and help reduce track slip. ¹

Grade 3D with Assist Package

Includes all features from the ARO with Assist Package listed above, plus:

Cat Grade with 3D	Factory integrated Cat Grade with 3D uses GNSS/GPS to control the blade so you can get to design plan faster. Low profile antennas are integrated into the cab roof and GNSS/GPS receivers are mounted inside the cab for better protection. ²
Steer Assist 3D	Automatically follow guidance lines from site design plans (or Infield designs) under light load or heavy load. ²
Dedicated Touchscreen Grade Display	Full-color Grade operator interface is intuitive and easier to use. The 254 mm (10 in) touchscreen uses an Android OS platform and operates like a smart phone.

Remote Control/Cat Command

Remote Control Ready Cab	Premium and High Debris cabs are Remote Control Ready from the factory with external connector for dealer installation of the Cat Command remote control system.
Command for Dozing ² (Optional)	Cat Command remote control technology provides full dozer maneuverability from a safe distance when working in hazardous environments. Command offers the choice of line-of-sight consoles or long-distance operator stations (non-line-of-sight).

¹Feature not operational indoors or in areas where a GNSS/GPS signal is not available.

²Requires Software Enabled Attachment (SEA) installation when not configured from the factory.

Note: Grade and Assist technologies, except Slope Indicate, Blade Load Monitor and Traction Control, are not compatible with Angle blades or specialty blades from Cat Work Tools. Please consult with your Cat dealer for details.

D7 Waste Handler Standard and Optional Equipment

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
POWER TRAIN			CAT TECHNOLOGY (continued)		
Cat C9.3B diesel engine	✓		Remote Flash/Troubleshoot	✓	
Fully-automatic 4-speed transmission with Lock-Up Clutch (LUC) torque divider	✓		Grade Connectivity		✓
Air-to-air aftercooler (ATAAC)	✓		Operator ID		✓
Aluminum bar plate radiator	✓		Machine Security – Passcode	✓	
Differential steering with dedicated hydraulic pump	✓		Machine Security – Bluetooth		✓
Engine air precleaner with screen and dust ejection	+		Remote Control Ready		✓
Engine with thermal shield	+		Cat Command for Dozing		✓
Engine idle shutdown		✓	OPERATOR ENVIRONMENT		
Extended life coolant	✓		High debris cab with integrated ROPS and FOPS, impact resistant polycarbonate doors, solid side windows for improved sealing, powered precleaner with Cat Advanced Cabin Filtration for improved performance and filter life. Cab is technology- and remote control-ready.		
Double Reduction Final Drives – Arctic, Waste	+		8-inch (203 mm) gauge cluster display	✓	
Fuel water separator	✓		Full-color 10-inch (254 mm) liquid crystal touchscreen display		✓
Electric fuel priming pump	✓		High Definition rear view camera with backup lines		✓
Hydraulic demand fan	✓		In-display key machine features		✓
Hydraulic reversing fan		✓	Cloth seat with mechanical adjustable lumbar support	✓	
Sound suppression		✓	Deluxe leather heated/ventilated seat with electronic adjustable lumbar support		✓
Debris resistant radiator cores	✓		Electrohydraulic implement and steering controls	✓	
Automatic ether starting aid	✓		Joystick control	✓	
Engine air filter with electronic service indicator	✓		Joystick control – ARO		✓
Jacket water heater (110V or 220V)		✓	Powered fresh air filter precleaner		
CAT TECHNOLOGY			Cab mounted modular HVAC system with automatic reversing fans. Automatic temperature and blower control with distributed ducting.	✓	
Slope Indicate	✓		Communication radio ready		✓
ARO with Assist Package		✓	Rearview mirror	✓	
– ARO			Retractable 76 mm (3 in) seat belt	✓	
– Slope Assist			Cup holders	✓	
– Steer Assist			Dash foot pads	✓	
– Stable Blade			Entertainment radio with Bluetooth and microphone		✓
– Blade Load Monitor			Lunchbox storage	✓	
– Traction Control			Wipers	✓	
– AutoCarry			USB and AUX Ports		✓
Grade 3D with Assist Package		✓	Operator presence switch	✓	
– Full-color 10-inch (254 mm) touchscreen grade display					
– Steer Assist 3D					
– Grade receivers and antennas					
– Grade Software Enabled Attachment (SEA)					
– ARO with Assist package features					
Compatibility with radios and base stations from Trimble, Topcon, and Leica	✓				
Capability to install 3D grade systems from Trimble, Topcon, and Leica	✓				
Product Link, Cellular	✓				
Product Link – Dual Cellular/Satellite		✓			

(continued on next page)

+Included in Waste Handler Package

*Recommended

D7 Waste Handler Standard and Optional Equipment

Standard and Optional Equipment (continued)

