

# From windrow to windfall — the growing composting market

Composting continues to grow as an economically viable and socially responsible segment of the global recycling market. Given deepening environmental concerns, stricter governmental regulations, decreasing landfill space and the increasing demand for compost products, the market presents some very real and exciting opportunities.

Whether you're just entering the market, or are experienced with composting and looking to grow your operation, questions always arise as to what technologies would best fit your needs and bottom line.



## At every turn, you can rely on Vermeer

Vermeer, with its recent acquisition of Wildcat Mfg. Co., Incorporated, makes it easier to capitalize on composting market opportunities by offering equipment that helps process organic waste quickly and efficiently, so it can be turned into useful end products. We offer a full line of compost turners, trommel screens and horizontal and tub grinders that are built to last, with innovative designs to help improve productivity and streamline maintenance.

Vermeer composting equipment is backed not only by years of experience in the field, but also by the dedicated support of your local Vermeer dealer. Our global dealer network is on the front line with you, providing training, parts and service every step of the way.



# Breaking down the differences between compost turners

Compost turners are essential for any operation producing large amounts of compost. By turning and mixing the compost, aeration is maximized, which helps speed decomposition, thereby increasing facility productivity.

Compost turners fall into two basic categories — drum-style and elevating-face turners. Vermeer and Wildcat manufacture both styles, allowing customers to pick the machine that best suits the needs of their individual operation.



## Drum-style turners

These efficient turners feature a horizontal steel drum with flails that spin rapidly to turn the compost windrow and mix fresh air into the pile. Drum-style turners are ideal if facility space is not an issue.

Vermeer drum-style turners are available in self-propelled models, self-powered towable and PTO-driven towable models for windrow applications.



## Elevating-face turners

Elevating-face turners employ a wide conveyor with teeth to lift and tumble compost material up and over the top of the machine, completely inverting it into a stack behind the machine or conveying it to the side for continuous stacking. This process does not reduce material size, which helps minimize compaction while introducing oxygen in the pile to speed up decomposition.

Elevating-face turners are ideal for continuous-stack applications, which enable a facility to produce more compost per acre with a limited amount of facility space.

# CT612

The CT612 by Wildcat is a power-takeoff (PTO) driven, towable, high-performing turner with impressive features. Its 35" (88.9 cm) flail-tip-to-flail-tip drum diameter provides optimized aeration of the windrow.

The CT612 is designed to aerate windrows up to 6' (1.8 m) high by 12' (3.7 m) wide in a single pass, and delivers a maximum capacity of 1500 tons (1360.8 tonnes) per hour, depending upon tow tractor horsepower. It's also built with a heavy-duty frame featuring structural steel tubing and steel plates for added rigidity and durability.

The CT612 is available with an optional kit to convert to transport mode for highway towing between jobsites, using the tow tractor hydraulics and simple hand tools.



## CT612 Specifications

### General Dimensions

Max width: 19.4' (5.9 m)  
Max height: 7.7' (2.3 m)  
Max length: 18.7' (5.7 m)  
Max ground clearance: 15" (38.1 cm)  
Weight: 8780 lb (3982.5 kg)  
Tongue weight (operational): 1505 lb (682.7 kg)

### Processing Size

Windrow width: 12' (3.7 m)  
Windrow height: 6' (1.8 m)

### Turning System – Drum

Drum diameter (including flails): 35" (88.9 cm)  
Length of drum: 11.9' (3.6 m)  
Number of flails: 68  
Flail dimensions: .5" x 4" x 12" (1.3 cm x 10.2 cm x 30.5 cm)  
Drum wall thickness: .5" (1.3 cm)

### Frame

Mainframe: 4 cross frames constructed of 4" x 3" x .2" (10.2 cm x 7.6 cm x .5 cm) tubing with continuous welding  
Tires: 12.5 L – 16 14-ply tubeless (2)

### Controls

Display type: None  
Gauges: None  
Controls: None

### Tow Vehicle Requirement

Min tow vehicle weight: 5700 lb (2585.5 kg)  
Min ground speed: 44 fpm (13.4 m/min)  
Max towing speed: 20 mph (32.2 km/h)  
Min horsepower: 80 hp (59.7 kW)  
Max horsepower: 150 hp (111.9 kW)  
Hitch type: Draw bar hitch  
Hydraulics: 2 outlets, min 10 gpm (37.9 L/min) @ 2000 psi (137.9 bar)

### Options

Low-speed transport package  
PTO: 1000 or 540 rpm

For a complete list of specifications, visit [vermeer.com](http://vermeer.com).



# CT514

The towable, self-powered CT514 by Wildcat can turn a windrow 5' (1.5 m) high by 14' (4.3 m) wide in a single pass. Its large 38" (96.5 cm) tip-to-tip drum diameter, combined with 173-hp (129 kW) engine delivers a maximum capacity of 2300 tons (2086.5 tonnes) per hour.

An electronically controlled, hydraulically engaged clutch powers a dual-reduction drum-drive system for ease of operation. The first reduction includes a high-efficiency synchronous belt drive system for low maintenance and long service life. The second reduction includes an enclosed oil bath 80-3 roller chain drive. The enclosed engine compartment helps keep the radiator clear and minimizes UV exposure damage to hoses and wiring. It also features convenient service access to both sides of the engine.



