

D9T WH

Waste Handler



Engine

Engine Model	Cat® C18 ACERT™	
Global Emissions	U.S. EPA Tier 4 Final/EU Stage IV Tier 2/Stage II Equivalent Tier 3/Stage IIIA Equivalent	

Net SAE J1349/ISO 9249

Tier 4 Final/Stage IV (Serial Number Prefix: REX)	325 kW	436 hp
Tier 2/Stage II Equivalent (Serial Number Prefix: TWG)	306 kW	410 hp
Tier 3/Stage IIIA Equivalent (Serial Number Prefix: TWG)	306 kW	410 hp

Operating Weight

(Serial Number Prefix: REX)	50 109 kg	110,471 lb
(Serial Number Prefix: TWG)	49 761 kg	109,705 lb

Purpose-built to Handle the Rigors of Landfill Work



Contents

Engine and Emissions Technology.....	4
Cooling System.....	5
Power Train.....	6
Structure.....	7
Undercarriage.....	8
Debris Resistant Features.....	9
Optional Waste Handling Attachments.....	10
Operator Station.....	11
Sustainability.....	11
Integrated Technologies.....	12
Serviceability.....	13
Customer Support.....	13
Specifications.....	14



Factory installed guarding and debris-resistant features help protect vital machine components to maximize service life and uptime. Its versatility makes the D9T Waste Handler a powerful and highly maneuverable machine for dozing and compacting waste, as well as an ideal fine grading machine to place just the right depth of cover material.

Engine and Emissions Technology

Power and reliability to help you move more.

C18 with ACERT Technology

Reduce emissions without sacrificing performance – the C18 ACERT engine in the new D9T Waste Handler meets Tier 4 Final and Stage IV emission standards and will continue to work productively and economically in tough landfill applications. The previous D9T Waste Handler model is still available in less regulated countries and can achieve emissions levels equivalent to Tier 2/Stage II and Tier 3/Stage IIIA standards.

Cat NO_x Reduction System (NRS)*

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

Diesel Particulate Filter (DPF)*

The Diesel Particulate Filter can provide a particulate reduction of greater than 90%. It filters soot from the exhaust. Soot is then removed through the regeneration process automatically or manually.

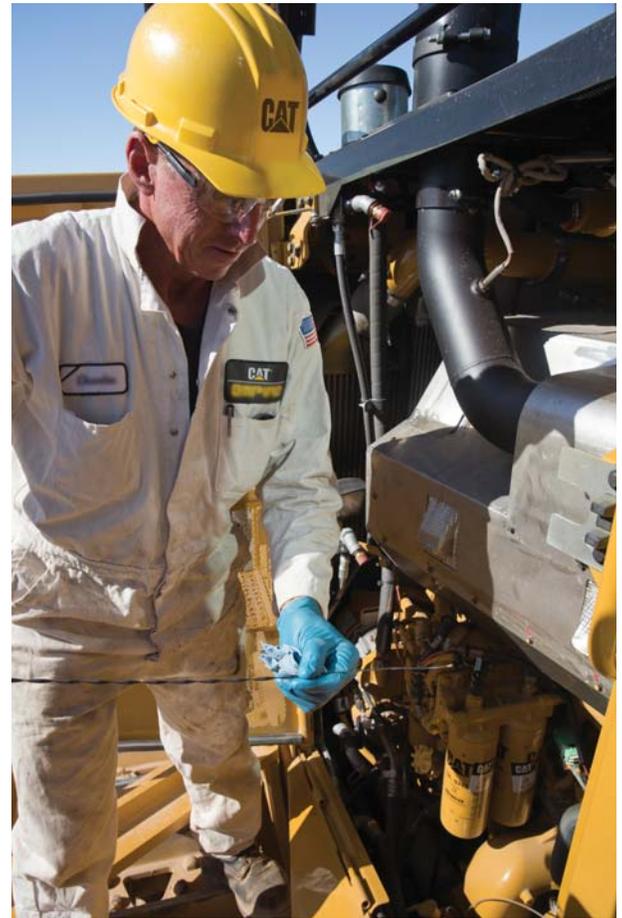
Selective Catalytic Reduction (SCR)*

The Selective Catalytic Reduction system can provide a NO_x reduction of greater than 90%. SCR operation is transparent to the operator during operation. The urea solution Diesel Exhaust Fluid (DEF), is pumped from DEF tank and is sprayed into the exhaust stream. The DEF reacts with the SCR catalyst to reduce NO_x.