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

	Standard	Optional		Standard	Optional
UNDERCARRIAGE			SERVICE AND MAINTENANCE		
Standard undercarriage	✓		30-minute cab removal		✓
Low Ground Pressure (LGP) undercarriage**		✓	Centralized, remote mounted pressure taps	✓	
Heavy Duty (HDXL with DuraLink™)	✓		Ecology drains		✓
Waste undercarriage: Positive Pin Retention, Extreme Service trapezoidal track	+		Extended service intervals (500 hours engine, 1,000-hour power train)	✓	
Carrier rollers		✓	Ground level service center (remote electrical disconnect, secondary shutdown switch, hour meter)	✓	
Hydraulic track adjusters	✓		Fuel tank (624 L/164.8 gal)	✓	
Lifetime lubricated track and roller	✓		High capacity fuel tank** (821 L/216.8 gal)		✓
Extreme service trapezoidal track shoes (see chart on page 17)	+		Fast fuel fill		✓
Track roller frame – 7 bottom rollers	✓		High-speed oil change		✓
Track roller frame – 8 bottom rollers		✓	Heavy duty perforated radiator doors, louvered and hinged	✓	
Track roller frame with center guiding guards	+		Quick access cab floor		*
BLADES			Under hood work light		✓
Semi-Universal Landfill		*	Removable engine enclosures, perforated and hinged	✓	
Universal Landfill		*	S-O-S SM sampling ports	✓	
Straight Landfill – LGP		*	Fender access guard rail with built-in shovel holder		✓
Semi-Universal Landfill – LGP	*		BATTERIES, STARTERS, ALTERNATORS AND COOLANT		
Semi-Universal		✓	95 Amp alternator	✓	
Straight Blade		✓	150 Amp ducted alternator	+	
Angle Blade		✓	24 Volt starter	✓	
Universal Blade – Standard configuration only		✓	Engine coolant, –37° C (–35° F)	✓	
Cat FirstCut cutting edges (SU blades)		✓	Arctic engine coolant, –51° C (–60° F)		✓
HYDRAULICS			ATTACHMENTS		
Load sensing hydraulics	✓		Fixed parallelogram ripper/curved shanks		✓
Independent steering and implement pumps	✓		Adjustable parallelogram ripper/curved shanks		✓
ELECTRICAL			Winch: – PACCAR PA110		✓
Lights – 4 LED	✓		Rear counterweight		✓
Lights – 6 LED		✓	Drawbar		✓
Premium lights – 12 LED		✓	Rear striker box with striker bar		*
Backup alarm	✓		GUARDING AND SCREENS		
Integrated warning lights	+		Bottom guards – heavy-duty and sealed	+	
Converter: 15 Amp, 12V outlet	✓		Fuel tank guards	+	
Forward warning horn	✓		Grab handles	✓	
			Cab air conditioning condenser guarding		✓
			Front striker bars for Standard D7 with 560 mm (22 in) tracks		✓
			Guards for premium lights, front and side		✓
			Sweeps package		✓
			Rear fixed screen		✓
			Hinged rear screen		✓
			Hinged side screen		✓

*Recommended

+Included in Waste Handler Package

**Not available in all areas. Please consult your Cat dealer for availability.



D7

Pipeline/Forestry

Take on the demands of land clearing and pipeline work with factory-installed equipment designed to help protect the operator and the machine in harsh applications.

Fully Automatic, Next Generation Performance

- Harness more weight and more horsepower than D7R.
- Fully automatic 4-speed powershift transmission continuously adjusts for maximum efficiency and power to the ground without added operator input.
- Elevated sprocket gives you better ride and balance, plus more penetration force.
- Long undercarriage is standard, with more track at the rear of the machine for superior dozing performance.

Added Machine Protection

- Optional high debris cab has impact-resistant polycarbonate doors.
- Optional attachments like rear and side window screens, sweeps and heavy duty handholds help protect the machine and operator from debris.
- Heavy duty guarding package with heavy duty bottom guards and fuel tank guard to help shield major machine components.
- Reversing fan helps remove debris with less maintenance time.
- Precleaner and roof-mounted filter help protect against dust and debris.
- 12 premium LED lights illuminate the work area.

Equipped for the Job

- Redesigned C-frame for Angle blades, D8-size pins and bearings add durability for harsh applications.
- Factory connections make it easy to fit the machine with a winch or ripper. Consult with your Cat dealer regarding available winch, ripper and other rear attachments options.
- Choose Standard or LGP configuration from the factory.
- Press-fit bushings and Positive Pin Retention (PPR2) are particularly well suited for applications such as forestry, waste, rock and v-ditching.
- Outfit your dozer with Angle, Semi-Universal (SU) or Straight (S) blade to suit pipeline work.
- Forestry/land clearing blades are equipped with brush rack to aid carrying, plus added guarding on the back of the blade to help protect machine components.

D7 Pipeline/Forestry Specifications

Engine

Engine Model	Cat® C9.3B	
Emissions	Brazil MAR-1 and UN ECE R96 Stage IIIA emission standards, equivalent to U.S. EPA Tier 3/EU Stage IIIA	
Power Train	Fully Automatic 4-Speed	
Net Power (2,200 rpm)		
ISO 9249/SAE J1349	197 kW	265 hp
ISO 9249 (DIN)	268 mhp	
Engine Power (1,400 rpm)		
ISO 14396	230 kW	309 hp
ISO 14396 (DIN)	313 mhp	
Bore	115.0 mm	4.5 in
Stroke	149.0 mm	5.9 in
Displacement	9.3 L	567 in ³

- Net power advertised is the power available at the engine flywheel when the engine is equipped with a fan, air cleaner, clean emissions module and alternator.
- Advertised power is tested per the specified standard in effect at the time of manufacture.
- No derating required up to 3078 m (10,100 ft) altitude, beyond 3078 m (10,100 ft) automatic derating occurs.
- Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels up to:
 - ✓ 100% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or “Caterpillar Machine Fluids Recommendations” (SEBU6250) for details.

