

# Cat® D7 Track-Type Tractor

The new Cat® D7 joins the growing family of Next Generation Dozers, delivering more productivity and high drive undercarriage value. A fully automatic 4-speed transmission makes efficient operation easy. The broadest range of technology features in the industry work together seamlessly to help you make the most of your equipment investment.

# **Fully Automatic, Next Generation Performance**

- Harness 6% more weight and 12% more horsepower than D7E to take on a wide range of dozing and grading tasks.
- Move up to 8% more material per hour.
- Like D6 and D8, fully automatic 4-speed powershift transmission continuously adjusts for maximum efficiency and power to the ground without added operator input.
- SU and S blades are 10% larger to help you get jobs done in fewer passes.
- 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.
- Outfit your dozer from the factory to take on the challenges of waste handling, land clearing, dredging and more.

# **Unprecedented Technology Choices**

- Cat® GRADE with Slope Assist™ automatically maintains pre-established blade position without a GPS signal – no additional hardware or software needed.
- Factory integrated Cat GRADE with 3D uses GPS to control the blade so you can get to design plan faster.
- Cat GRADE with 3D has no masts small antennas are integrated into the cab roof and GPS receivers are mounted inside the cab for better protection.
- GRADE operator interface is intuitive and easier to use: 254 mm (10 in) touchscreen, Android OS platform, operates like a smart phone.
- Slope Indicate shows machine cross-slope and fore/aft orientation right on the main display to help operators with slope work.
- Attachment Ready Option (ARO) comes from the factory with key sensors and wiring installed so you can easily upgrade to fully integrated grade control or blade mounted system.
- Install the aftermarket grade control system of your choice easily with optimal mounting locations in the cab.

# **Boost Operator Efficiency**

- New assist features just work behind the scenes to help make machine operation easier.
- Make the most of every pass with Blade Load Monitor to help you optimize blade capacity.<sup>1</sup>
- Stable Blade works seamlessly with operator inputs to help produce a smoother surface.
- Traction Control automatically reduces track slip to save you time, fuel and track wear.<sup>1</sup>
- AutoCarry automates blade lift to help you maintain consistent blade load and help reduce track slip.<sup>1</sup>

#### **Comfort and Visibility**

- Common cab with D5 and D6, for a whole new standard in comfort and productivity.
- Easy-to-use 254 mm (10 in) touchscreen main display.
- Standard High Definition rearview camera shows prominently in the main display.
- Key Features Help, built into the display, gives you an overview of machine and technology features and helpful operating tips.
- Wide air suspension seat has multiple adjustments for personalized comfort. Armrest adjusts independent of the seat.
- Distributed cab heating/cooling circulates air effectively around the operator and helps reduce window fogging/frosting.
- Ample storage spaces throughout the cab.
- Convenient USB and Auxiliary power ports in cab.



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### **Built-in Durability**

- Elevated sprocket protects major components from shock loads.
- · Heavier frame and structures for added durability.
- Cat C9.3B engine eliminates Exhaust Gas Recirculation (EGR) system for greater reliability; Simplified with a single engine Electronic Control Module (ECM).
- Redesigned fuel system provides greater reliability and more accurate fuel delivery.
- New Heavy Duty Extended Life undercarriage HDXL with DuraLink™ – provides up to 20 percent more seal life in high impact conditions.
- Heavy-duty batteries for more cold-cranking power.

# **Because Uptime Counts**

- Elevated sprocket makes cleanout easier and provides convenient, modular service.
- Standard dozer under 3.7 m (12 ft) shipping width for easier transport with blade installed.
- New track roller frame with larger roller shafts adds durability and ease of cleanout.
- Reversible hydraulic demand fan helps remove debris while you work, saving cleanout and maintenance time.
- Longer life LED lights help save you time and money.
- Easy access under the cab floor if needed. Cab can be removed in about 30 minutes.
- Platform with guard rail makes refueling and DEF fill convenient.

# **Waste Handling Performance**

- Cat Waste Handlers are designed and built from the frame up to take on the challenges of landfill work.
- Specialized guarding, striker bars and seals help protect machine and undercarriage from impact, wrapping and airborne debris.
- Impact-resistant polycarbonate cab doors eliminate need for door screens.
- High-debris cooling system with automatic reversing fan and swing-out cleanout access.
- Lights mounted up and away from main debris area for protection, while still giving you plenty of light on the work area.
- Waste undercarriage, center-hole track shoes and landfill blades help optimize performance.
- · Laminated thermal shields and insulated Clean Emissions Module.