Diesel Exhaust Fluid (DEF)*

Diesel Exhaust Fluid is a liquid that is injected into the exhaust system of engines equipped with Selective Catalytic Reduction (SCR) systems. On the D9T the DEF tank is located on the left hand fender enclosure next to the fuel tank. Diesel Exhaust Fluid that meets ISO 22241 specifications is required.

*Applies to Tier 4 Final and Stage IV Emission Standards.



Cooling System

Superior cooling keeps you moving in the most demanding work conditions.



The D9T provides durable, efficient cooling for the most demanding conditions encountered on job sites.

Aluminum Bar Plate Radiator – 6 Fins per Inch (fpi)

The new radiator core design is wider, deeper, and integrates tanks with the cores. This extremely durable design supports higher heat transfer and provides superior corrosion resistance.

Air-to-Air Aftercooling

Air-to-air aftercooling on the D9T cools hot, compressed air coming out of the turbocharger providing cooler and denser air for the air intake system. Bringing more cool air into the engine increases power generation, lowers emissions, and improves fuel efficiency.



Air to Oil Hydraulic Cooler

Helping to save on repair and maintenance costs, the air to oil hydraulic cooler helps extend component life by reducing hydraulic oil temperatures. The core is built using the same rugged aluminum bar plate design as the engine radiator.

Closed Circuit Hydraulically Variable, Demand Fan

Customers experience increases in production and fuel economy as well as reductions in fan noise and engine overcooling with the closed circuit hydraulically variable demand fan. The demand fan changes speed to match ambient conditions. In cooler environments, the fan turns at a slower speed; consuming only the power required to cool the tractor systems, providing more power to the tracks to help you lower your cost per unit of material moved.



Power Train

Power and control to efficiently move more material.



High Availability is Key

Major power train components are modular in design, so being able to quickly remove and reinstall a new pre-tested component gives you the ability to keep the dozer up and running and producing.

Power Train

The power shift transmission and differential steering work with the C18 ACERT engine to deliver the outstanding power, productive performance and reliability expected from Cat Large Dozers. Differential steering maintains full power to both tracks to provide best-in-class turning with a loaded blade. When one track speeds up, the other slows down an equal amount. Maneuverability – especially with large blade loads – is improved, as well as cycle times in some applications. Greater load capacity, power and speed control are possible in soft underfoot conditions on steep slopes.



Structure

Engineered for maximum production and service life.



Mainframe Strength – Built to Last

Helping you get more done with maximum availability, the D9T's durable design makes repair and maintenance easy. Customers can rebuild these tractors several times using the same frame with only minor repairs. With unparalleled support from Cat dealers it is not unusual for a Cat large dozer to log more than 100,000 hours.

- The D9T mainframes are built to absorb high impact shock loads and twisting forces encountered during severe dozing and ripping applications.
- The main case, equalizer bar saddle, and front cross member are heavy duty steel castings incorporated into highly loaded areas of the mainframe to improve stress distribution for improved durability.
- Top and bottom rails are made from continuous rolled sections to eliminate welds and machining, providing superior mainframe durability.
- The main case elevates the final drives well above the ground level work area to protect them from impact loads, abrasion and contaminants.
- Tag-link blade mounting brings the blade closer to the machine for excellent maneuverability, machine balance and blade penetration.
- The pivot shaft and pinned equalizer bar maintain track roller frame alignment and allow the roller frame to oscillate for smoother ride.



Undercarriage

Designed for optimized machine balance and best performance at your site.

