

Product Specifications For D10



Engine - U.S. EPA Tier 4 Final/EU Stage V

Engine Model	Cat® C27
Engine Power - Net SAE J1349/ISO 9249** - Forward	449 kW
Engine Power - Gross SAE J1995* - Forward	471 kW
Engine Power - Gross SAE J1995* - Reverse	597 kW
Engine Power - ISO 14396* - Forward	462 kW
Engine Power - ISO 14396* - Reverse	588 kW
Engine Power - Net SAE J1349/ISO 9249** - Reverse	564 kW
Displacement	27 l
Stroke	152 mm
Bore	137 mm
Emissions	U.S. EPA Tier 4 Final/EU Stage V
Note (1)	*Excludes all fan losses.
Note (2)	All Engine ratings apply at 1,800 rpm.
Note (3)	Tier 2 equivalent rating (in FWD gears) begins altitude de-rate at 4480 m (14,700 ft).

Note (4) Tier 4/EU Stage 5 equivalent rating (in FWD gears) begins altitude de-rate at 4420 m (14,500 ft).

Note (5) **Net power advertised is the power available at the flywheel when the engine is equipped with air cleaner, muffler, alternator, fan, and engine emissions controls as required at 25° C ambient temperature.

Weights

Operating Weight 70 256 kg

Shipping Weight 50 684 kg

Note (1) D10 Operating Weight includes coolant, lubricants, full fuel tank, ROPS, FOPS cab, SU ABR bulldozer, dual tilt, single-shank ripper with pin-puller, fast fuel, 610 mm (24 in) ES shoes, and operator.

Note (2) D10 Shipping Weight includes coolant, lubricants, 10% fuel, FOPS cab, fast fuel, and 610 mm (24 in) ES shoes.

Undercarriage

Shoe Type Extreme Service (ES)

Width - Shoe 610 mm

Shoes/Side 44

Grouser Height 93 mm

Pitch 260 mm

Ground Clearance 725 mm

Track Gauge 2550 mm

Length - Track on Ground 3880 mm

Ground Contact Area 4.74 m²

Track Rollers/Side

8

Number of Carrier Rollers

1 per side (optional)

Standards

ROPS

Rollover Protective Structure (ROPS) meets the following criteria: ISO 3471:2008.

FOPS

Falling Object Protective Structure (FOPS) meets the following criteria: ISO 3449:2005 LEVEL II.

Sound

Operator Sound Pressure Level (ISO 6396:2008): 78 db(A)

Note

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 measurement was conducted with the cab doors and the cab windows closed. The cab was properly installed and maintained.

Sound (1)

Exterior Sound Pressure Level (ISO 6395:2008): 116 db(A)

Note (1)

The measurement was conducted at 70% of the maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds.

Note (2)

The sound levels listed above include both measurement uncertainty and uncertainty due to production variation.

Note (3)

The available sound suppression package can reduce the dynamic exterior sound power level of the machine by up to 4 db(A) and the dynamic operator sound pressure level by up to 2 db(A).

Steering And Brakes

Steering Type

Hydraulically Applied Multiple-Disc Steering Clutch

Brake Type

Spring Applied Multiple- Disc Brake

Brake Diameter

392 mm

Brake Count

10

Engine - U.S. EPA Tier 2 Equivalent

Engine Model	Cat® C27
Engine Power - Net SAE J1349/ISO 9249** - Forward	450 kW
Engine Power - Net SAE J1349/ISO 9249** - Reverse	538 kW
Engine Power - Gross SAE J1995* - Forward	471 kW
Engine Power - Gross SAE J1995* - Reverse	571 kW
Engine Power - ISO 14396* - Forward	464 kW
Engine Power - ISO 14396* - Reverse	564 kW
Displacement	27 l
Bore	137 mm
Stroke	152 mm
Emissions	U.S. EPA Tier 2 Equivalent
Note (1)	*Excludes all fan losses.
Note (2)	All Engine ratings apply at 1,800 rpm.
Note (3)	Tier 2 equivalent rating (in FWD gears) begins altitude de-rate at 4480 m (14,700 ft).
Note (4)	Tier 4/EU Stage 5 equivalent rating (in FWD gears) begins altitude de-rate at 4420 m (14,500 ft).

Note (5)

**Net power advertised is the power available at the flywheel when the engine is equipped with air cleaner, muffler, alternator, fan, and engine emissions controls as required at 25° C ambient temperature.