*For use of blends higher than 20% biodiesel, consult your Cat dealer.

Fluid/Refill Capacities

Fuel Tank	624 L	164.8 gal
Cooling System	62 L	16.3 gal
Engine Crankcase	28 L	7.4 gal
Power Train	187 L	49.4 gal
Roller Frames Standard/LGP (each)	85-96 L	22.4-25.3 gal
Final Drives (each)	13 L	3.4 gal
Hydraulic System	144 L	38 gal

Hydraulic Controls – Pressures

Maximum Implement Operating Pressure	31 000 kPa	4,496 psi
Maximum Steering Operating Pressure	38 000 kPa	5,510 psi

Hydraulic Controls – Pump

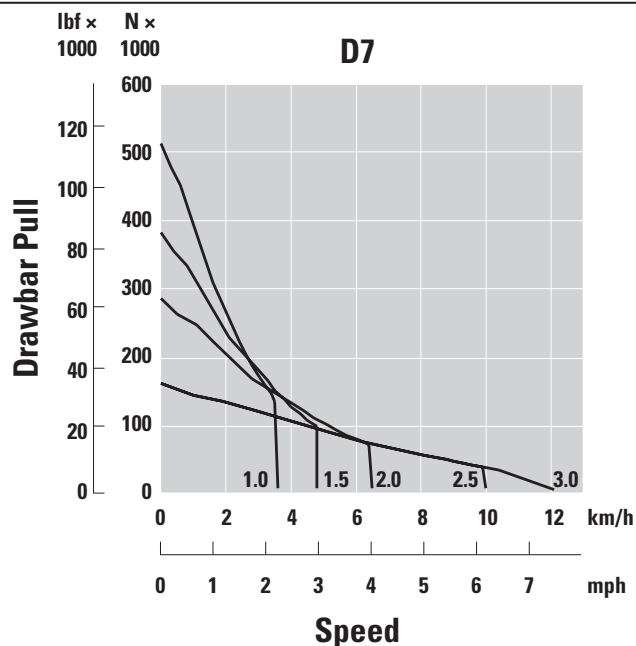
Pump Output (1,900 rpm engine speed*)		
Implement	220 L/min	58 gal/min
Steering	267 L/min	70 gal/min
Fan	56 L/min	15 gal/min
Lift Cylinder Flow	220 L/min	58 gal/min
Tilt Cylinder Flow	170 L/min	45 gal/min
Ripper Cylinder Flow	220 L/min	58 gal/min

*Engine speed varies with load and travel speed. A high idle/low working load speed shown.

Transmission

1.0 Forward	3.5 km/h	2.2 mph
1.5 Forward	4.8 km/h	3.0 mph
2.0 Forward	6.4 km/h	4.0 mph
2.5 Forward	9.0 km/h	5.6 mph
3.0 Forward	11.4 km/h	7.1 mph
1.0 Reverse	3.5 km/h	2.2 mph
1.5 Reverse	4.8 km/h	3.0 mph
2.0 Reverse	6.3 km/h	3.9 mph
2.5 Reverse	8.5 km/h	5.3 mph
3.0 Reverse	11.4 km/h	7.1 mph

Drawbar Pull



D7 Pipeline/Forestry Specifications

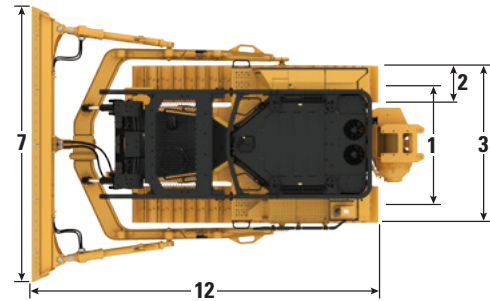
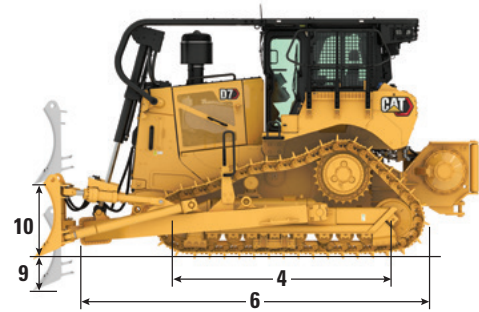
D7

Operating Weight*	30 309 kg	66,820 lb
Shipping Weight**	25 553 kg	56,335 lb
Ground Pressure (ISO 16754)	73.4 kPa	10.7 psi
Undercarriage	41 Sections with 7 Bottom Rollers	
1 Track Gauge	1.98 m	78 in
2 Width of Track Shoe (Standard)	0.61 m	24 in
3 Width of Tractor (without trunnions)	2.59 m	102 in
4 Length of Track on Ground	2.97 m	117 in
Ground Contact Area (ISO 16754)	4.05 m ²	6,274 in ²
Grouser Height (Moderate Service)	0.07 m	2.9 in
Ground Clearance	0.44 m	17.5 in
5 Machine Height***	3.43 m	134.9 in
6 Length of Basic Tractor	4.66 m	183.4 in
With Winch, add	735 mm	28.9 in

*Operating weight includes Angle Blade, lubricants, coolant, full fuel tank, ROPS/FOPS cab, sweeps, hydraulic winch, and 75 kg (165 lb) operator.