Undercarriage

The D9T Waste Handler features the Cat elevated sprocket and fully suspended undercarriage design that isolates final drives, axles, and steering components from harsh impacts – resulting in a smoother, more comfortable ride in addition to improved production and longer component life.

Every single piece of rolling stock (idlers or rollers) that is in contact with ground has the ability to move up and down. This oscillation allows the undercarriage to envelop obstacles in landfills to keep the track in contact with the ground for superior traction and performance. The undercarriage is designed for easy clean-out, and a modular design aids serviceability to help reduce maintenance costs.



Debris Resistant Features

A commitment of long life and quality for our waste handling customers.

Cat Waste Handlers are designed with guarding and seals that are critical to the life of your investment and keeping the D9T productive in this application.

- Hinged cleanout slot covers (1) offer quick access to the front side of the radiator cores for cleaning.
- Engine enclosures (2) have perforated hood and side panels to help prevent airborne debris from entering the engine compartment and helps reduce radiator plugging.
- Turbine Engine Precleaner and Dust Ejector (3) delivers clean air and provides longer filter life. The intake air is spun by a flow driven impeller. Debris stratifies along the outer wall and is ejected back into the environment, allowing only precleaned air to continue to the engine's air filter.
- High-capacity ducted alternator provides additional power required for electrical accessories. Ducting is provided that helps prevent debris from entering into the alternator for longer life.
- Sealed Bottom Guards* help protect against contact damage and help keep debris out of vital machine compartments.
- Clamshell Guards* (4) are designed to optimize performance in waste handling applications. Using clamshell guards with inspection covers will protect the final drive seal from damage due to winding of wire, nylon strapping, fishing line, etc.
- D9T Waste Handling Undercarriage* (5) includes guarded idlers and guarded pivot shaft seal, and front track roller frames that can accept front striker bars.
- Standard operator controls and platform with quick opening floor plates* (6) to aid in regular cleaning.
- Wrapped exhaust* includes steel covered, insulated exhaust shields for the exhaust manifolds, turbo and muffler inlet tube.

*Required for Waste Handling Arrangement.



Optional Waste Handling Attachments

Enhanced landfill performance.

A number of optional features are recommended to help customers get optimal performance from their D9T Waste Handler.

- Cat landfill blades (1) increase the dozing capacity in trash and help prevent material from spilling over the blade and entering the radiator.
- Front striker bars angled design (2) helps prevent debris from riding up the track during tractor reversal to prevent material from damaging the fenders or fuel and hydraulic tanks.
- Rear striker bar (3) includes a striker bar, storage box, drawbar, three slab counterweight, fast fuel system, and transmission guard. The bar is used to knock material off of the tracks during forward operation to prevent material from packing between the track and fender.
- Trapezoidal hole track shoes (4) help extend service life by reducing refuse packing within the track. The trapezoidal hole design allows the sprocket to punch out most dirt and debris help extend track pin life.
- Powered cab air precleaner includes an additional centrifugal precleaner (5) to separate excess dust particles before the air enters the cab fresh air filter extending filter life.
- Guarding (6) helps protect implement hydraulic oil tank, DEF tank (serial prefix REX) and fuel tank in high debris landfill applications.
- Tilt cylinder lines guard helps protect hydraulic lines from contact damage, while maintaining hose flexibility.
- Halogen, HID or LED lights (7) are mounted up and away from the concentrated debris environment for excellent illumination for optimum visibility under low light conditions.



Operator Station

Designed for your comfort, convenience, and productivity.

The D9T's cab design provides ergonomic controls, intuitive monitoring systems, and enhanced visibility. All of the new features within the D9T operator station provide an industry leading operator environment that helps contribute to high levels of productivity, efficiency, and comfort.

Implement and Steering Controls

- The D9T utilizes electro-hydraulically controlled differential steering, which helps keep power to both tracks for constant centerline velocity for higher productivity in applications with a lot of turning. Also allows for counter rotation of tracks. This steering system combines the direction and degree of turns, forward-reverse shifting, and gear selection in a single control handle, to enhance operator comfort and help reduce fatigue.
- A low-effort electronic dozer control handle gives the operator complete control of all dozer functions with one hand.