### **Connect to Greater Efficiency**

- Product Link<sup>TM</sup> collects machine data that can be viewed online through web and mobile applications.
- Access information anytime, anywhere with VisionLink® and use it to make informed decisions that boost productivity, lower costs, simplify maintenance, and improve safety and security on your job site.
- The Cat App helps you manage your assets at any time right from your smartphone. See fleet location and hours, get critical required maintenance alerts, and even request service from your local Cat dealer.
- Remote Troubleshoot saves time and money by allowing your Cat dealer to perform diagnostic testing remotely.
- Remote Flash updates on-board software without a technician being present, at a time that is convenient for you, potentially reducing update time by as much as 50%.

# **Remote Control Ready**

- Cab is Remote Control Ready from the factory with external connector for dealer installation of a plug-and-play roof-mounted remote control unit.
- Cat COMMAND for Dozing offers remote control operation for enhanced safety and greater productivity.
- COMMAND uses line-of-sight (LOS) control with an over-the-shoulder console, or a non-line-of-sight (NLOS) option using the Cat Command Station to run the machine remotely.

# **Saved Settings, Added Security**

- Application Profile lets you save machine settings based on application or operator preference – save multiple profiles for various jobs or multiple operators.
- Operator ID allows you to save machine settings and to track individual operator productivity, safety and training opportunities via Product Link.<sup>2</sup>
- Machine Security Passcode helps prevent theft and unauthorized operation by requiring an operator to enter an ID to start the machine.<sup>2</sup>

All comparisons to D7E

<sup>&</sup>lt;sup>1</sup>Feature not operational indoors or in areas where a GPS signal is not available.

<sup>&</sup>lt;sup>2</sup>Can be enabled by dealer technician.

# **Standard and Optional Equipment**

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

	Standard	Optional		Standard	Optional
POWER TRAIN			BLADES		
Fully-automatic 4-speed transmission	✓		Semi-Universal		✓
Cat C9.3B diesel engine	✓		Universal		✓
Double reduction 3-planet planetary	✓		Straight blade		✓
final drives			Angle blade		✓
Electric fuel priming pump	✓		Waste/Landfill		✓
OPERATOR ENVIRONMENT			For a full list of blade offerings, please refe		
Fully redesigned cab, sound suppressed,	$\checkmark$		Technical Specifications brochure on cat.c	om.	
with Integrated Roll Over Protective			UNDERCARRIAGE		
Structure (IROPS)			Heavy Duty (HDXL with DuraLink)	✓	
Dual pane/polycarbonate window		✓	Redesigned track roller frame	✓	
Special Application Cab Full-color 254 mm (10 in) liquid crystal	<b>√</b>		Moderate Service or Extreme Service		✓
touchscreen display	•		track shoes		
Integrated rearview camera	<b>√</b>		Waste or Cold Weather undercarriage		✓
Adjustable operator controls/armrests	<u> </u>		For a complete listing of track shoe offering		er
Cab mounted modular HVAC system	<u> </u>		to the Technical Specifications brochure or	r cat.com.	
Added storage areas	<u> </u>		SERVICE AND MAINTENANCE		
<u> </u>			Fast fuel fill ready	✓	
Electrohydraulic implement and steering controls	•		Hydraulic reversing fan	✓	
Cloth seat	<b>√</b>		Shovel holder	✓	
Deluxe leather heated/ventilated seat	•		Ground level service center	✓	
· · · · · · · · · · · · · · · · · · ·		<u>√</u>	30-minute cab removal	✓	
Communication radio ready	<b>√</b>		Quick access cab floor		✓
Lights – 6 LED	· ·		Fire extinguisher mounting provision	✓	
Premium lights – 12 LED		<b>√</b>	Ecology drains	✓	
Integrated warning lights		<b>~</b>	High-speed oil change		✓
CAT TECHNOLOGY			Underhood work light	✓	
Slope Indicate	✓		HYDRAULICS		
ARO with Assist (GRADE Ready +		✓	Independent steering and	✓	
Assist features)  – Slope Assist			implement pumps		
- Traction Control			Load sensing hydraulics	✓	
- Stable Blade			ATTACHMENTS		
– Blade Load Monitor			Ripper-ready rear hydraulics	✓	
<ul><li>AutoCarry</li></ul>			Multi-shank ripper		✓
<ul> <li>Third Party Grade Control Ready</li> </ul>			Winch		✓
Cat GRADE with 3D (includes ARO with		✓	Drawbar		✓
Assist features)			Counterweights		✓
– Full-color 254 mm (10 in) touchscreen			Striker bar box		✓
grade display			Side screens		✓
Product Link, Cellular	✓		Rear screen – hinged or fixed		<b>√</b>
Product Link – Dual Cellular/Satellite		✓	Sweeps		<b>√</b>
Remote Flash/Troubleshoot	✓		Waste and Forestry Special Arrangements	 :	<u> </u>
Grade Connectivity		✓	Tradic and Forestry Openial Arrangements		•
Operator ID	✓				
Machine Security – Passcode	✓				
Machine Security – Bluetooth®		✓			_
Remote Control Ready	✓				和定局的 第二章
Cat COMMAND for Dozing		✓			The state of the s
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# Cat® D7 Track-Type Tractor