**Shipping weight includes blade lift cylinders, lubricants, coolant, 10% fuel, ROPS/FOPS cab, sweeps and hydraulic winch.

***Machine height from tip of grouser to top of Product Link™ Antenna. For sweeps, add 64 mm (2.5 in) to overall machine height. With Extreme Service, add 9 mm (0.4 in). When Cat Grade with 3D antennas are installed there is no added machine height.



Standard Configuration/Optional Sweeps and Screens Shown

Blades

Configuration	Angle Blade (STD)		Semi-Universal (SU)		Universal (U)	
	m	in	m	in	m	in
Capacity (ISO 9246)	4.16 m ³	5.4 yd ³	7.42 m ³	9.7 yd ³	8.56 m ³	11.2 yd ³
7 Width across End Bits	4.58 m	180.2 in	3.64 m	143.3 in	3.92 m	154.3 in
Width without End Bits	4.49 m	176.8 in	3.50 m	138.0 in	3.78 m	149.0 in
8 Height	1.11 m	43.7 in	1.56 m	61.6 in	1.56 m	61.6 in
9 Dig Depth	0.75 m	29.4 in	0.58 m	22.8 in	0.58 m	22.8 in
10 Lift Height	1.15 m	45.4 in	1.21 m	47.8 in	1.21 m	47.8 in
11 Maximum Tilt at Blade Corner	0.65 m	25.4 in	0.52 m	20.4 in	0.56 m	22.2 in
Maximum Tilt Angle	8.5°		8.5°		8.5°	
Pitch Adjustment	N/A		± 3.5°		± 3.5°	
12 Length of Machine with Blade	5.75 m	226.4 in	5.78 m	227.4 in	6.03 m	237.4 in
Blade Weight (blade + push arms installed)	4246 kg	9,341 lb	3269 kg	7,207 lb	3473 kg	7,640 lb

Cat FirstCut™ cutting edges are available for for Semi-Universal (SU) blades. FirstCut edges provide superior penetration in tough compacted, rocky or frozen soils resulting in up to 35% larger payload mass and up to 17% improvement in productivity. Consult with your Cat dealer for more benefits and details.

D7 Pipeline/Forestry Specifications

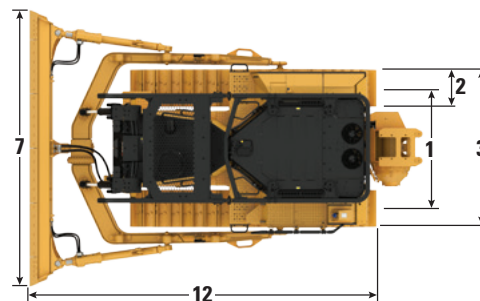
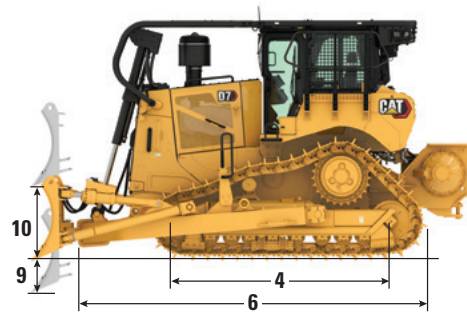
D7 LGP

Operating Weight*	31 650 kg	69,777 lb
Shipping Weight**	27 067 kg	59,671 lb
Ground Pressure (ISO 16754)	48.3 kPa	7.0 psi
Undercarriage	43 Sections with 9 Bottom Rollers	
1 Track Gauge	2.24 m	88 in
2 Width of Track Shoe (Standard)	0.91 m	36 in
3 Width of Tractor (without trunnions)	3.15 m	124 in
4 Length of Track on Ground	3.20 m	126 in
Ground Contact Area (ISO 16754)	6.47 m ²	10,036 in ²
Grouser Height (Moderate Service)	0.07 m	2.9 in
Ground Clearance	0.44 m	17.5 in
5 Machine Height***	3.43 m	135.0 in
6 Length of Basic Tractor	4.65 m	183.4 in
With Winch, add	749.7 mm	29.5 in

*Operating weight includes Angle Blade, lubricants, coolant, full fuel tank, ROPS/FOPS cab, winch, and 75 kg (165 lb) operator.

**Shipping weight includes blade lift cylinders, C-frame, lubricants, coolant, 10% fuel, ROPS/FOPS cab, and drawbar.

***Machine height from tip of grouser to top of Product Link Antenna. For sweeps, add 64 mm (2.5 in) to overall machine height. For forestry sweeps, add 81 mm (3.2 in). With Extreme Service, add 9 mm (0.4 in). When Cat Grade with 3D antennas are installed there is no added machine height.