Wide Panoramic View

- For enhanced safety and production, the operator station offers an exceptional viewing area.
- The tapered hood, notched fuel tank, and narrow ripper carriage (if equipped) gives the operator a clear line of sight to front and rear work areas.



Sustainability

Thinking about your legacy for future generations.

The D9T WH is designed to maximize efficiency and productivity and offers a number of sustainable benefits:

- Major components of Cat dozers are designed to be rebuilt. The Cat Certified Rebuild program conserves natural resources by delivering a cost effective second and even third life for our machines.
- Fuel saving features like Enhanced Auto Shift help decrease overall fuel consumption.
- Ecology drains allow fluids to be easily captured for recycling or proper disposal.



Integrated Technologies

Monitor, manage, and enhance job site operations.

Cat Grade Control 3D

Cat Grade Control for dozers is an integrated electronic system that works in landfill applications to ensure the correct amount of material is moved. This helps conserve valuable airspace and cover soil with reduced stakes and crews. The system uses dual ROPS mounted Global Navigation Satellite System (GNSS) antennas and in-cylinder position sensors to provide precise positioning of the cutting edge. This eliminates the need for masts and cables on the blade and improves visibility for the operator. As compared to traditional aftermarket externally mounted sensors, the Cat Grade Control sensors are protected from the harsh working environments in the landfill. Additionally, Cat Grade Control 3D permits the identification of site specific storage areas such as hazardous waste, medical, industrial, organic, and other materials which require special handling or a record of their placement.

Product Link™/VisionLink®

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

Cat AccuGrade™

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





Serviceability

Reduce service time to increase your uptime.

You will benefit from high uptime and lower upkeep costs with the reliable D9T WH. The modular design supports efficient servicing and quick turnaround on repairs. Through the ability to swap out a component with a pretested rebuilt or remanufactured unit, the D9T WH returns to the job faster.

Ground Level Service Center

The ground level service center mounted on the left hand fender provides easy access to:

- Access lighting switch
- Electrical disconnect switch with built in lockout/tag-out capability
- Engine shutdown switch
- Hour meter
- Jump start receptacle (Serial Prefix REX ONLY)



Customer Support

When uptime counts.



Legendary Cat Dealer Support

From helping you choose the right machine to knowledgeable ongoing support, Cat dealers provide you with unmatched sales and service.

- Preventive maintenance programs and guaranteed maintenance contracts.
- Best-in-class parts availability.
- Operator training to help boost your profits.
- Genuine Cat Remanufactured parts.

D9T WH Waste Handler Specifications

Specifications

All dimensions are approximate.

Model	D9T WH (Serial Prefix: TWG)	D9T WH (Serial Prefix: REX)
Engine Emission Standards	Tier 2/Stage II Equivalent Tier 3/Stage IIIA Equivalent	Tier 4 Final/Stage IV
Net Power SAE J1349/ISO 9249	306 kW (410 hp)	325 kW (436 hp)
Operating Weight*	49 761 kg (109,705 lb)	50 109 kg (110,471 lb)
Engine Model	C18 ACERT	C18 ACERT
Rated Engine RPM	1,833 rpm	1,800 rpm
No. of Cylinders	6	6
Bore	145 mm (5.7")	145 mm (5.7")
Stroke	183 mm (7.2")	183 mm (7.2")
Displacement	18.1 L (1,106 in ³)	18.1 L (1,106 in ³)
Track Rollers (each side)	8	8
Width of Standard Track Shoe	610 mm (2'0")	610 mm (2'0")
Length of Track on Ground	3.47 m (11'5")	3.47 m (11'5")
Ground Contact Area (with Standard Shoe)	4.24 m ² (6,569 in ²)	4.24 m ² (6,569 in ²)
Track Gauge	2.25 m (7'5")	2.25 m (7'5")
General Dimensions:		
Height (Stripped Top)**	3.69 m (12'1")	3.69 m (12'1")
Height (To Top of ROPS Canopy)***	4.00 m (13'1")	4.00 m (13'1")
Height (To Top of ROPS Cab)***	3.82 m (12'6")	3.82 m (12'6")
Overall Length (without Blade and without Drawbar)	4.91 m (16'1")	4.91 m (16'1")
Overall Length (SU Landfill Blade)****	6.86 m (22'5")	6.86 m (22'5")
Width (over Trunnion)	3.30 m (10'8")	3.30 m (10'8")
Width (without Trunnion – Standard Shoe)	2.88 m (9'5")	2.88 m (9'5")
Ground Clearance***	596 mm (1'10")	596 mm (1'10")
Fuel Tank Refill Capacity	889 L (235 gal)	821 L (217 gal)
DEF Tank Capacity	N/A	36 L (9.5 gal)