# **Technical Specifications**

Engine						
Engine Model	Cat C9.	Cat C9.3B				
Emissions		U.S. EPA Tier 4 Final/EU Stage V/ Japan 2014/Korea Tier 4 Final				
Build Number	17A	17A				
Power Train	Fully Automati	Fully Automatic 4-Speed				
Net Power – 2,200 rpm						
ISO 9249/SAE J1349	197 kW	265 hp				
ISO 9249/SAE J1349 (DIN)		268 hp				
Displacement	9.3 L	567 in <sup>3</sup>				
	E: 1.0: IUB D7 137.1					

- All non-road Tier 4 Interim and Final, Stage IIIB, IV and V, Japan 2014 (Tier 4 Final) and Korea Tier 4 Final diesel engines are required to use only Ultra Low Sulfur Diesel (ULSD) fuels containing 15 ppm EPA/10 ppm EU (mg/kg) sulfur or less. Biodiesel blends up to B20 (20% blend by volume) are acceptable when blended with 15 ppm (mg/kg) sulfur or less ULSD. B20 should meet ASTM D7467 specification (biodiesel blend stock should meet Cat biodiesel spec, ASTM D6751 or EN 14214). Cat DEO-ULS™ or oils that meet the Cat ECF-3, API CJ-4, and ACEA E9 specification are required. Consult your OMM for further machine specific fuel recommendations.
- Diesel Exhaust Fluid (DEF) used in Cat Selective Catalytic Reduction (SCR) systems must meet the requirements outlined in the International Organization for Standardization (ISO) standard 22241.
- 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 CO<sub>2</sub> equivalent of 1.946 metric tonnes.

Service Refill Capacities					
Fuel Tank	465.0 L	122.8 gal			
DEF Tank	44.0 L	11.6 gal			

Operating Weight					
SU with Ripper	29 776 kg	65,644 lb			
LGP S with Drawbar	28 677 kg	63,220 lb			
Waste Handler	28 140 kg	62,035 lb			
SU ripper weight with three ripper shanks = 2993 kg/6,596 lb					

Ground Pressure**					
SU with Ripper	72.1 kPa	10.5 psi			
LGP S with Drawbar	43.4 kPa	6.3 psi			
Waste Handler	68.3 kPa	9.9 psi			
**Standard size shoes and drawbar attachment per ISO 16754.					

	Blades				
	Capa	Capacity		Width	
Semi-Universal (SU)	7.4 m <sup>3</sup>	9.7 yd³	3500 mm	138.0 in	
LGP Straight (S)	6.2 m <sup>3</sup>	8.1 yd <sup>3</sup>	4150 mm	163.0 in	
Angle (A)	4.2 m <sup>3</sup>	5.4 yd <sup>3</sup>	4320 mm	170.0 in	
LGP Angle (A)	4.7 m <sup>3</sup>	6.2 yd <sup>3</sup>	4770 mm	188.0 in	
Universal (U)	8.6 m <sup>3</sup>	11.2 yd³	3788 mm	149.0 in	
Universal Landfill	16.6 m <sup>3</sup>	21.7 yd <sup>3</sup>	3788 mm	149.0 in	

Dimensions*						
	SU		LGP S		Waste Handler	
Track Gauge	1981 mm	78.0 in	2235 mm	88.0 in	1981 mm	78.0 in
Width of Standard Shoe	610 mm	24.0 in	915 mm	36.0 in	610 mm	24.0 in
Width of Tractor (without trunnions)	2591 mm	102.0 in	3150 mm	124.0 in	2591 mm	102.0 in
Machine Height (to ROPS)	3354 mm	132.0 in	3354 mm	132.0 in	3354 mm	132.0 in
Machine Height (to ROPS) including Grouser Height	3436 mm	135.3 in	3428 mm	135.0 in	3436 mm	435.3 in
Length of Track on Ground	2972 mm	117.0 in	3200 mm	126.0 in	2972 mm	117.0 in
Length of Basic Tractor	4659 mm	183.4 in	4659 mm	183.4 in	4659 mm	183.4 in
With the following attachments, add to basic tractor length:						
SU Blade	1125 mm	44.0 in			1125 mm	44.0 in
S Blade			840 mm	33.0 in		
U Blade	1365 mm	54.0 in			1365 mm	54.0 in
Landfill Blade	1125 mm	44.0 in	840 mm	33.0 in	1125 mm	44.0 in
Drawbar	260 mm	10.2 in	270 mm	10.6 in	260 mm	10.2 in
Ripper	1555 mm	61.2 in	1565 mm	61.6 in	1555 mm	61.2 in
Winch	735 mm	28.9 in	745 mm	29.3 in	735 mm	28.9 in
*Heavy Duty Undercarriage						

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