Standard Configuration/Optional Sweeps and Screens Shown

Blades

Configuration	Angle Blade (LGP)		Straight (S)		Semi-Universal (SU)	
	m	in	m	in	m	in
Capacity (ISO 9246)	4.70 m ³	6.2 yd ³	6.20 m ³	8.1 yd ³	8.79 m ³	11.5 yd ³
7 Width across End Bits	5.03 m	197.9 in	4.31 m	169.8 in	3.93 m	154.6 in
Width without End Bits	4.77 m	188.0 in	4.15 m	163.0 in	3.78 m	149.0 in
8 Height	1.11 m	43.7 in	1.37 m	53.8 in	1.56 m	61.6 in
9 Dig Depth	0.67 m	26.4 in	0.58 m	22.8 in	0.58 m	22.8 in
10 Lift Height	1.28 m	50.2 in	1.21 m	47.8 in	1.21 m	47.8 in
11 Maximum Tilt at Blade Corner	0.62 m	24.3 in	0.51 m	19.9 in	0.51 m	19.9 in
Maximum Tilt Angle	7.0°		7.0°		7.0°	
Pitch Adjustment	N/A		± 3.5°		± 3.5°	
12 Length of Machine with Blade	5.97 m	235.2 in	5.50 m	216.4 in	5.79 m	227.8 in
Blade Weight (blade + push arms installed)	4537 kg	10,001 lb	3521 kg	7,762 lb	3500 kg	7,700 lb

Cat FirstCut™ cutting edges are available for for Semi-Universal (SU) blades. FirstCut edges provide superior penetration in tough compacted, rocky or frozen soils resulting in up to 35% larger payload mass and up to 17% improvement in productivity. Consult with your Cat dealer for more benefits and details.

Some features and configurations may not be available in all areas. Please consult your Cat dealer for availability.

D7 Pipeline/Forestry Specifications

D7 Pipeline/Forestry Features

Choose from a variety of options to ideally equip your dozer for the work you do.

- 1) Redesigned C-frame for Angle blades, D8-size pins and bearings add durability for harsh applications.
- 2) Reversing fan option helps remove debris with less maintenance time.
- 3) Optional high debris cab has impact-resistant polycarbonate doors.
- 4) Optional attachments like rear and side window screens, sweeps and heavy duty handholds help protect the machine and operator from debris.
- 5) Heavy duty guarding package with heavy duty bottom guards and fuel tank guard to help shield major machine components.



- 6) Factory connections make it easy to fit the machine with a winch or ripper.
- 7) Press-fit bushings and Positive Pin Retention (PPR2) are particularly well suited for applications such as forestry, waste, rock and v-ditching.
- 8) 12 premium LED lights illuminate the work area.
- 9) Purpose-built Blades
- 10) Choose Standard or LGP configuration from the factory.

D7 Pipeline/Forestry Specifications

Track Shoes – Heavy Duty Extended Life (HDXL)

Some track shoes not available in all regions. Please consult your Cat dealer for details.

	Standard – 41 Section			LGP – 43 Section	
	560 mm (22 in)	610 mm (24 in)	660 mm (26 in)	760 mm (30 in)	915 mm (36 in)
Moderate Service			✓		✓
Extreme Service	✓	✓	✓		✓
Extreme Service Trapezoidal		✓		✓	✓

Dimensions – Rear Attachments

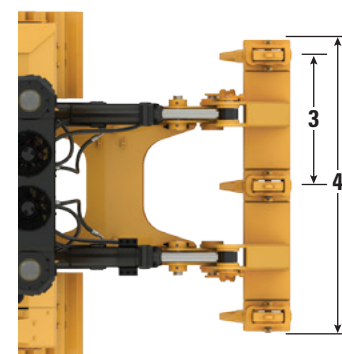
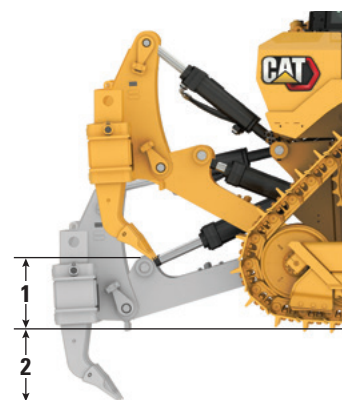
Add the following to the total length of the machine when these rear attachments are installed.