*Operating weight includes ROPS, operator, lubricants, coolant, full fuel tank, hydraulic oil, U-blade with dual tilt, and striker bar box.

**Height (stripped top) – without ROPS canopy, exhaust, seat back or other easily removed encumbrances. Dimensions measured from ground line. Add grouser height for total dimensions on hard surfaces.

***Includes grouser height for total dimensions on hard surfaces.

****Includes drawbar.

D9T WH Waste Handler Specifications

Transmission

1 Forward	3.9 km/h	2.4 mph
2 Forward	6.8 km/h	4.2 mph
3 Forward	11.7 km/h	7.3 mph
1 Reverse	4.7 km/h	2.9 mph
2 Reverse	8.4 km/h	5.2 mph
3 Reverse	14.3 km/h	8.9 mph
1 Forward – Drawbar Pull (1000)	716.5 N	161 lbf
2 Forward – Drawbar Pull (1000)	400.5 N	90 lbf
3 Forward – Drawbar Pull (1000)	222.5 N	50 lbf

Blades with Trash Rack

	9SU	9U	9U*
Capacity	28.8 m ³ (37.6 yd ³)	33.5 m ³ (43.8 yd ³)	38.8 m ³ (50.8 yd ³)
Width**	4354 mm (14'3")	4686 mm (15'4")	5522 mm (18'1")
Height	2834 mm (9'3")	2827 mm (9'3")	2759 mm (9'1")
Weight***	5216 kg (11,499 lb)	5885 kg (12,974 lb)	4879 kg (10,756 lb)

*Available through Cat Work Tools.

**Including standard end bits.

***Weight includes: trash rack, edges and end bits.

Hydraulic Controls

Pump Type	Piston-type pump geared from flywheel	
Pump Output (Steering)	387 L/min	102 gal/min
Pump Output (Implement)	226 L/min	60 gal/min
Tilt Cylinder Rod End Flow	140 L/min	37 gal/min
Tilt Cylinder Head End Flow	188 L/min	50 gal/min
Lift Cylinder Relief Valve Setting	26 200 kPa	3,800 psi
Tilt Cylinder Relief Valve Setting	19 300 kPa	2,800 psi
Ripper (Lift) Relief Valve Setting	26 200 kPa	3,800 psi
Ripper (Pitch) Relief Valve Setting	26 200 kPa	3,800 psi
Steering System Pressure	40 500 kPa	5,875 psi
Tank Capacity	89 L	23.5 gal

- Steering pump output measured at 1,800 rpm and 30 000 kPa (4,351 psi).
- Implement pump output measured at 1,800 rpm and 20 000 kPa (2,900 psi).
- Electro-hydraulic pilot valve assists operations of ripper and dozer controls. Standard hydraulic systems includes four valves.
- Complete system consists of pump, tank with filter, oil cooler, valves, lines, linkage and control levers.

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

AEHQ7348 (10-2014)

© 2014 Caterpillar
All rights reserved

Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

CAT, CATERPILLAR, SAFETY.CAT.COM, their respective logos, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

VisionLink is a trademark of Trimble Navigation Limited, registered in the United States and in other countries.