Fuel Tank Capacities

Fuel Tank - Usable Volume	1224 l
Fuel Tank - Total Volume	1269 l

Hydraulic Controls

Pump Type	Variable displacement piston
Pump Output - Implement	424 L/min
Note (1)	Implement Pump output measured are 2,010 engine rpm and 7000 kPa (1,015 psi).
Fan Pump	82 L/min
Note (2)	Fan Pump output measured at 2,010 engine rpm and 26 000 kPa (3,771 psi).
Tilt Cylinder Flow - Rod End Flow	424 L/min
Tilt Cylinder Flow - Head End Flow	240 L/min
Lift Cylinder Relief Valve Setting	28 000 kPa
Tilt Cylinder Relief Valve Setting	26 700 kPa
Ripper - Lift - Relief Valve Setting	28 000 kPa
Ripper - Pitch - Relief Valve Setting	28 000 kPa
Tank Capacity	122 l
Cylinder Sizing - Blade Lift - Bore	140 mm

Cylinder Sizing - Blade Tilt - Bore	210 mm
Cylinder Sizing - Ripper Shank Lift - Bore	209.6 mm
Cylinder Sizing - Ripper Shank Angle - Bore	180 mm
Cylinder Sizing - Blade Lift - Stroke	1653 mm
Cylinder Sizing - Blade Tilt - Stroke	241 mm
Cylinder Sizing - Ripper Shank Lift - Stroke	535 mm
Cylinder Sizing - Ripper Shank Angle - Stroke	660 mm
Note (3)	Electro-hydraulic pilot valves assist operations of ripper and dozer controls.

Air Conditioning System

Air Conditioning	The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 1.8 kg of refrigerant which has a CO2 equivalent of 2.600 metric tonnes.
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Transmission

1.0 Forward	4 km/h
1.5 Forward	5.4 km/h
2.0 Forward	7.2 km/h
2.5 Forward	9.6 km/h
3.0 Forward	12.5 km/h
1.0 Reverse	5.2 km/h

1.5 Reverse	6.7 km/h
2.0 Reverse	9 km/h
2.5 Reverse	12.1 km/h
3.0 Reverse	15.7 km/h
Transmission Clutch Diameter	431.8 mm
Type	Planetary powershift

Blades

10SU ABR - Capacity (SAE J1265)	18.5 m ³
10SU ABR - Width (over end bits)	4940 mm
10SU ABR - Height	2120 mm
10SU ABR - Digging Depth - Blade Pitch: Full Racked Back (Carry)	507.47 mm
10SU ABR - Digging Depth - Blade Pitch: Nominal	640.87 mm
10SU ABR - Digging Depth - Blade Pitch: Full Pitched Forward (Spread)	764.12 mm
10SU ABR - Ground Clearance - Blade Pitch: Full Racked Back (Carry)	1680 mm
10SU ABR - Ground Clearance - Blade Pitch: Full Pitched Forward (Spread)	1368 mm

10SU ABR - Ground Clearance - Maximum Tilt LH	1430 mm
10SU ABR - Ground Clearance - Maximum Tilt RH	1430 mm
10U ABR - Capacity (SAE J1265)	22 m ³
10U ABR - Width (over end bits)	5260 mm
10U ABR - Height	2120 mm
10U ABR - Digging Depth - Blade Pitch: Full Racked Back (Carry)	507.5 mm
10U ABR - Digging Depth - Blade Pitch: Nominal	640.9 mm
10U ABR - Digging Depth - Blade Pitch: Full Pitched Forward (Spread)	764.1 mm
10U ABR - Ground Clearance - Blade Pitch: Full Racked Back (Carry)	1680 mm
10U ABR - Ground Clearance - Blade Pitch: Full Pitched Forward (Spread)	1368 mm
10U ABR - Ground Clearance - Maximum Tilt LH	1545 mm
10U ABR - Ground Clearance - Maximum Tilt RH	1545 mm
10U ABR - Weights - Blade Weight*	10 698 kg

10U ABR - Weights - Total Operating Weight** (with blade and SS ripper)	70 256 kg
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Note (1)	Maximum LH and RH tilt for 10SU ABR and 10U ABR blades: 17.31 degrees
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Note (2)	*Does not include hydraulic controls but includes blade cylinders, pusharms.
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Note (3)	**D10 Operating Weight includes coolant, lubricants, full fuel tank, ROPS, FOPS cab, SU ABR bulldozer, dual tilt, single-shank ripper with pin-puller, fast fuel, 610 mm (24 in) ES shoes, and operator.
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Ripper - Single Shank

Maximum penetration force * (shank vertical)	219 kN
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Maximum penetration depth (standard tip)	1504 mm
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Maximum Clearance Raised - Under Tip, Pinned in Bottom Hole	912 mm
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Weight	6445 kg
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Note	Weight includes one shank. Add 544 kg (1,199 lb) for each additional shank.
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Ripper - Single Shank, Deep Ripping

Maximum penetration force * (shank vertical)	236 kN
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Maximum penetration depth (standard tip)	1988 mm
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Weight	6599 kg
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Note	Weight includes one shank. Add 544 kg (1,199 lb) for each additional shank.
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Dimensions (Approximate)

Ground Clearance*	725 mm
Track Gauge	2550 mm
Width - Without Trunnions - 610 mm/24 in ES	3311 mm
Width - Over Trunnions	3759 mm
Height - FOPS Cab*	4134 mm
Height - Top of Stack*	4356 mm
Height - ROPS/Canopy*	4406 mm
Note (1)	*Includes grouser height for total dimensions on hard surfaces.
Length - Track on Ground	3880 mm
Overall Length - Basic Tractor	5324 mm
Length - With SU-Blade	7416 mm
Length - With U-Blade	7750 mm
Length - With Single-Shank Ripper	7081 mm
Length - With Multi-Shank Ripper	7241 mm
Overall Length - SU-Blade/SS Ripper	9158 mm