Drawbar		Winch		Ripper		Waste Striker Box	
276 mm	10.8 in	749.7 mm	29.5 in	1570 mm	61.8 in	450.5 mm	17.7 in

Ripper

Type	Adjustable Parallelogram	
Weight with Three Shanks	3607 kg	8,091 lb
Weight with One Shank	3307 kg	7,431 lb
4 Beam Width	2210 mm	87 in
Beam Cross Section	343 × 279 mm	13.5 × 11 in
1 Maximum Clearance, Raised (Shank Tip)	748 mm	29.4 in
2 Maximum Penetration	757 mm	29.8 in
3 Number of Pockets	3	
Maximum Penetration Force	8664 kg	19,100 lb
Maximum Pryout Force	17 138 kg	38,513 lb

Type	Fixed Parallelogram	
Weight with Three Shanks	3539 kg	7802 lb
Weight with One Shank	3239 kg	7141 lb
4 Beam Width	2210 mm	87 in
Beam Cross Section	343 × 279 mm	13.5 × 11 in
1 Maximum Clearance, Raised (Shank Tip)	748 mm	29.4 in
2 Maximum Penetration	757 mm	29.8 in
3 Number of Pockets	3	
Maximum Penetration Force	8664 kg	19 100 lb
Maximum Pryout Force	17 138 kg	38 513 lb



D7 Pipeline/Forestry Specifications

Winch

Winch Model	PA110	
Weight ²	2046 kg	4,511 lb
Oil Refill Capacity	15 L	4 gal
Winch and Bracket Length	1628 mm	64.1 in
Winch Case Width ¹	1227 mm	48.3 in
Drum Diameter	320 mm	12.5 in
Drum Width	330 mm	13.0 in
Flange Diameter	610 mm	24 in
Winch Drive	Hydraulic (High Power)	
Control	Electric	
Rope Diameter (recommended)	28 mm	1.13 in
Rope Diameter (optional)	32 mm	1.25 in
Drum Capacity – Maximum Theoretical – 28 mm (1.13 in) ³	78 m	261 ft
Drum Capacity – Maximum Theoretical – 32 mm (1.25 in) ³	62 m	207 ft
Drum Capacity – Maximum Recommended – 28 mm (1.13 in) ⁴	55 m	185 ft
Drum Capacity – Maximum Recommended – 32 mm (1.25 in) ⁴	36 m	119 ft
Cable Ferrule Size (O.D. × Length)	60 mm × 70 mm	2.38 in × 2.75 in
Maximum Bare Drum		
Line Pull ⁵	489.3 kN	110,000 lb
Line Speed ⁶	17.7 m/min	58 ft/min
Maximum Full Drum ³		
Line Pull ⁵	296 kN	66,500 lb
Line Speed ⁶	29 m/min	96 ft/min

¹Winch width does not include mounting brackets/adapters.

²Weight shown is base winch, mounting arrangement, guards, and oil. Wire rope not included.

³Theoretical drum capacity as defined by SAE J1158.

⁴Recommended drum capacity per SAE J706 (K=0.9).

⁵Maximum line pull is lesser of winch catalog rating or calculated maximum line pull at maximum tractor hydraulic system pressure.

⁶Maximum line speed is calculated maximum no-load line speed at maximum tractor hydraulic system flow.

D7 Pipeline/Forestry Specifications

Standards

ROPS/FOPS

- ROPS (Rollover Protective Structure) offered by Caterpillar for the machine meets ROPS criteria ISO 3471:2008.
- FOPS (Falling Object Protective Structure) meets ISO 3449:2005 Level II.

Brakes

- Brakes meet the standard ISO 10265:2008.

Sound Level Information

- The declared dynamic spectator sound power level when “ISO 6395:2008” is used to measure the value for a machine is 115 dBA. 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 declared dynamic operator sound pressure level when “ISO 6396:2008” is used to measure the value for an enclosed cab is 80 dBA. 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 declared sound levels listed above include both measurement uncertainty and uncertainty due to production variation.
- Hearing protection may be needed when the machine is operated with an open operator station, for extended periods, in a noisy environment, or with a cab that is not properly maintained.
- A sound-suppressed configuration is available that offers reduced spectator and operator sound levels and meets the Brazil MAR-1 sound requirements.

Sound Level Information for Machines in European Union Countries and in Countries That Adopt the “European Union Directives”

- If equipped, the certification label is used to verify the environmental sound certification of the machine to the requirements of the European Union. The value that is listed on the label indicates the guaranteed exterior sound power level (L_{WA}) of 112 dBA at the time of manufacture for the conditions that are specified in “2000/14/EC.”
- The declared dynamic operator sound pressure level when “ISO 6396:2008” is used to measure the value for an enclosed cab is 78 dBA. 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 declared sound levels listed above include both measurement uncertainty and uncertainty due to production variation.
- Hearing protection may be needed when the machine is operated with an open operator station, for extended periods, in a noisy environment, or with a cab that is not properly maintained.

Sound Level Information for Machines in Eurasian Economic Union Countries

- The declared dynamic spectator sound power level when “ISO 6395:2008” is used to measure the value for a machine is 115 dBA. 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 declared dynamic operator sound pressure level when “ISO 6396:2008” is used to measure the value for an enclosed cab is 80 dBA. 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 declared sound levels listed above include both measurement uncertainty and uncertainty due to production variation.
- Hearing protection may be needed when the machine is operated with an open operator station, for extended periods, in a noisy environment, or with a cab that is not properly maintained.

Advanced Cabin Filtration

Operator Cabin

- Distributed HVAC ducting with automatic temperature control and blower speed provides ultimate operator comfort with less user input.
- Reduced maintenance of the condenser core with automatic reversing fans.
- Cat Advanced Cabin Filtration is standard.

Cat Advanced Cabin Filtration

- Operator protection from respirable particulate (0.3-10-micron size).
- Sustainably pressurized cab (U.S. Silica compliant).
- Reduced maintenance with longer life, high efficiency filters.
- Protection for all cabin components: electronics, etc.
- Helps meet U.S. Occupational Safety and Health Administration Silica Rule Table 1 requirements for operator cabs.
- Multi-tiered filter offerings for optional efficiency upgrades. Contact Cat dealer for availability.
 - MERV 16 – Standard Equipment
 - HEPA
 - Activated Carbon + HEPA
 - ABEK1 + HEPA

Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.36 kg of refrigerant which has a CO₂ equivalent of 1.946 metric tonnes.

Dozer Technology Features

Assist technology features to help operators of varied experience levels get the job done faster and more accurately. Grade and Command offerings help further enhance your productivity, efficiency and job site safety.

All Premium and High Debris cabs are Third Party Grade Control Ready, equipped with CAN interface, harness pass throughs and mounting features to make it easier to install the grade control system of your choice.

ARO with Assist Package

Attachment Ready Option (ARO)	ARO provides wiring and mounting provisions for dealer installation of Grade with 3D, AccuGrade, UTS, or other grade control systems.
Cat Grade with Slope Assist™	Slope Assist automatically maintains pre-established blade position without a GNSS/GPS signal – no additional hardware or software needed. For machines with 3D, operators can easily switch back and forth from full 3D automatics to Slope Assist.
Steer Assist	Steer Assist automates track and blade tilt steering. Helps reduce operator fatigue by automatically maintaining straight travel with light loads or heavy loads on flat ground and cross slopes. No GNSS/GPS required.
Stable Blade	Stable Blade works seamlessly with operator inputs to help produce a smoother surface when operating manually.
Slope Indicate	Slope Indicate is included in the main machine display and shows side slope and uphill/downhill grades to help operators with slope work.
Blade Load Monitor	Blade Load Monitor gives you real-time feedback on current load versus the optimal blade load based on your ground conditions. Actively monitors machine load and track slip to help you reach optimal pushing capacity. ¹
Traction Control	Traction Control automatically reduces track slip to save you time, fuel and track wear. ¹
AutoCarry™	AutoCarry automates blade lift to help you maintain consistent blade load and help reduce track slip. ¹

Grade 3D with Assist Package

Includes all features from the ARO with Assist Package listed above, plus:

Cat Grade with 3D	Factory integrated Cat Grade with 3D uses GNSS/GPS to control the blade so you can get to design plan faster. Low profile antennas are integrated into the cab roof and GNSS/GPS receivers are mounted inside the cab for better protection. ²
Steer Assist 3D	Automatically follow guidance lines from site design plans (or Infield designs) under light load or heavy load. ²
Dedicated Touchscreen Grade Display	Full-color Grade operator interface is intuitive and easier to use. The 254 mm (10 in) touchscreen uses an Android OS platform and operates like a smart phone.

Remote Control/Cat Command

Remote Control Ready Cab	Premium and High Debris cabs are Remote Control Ready from the factory with external connector for dealer installation of the Cat Command remote control system.
Command for Dozing ² (Optional)	Cat Command remote control technology provides full dozer maneuverability from a safe distance when working in hazardous environments. Command offers the choice of line-of-sight consoles or long-distance operator stations (non-line-of-sight).

¹Feature not operational indoors or in areas where a GNSS/GPS signal is not available.

²Requires Software Enabled Attachment (SEA) installation when not configured from the factory.

Note: Grade and Assist technologies, except Slope Indicate, Blade Load Monitor and Traction Control, are not compatible with Angle blades or specialty blades from Cat Work Tools. Please consult with your Cat dealer for details.