FLUID CAPACITIES

Cooling System Refill – Tier 4 Final Engine	175 l
Engine Crankcase Sump	103 l
Power Train - Total Volume	308 l

Power Train - Refill Volume	283 l
Final Drives (each)	46 l
Track Roller Frames (each)	64 l
Pivot Shaft Oil	36 l
Hydraulic System Tank	122 l

D10 Standard Equipment

OPERATOR ENVIRONMENT

Air Conditioner and Heater with Automatic Climate Control

Seat — Cloth with Air Suspension

Cab Glass — Single-Pane Tinted Safety

Rollover Protection System (ROPS)/Falling Object Protection (FOPS), Sound-Suppressed Cab

High-Definition Primary Touchscreen Display

Cab Access – Blade Push Arm Steps and Grab Handle

Visibility – Rearview Mirror

TECHNOLOGY

VIMS

Cat Product Link™ Elite (cellular)

Automated Blade Assist (ABA)

POWER TRAIN

Stator Clutch Torque Divider – Electronic Control

Powershift Transmission – Three-Speed Electronic Shift

High-Performance Single-Plane Cooling Package with Aluminum Radiator

Cat C27 Engine – U.S. EPA Tier 4 Final or Tier 2 Equivalent

UNDERCARRIAGE

Lifetime-Lubricated Rollers and Idlers

Suspension-Type Undercarriage

Track Shoe (ES): 610/710/785 mm (24, 28, 31 inch) Width

HYDRAULICS

Electronically Controlled, Load-Sensing Dozer Lift and Tilt

Electronically Enabled Blade – Quick Drop

Electronically Controlled, Load-Sensing Ripper Lift and Pitch

Dozer Blade – Dual Tilt, Guarded Lines

ELECTRICAL

24V Electric Start

Batteries – 2× 200-Amp Hour, 12V

Battery Isolation - Single Pole

Lights – LED – 13 Positions

SERVICE AND MAINTENANCE

Replaceable Bearings – Push Arm and Ripper

Radiator Guard – Swing-Out Access Doors

Ground-Level Fast Fuel Fill

Ground-Level Electrical Service Station

Diagnostic Connector

Bottom Guards - Hinged with Release Catch

Scheduled Oil Sampling (S·O·S) Fluid Sampling Ports

Ecology Fluid Drains – All Compartments

D10 Optional Equipment

OPERATOR ENVIRONMENT

Cab Glass – Dual-Pane Laminated Impact Safety

Visibility – Five Cameras: 360-Degree View and Ripper Camera

Cab Glass – High-Pressure Safety (40 psi/275 kPa)

MineStar™ Terrain Display

Seat – Heated, Cooled, Adjustable Lumbar and Bolsters

Visibility – Dual Camera: Backup and Ripper

TECHNOLOGY

Autocarry™

Auto Ripper Control

Cat Product Link Elite Dual Mode (cellular + satellite)

Cat Grade with 3D Blade Control

MineStar Terrain Ready

MineStar Terrain with Blade Control

MineStar Command Remote Control Ready

POWER TRAIN

Hydraulic Cooling Fan – Automatic Reversing

UNDERCARRIAGE

Abrasion Rollers and Idlers

Cold Weather Rollers and Idlers

Carrier Roller

Track Links – Heavy Duty XL – Duralink

Track Shoe – Anti-Packing Round Hole

Sound-Suppression Undercarriage

Track Shoes : 610/710/786 mm (24/28/31 in) Width (various configurations)

HYDRAULICS

Ripper Pin Puller

ELECTRICAL

Lights – LED – Premium Package

Battery Isolation – Dual Pole

SERVICE AND MAINTENANCE

Ripper Lubrication – Grouped – Ground-Level Fill

Ground-Level – Fluid Fill and Drain Engine, Power Train, Hydraulic and Coolant

Sound Reduction Sealed Bottom Guards

Ripper Lubrication – Autolube with Ground-Level Fill

REAR ATTACHMENTS

Counterweight – Rear, 3 Weighted Plates

No Rear Attachment for customers who already have a rear attachment

Ripper – Single Shank with Pin Puller and Retrieval Hitch

Ripper – Single Shank with Pin Puller

Ripper – Multi Shank (three shank)

Counterweight – Rear, 4 Weighted Plates

Ripper – Multi Shank Deep with Pin Puller

BLADES

Semi-Universal (18.5 m³/24.2 yd³)

Universal (22 m³/28.7 yd³)

OTHER

Fire Suppression Ready

Fire Suppression Installed

WORKTOOLS BLADES

Cushion Dozer Blade

Coal Universal (52 m³/68 yd³)

Black Blade Paint

Abrasion Liners and Guards

Woodchip Universal (72.6 m³/95 yd³)

Reclamation Universal (24.5 m³/32 yd³)

Coal Universal (46.1 m³/60.3 yd³)