D7 Pipeline/Forestry Standard and Optional Equipment

Standard and Optional Equipment

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

	Standard	Optional		Standard	Optional
POWER TRAIN			CAT TECHNOLOGY (continued)		
Cat C9.3B diesel engine	✓		Operator ID		✓
Fully-automatic 4-speed transmission with Lock-Up Clutch (LUC) torque divider	✓		Machine Security – Passcode	✓	
Air-to-air aftercooler (ATAAC)	✓		Machine Security – Bluetooth		✓
Aluminum bar plate radiator	✓		Remote Control Ready		✓
Differential steering with dedicated hydraulic pump	✓		Cat Command for Dozing		✓
Engine air precleaner with dust ejection	✓		OPERATOR ENVIRONMENT		
Engine air precleaner with screen and dust ejection		✓	Standard cab with Integrated ROPS and FOPS, laminated safety glass, sliding windows, basic display/non-ARO, standard seat	✓	
Engine with thermal shield		✓	Premium cab with integrated ROPS and FOPS, laminated safety glass, sliding windows, adjustable armrests. Cab is technology- and remote control-ready.		✓
Engine idle shutdown		✓	High debris cab with integrated ROPS and FOPS, impact resistant polycarbonate doors, solid side windows for improved sealing, powered precleaner with Cat Advanced Cabin Filtration for improved performance and filter life. Cab is technology- and remote control-ready.		✓
Extended life coolant	✓		8-inch (203 mm) gauge cluster display	✓	
Double Reduction Final Drives – Standard or LGP	✓		Full-color 10-inch (254 mm) liquid crystal touchscreen display		✓
Double Reduction Final Drives – Arctic		✓	High Definition rear view camera with backup lines		✓
Fuel water separator	✓		In-display key machine features		✓
Electric fuel priming pump	✓		Cloth seat with mechanical adjustable lumbar support	✓	
Hydraulic demand fan	✓		Deluxe leather heated/ventilated seat with electronic adjustable lumbar support		✓
Hydraulic reversing fan		✓	Electrohydraulic implement and steering controls	✓	
Sound suppression		✓	Joystick control	✓	
Debris resistant radiator cores	✓		Joystick control – ARO		✓
Automatic ether starting aid	✓		Fresh air filter	✓	
Engine air filter with electronic service indicator	✓		Powered fresh air filter precleaner		✓
Jacket water heater (110V or 220V)		✓	Cab mounted modular HVAC system with automatic reversing fans. Automatic temperature and blower control with distributed ducting.	✓	
CAT TECHNOLOGY			Communication radio ready		✓
Slope Indicate	✓		Rearview mirror	✓	
ARO with Assist Package		✓	Retractable 76 mm (3 in) seat belt	✓	
– ARO			Cup holders	✓	
– Slope Assist			Dash foot pads	✓	
– Steer Assist			Entertainment radio with Bluetooth and microphone		✓
– Stable Blade			Lunchbox storage	✓	
– Blade Load Monitor			Wipers	✓	
– Traction Control			USB and AUX Ports		✓
– AutoCarry			Operator presence switch	✓	
Grade 3D with Assist Package		✓			
– Full-color 10-inch (254 mm) touchscreen grade display					
– Steer Assist 3D					
– Grade receivers and antennas					
– Grade Software Enabled Attachment (SEA)					
– ARO with Assist package features					
Compatibility with radios and base stations from Trimble, Topcon, and Leica	✓				
Capability to install 3D grade systems from Trimble, Topcon, and Leica	✓				
Product Link, Cellular	✓				
Product Link – Dual Cellular/Satellite		✓			
Remote Flash/Troubleshoot	✓				
Grade Connectivity		✓			

(continued on next page)

D7 Pipeline/Forestry Standard and Optional Equipment

Standard and Optional Equipment (continued)

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

	Standard	Optional		Standard	Optional
UNDERCARRIAGE			SERVICE AND MAINTENANCE		
Standard undercarriage	✓		30-minute cab removal		✓
Low Ground Pressure (LGP) undercarriage**		✓	Centralized, remote mounted pressure taps	✓	
Heavy Duty (HDXL with DuraLink™)	✓		Ecology drains		✓
Carrier rollers	✓		Extended service intervals (500 hours engine, 1,000-hour power train)	✓	
Hydraulic track adjusters	✓		Ground level service center (remote electrical disconnect, secondary shutdown switch, hour meter)	✓	
Lifetime lubricated track and roller	✓		Fuel tank (624 L/164.8 gal)	✓	
Moderate service track shoes (see chart on page 27)	✓		High capacity fuel tank** (821 L/216.8 gal)		✓
Extreme service track shoes (see chart on page 27)		✓	Fast fuel fill		✓
Track roller frame – 7 bottom rollers	✓		High-speed oil change		✓
Track roller frame – 8 bottom rollers		✓	Heavy duty perforated radiator doors, louvered and hinged	✓	
Track roller frame guiding guards: center, partial or full (NOTE: center guiding guards standard on LGP machine)		✓	Quick access cab floor		*
BLADES			Under hood work light		✓
Semi-Universal		✓	Removable engine enclosures, perforated and hinged	✓	
Straight Blade		✓	S-O-S SM sampling ports	✓	
Angle Blade		*	Shovel holder		✓
Universal Blade – Standard configuration only		✓	BATTERIES, STARTERS, ALTERNATORS AND COOLANT		
Forestry/Land Clearing Blade		*	95 Amp alternator	✓	
Cat FirstCut cutting edges (SU blades)		✓	150 Amp alternator		✓
HYDRAULICS			150 Amp ducted alternator		✓
Load sensing hydraulics	✓		24 Volt starter	✓	
Independent steering and implement pumps	✓		Engine coolant, –37° C (–35° F)	✓	
ELECTRICAL			Arctic engine coolant, –51° C (–60° F)		✓
Lights – 4 LED	✓		ATTACHMENTS		
Lights – 6 LED		✓	Fixed parallelogram ripper/curved shanks		✓
Premium lights – 12 LED		✓	Adjustable parallelogram ripper/curved shanks		✓
Backup alarm	✓		Winch: – PACCAR PA110		*
Integrated warning lights		✓	Drawbar		✓
Converter: 15 Amp, 12V outlet	✓		GUARDING AND SCREENS		
Forward warning horn	✓		Bottom guards – standard	✓	
			Bottom guards – heavy-duty and sealed		*
			Fuel tank guards		*
			Grab handles	✓	
			Guards for premium lights, front and side		✓
			Sweeps package		✓
			Rear fixed screen		*
			Hinged rear screen		✓
			Hinged side screen		✓
			Rear counterweight		✓

*Recommended

**Not available in all areas. Please consult your Cat dealer for availability.



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