## CT514 Specifications

### General Dimensions

Max width (operational): 21.5' (6.6 m)  
 Max width (transport): 7.3' (2.2 m)  
 Max height (operational): 14.7' (4.5 m)  
 Max height (transport): 10.7' (3.3 m)  
 Max length: 31.2' (9.5 m)  
 Max ground clearance: 22.5" (57.2 cm)  
 Weight: 13,200 lb (5987.4 kg)  
 Tongue weight (operational): 1700 lb (771.1 kg)

### Engine

Make and model: John Deere PowerTech 6068HF Tier 3  
 Number of cylinders: 6  
 Horsepower: 173 hp (129 kW)  
 Battery: 12 V 660 CCA

### Processing Size

Windrow width: 14' (4.3 m)  
 Windrow height: 5' (1.5 m)

### Turning System – Drum

Drum diameter (including flails): 38" (96.5 cm)  
 Length of drum: 13.8' (4.2 m)  
 Number of flails: 80  
 Flail dimensions: .5" x 4" x 12" (1.3 cm x 10.2 cm x 30.5 cm)  
 Drum wall thickness: .6" (1.5 cm)  
 Drum clutch: Electronically controlled hydraulically engaged clutch with accumulator

### Frame

Mainframe: Constructed of 4" x 4" x .25" (10.2 cm x 10.2 cm x .6 cm) structural steel tubing with continuous welding  
 Tires: 16.5" x 16.1" (41.9 cm x 40.9 cm) 10-ply (non-engine side), 48" x 31" (121.9 cm x 78.7 cm) 1-ply (engine side), 425/65 R22.5 20-ply [low-speed transport option (2)]

### Controls

Display type: LCD readout and LED warning lights  
 Gauges: Murphy Powerview with monitors — engine rpm, coolant temperature, oil pressure, volts, engine hours, fuel level, engine load and engine fault codes  
 Controls: Engine ignition, throttle, clutch engage/disengage, raise and lowering of machine, tongue extend and retract, thrown object deflector raise and lower, tethered remote control box located in tow vehicle

### Tow Vehicle Requirement

Min tow vehicle weight: 8900 lb (4037 kg)  
 Min ground speed: 44 fpm (13.4 m/min)  
 Max towing speed: 20 mph (32.2 km/h)  
 Min horsepower: 60 hp (44.7 kW) with optional low-speed creep gear  
 Hitch type: Pintle-ring style

### Options

Low-speed transport package  
 Stainless steel processing tunnel  
 Spray bar attachment  
 Hard-surfacing flails

For a complete list of specifications, visit [vermeer.com](http://vermeer.com).

# CT616

The CT616 by Wildcat is a towable, self-powered unit that is able to turn a windrow 6' (1.8 m) high by 16' (4.9 m) wide. It features a 40" (101.6 cm) tip-to-tip drum diameter, and its 275-hp (205.1 kW) engine offers a maximum turning capacity of 3000 tons (2721.6 tonnes) per hour.

Drum engagement is easy with the electronically controlled, hydraulically engaged clutch drive system with dual reduction. The highly efficient poly-synchronous belt allows for low maintenance and long service life.

Enclosed, hinged engine compartment doors help keep the engine clear and minimizes UV exposure damage to hoses and wiring. Both sides of the engine are also easily accessed for convenient service access.



## CT616 Specifications

### General Dimensions

Max width (operational): 25.5' (7.8 m)  
 Max width (transport): 8.3' (2.5 m)  
 Max height (operational): 14.7' (4.5 m)  
 Max height (transport): 11.8' (3.6 m)  
 Max length (operational): 21.3' (6.5 m)  
 Max ground clearance: 22.5" (57.2 cm)  
 Weight: 17,800 lb (8073.9 kg)  
 Tongue weight (operational): 3800 lb (1723.7 kg)

### Engine

Make and model: John Deere PowerTech RG6090HF Tier 4i (Stage IIIB)  
 Number of cylinders: 6  
 Horsepower: 275 hp (205.1 kW)  
 Battery: 12V 660 CCA

### Processing Size

Windrow width: 16' (4.9 m)  
 Windrow height: 6' (1.8 m)

### Turning Style – Drum

Drum diameter (including flails): 40" (101.6 cm)  
 Length of drum: 15.8' (4.8 m)  
 Number of flails: 92  
 Flail dimensions: .5" x 4" x 12" (1.3 cm x 10.2 cm x 30.5 cm)  
 Drum wall thickness: .6" (1.5 cm)  
 Drum clutch: Electronically controlled hydraulically engaged clutch with accumulator

### Frame

Mainframe: Constructed of 4" x 6" x .25" (10.2 cm x 15.2 cm x .6 cm) structural steel tubing with continuous welding  
 Tires: 48" x 31" (121.9 cm x 78.7 cm) 10-ply [main frame (2)], 425/65 R22.5 20-ply [low-speed transport option (2)]

### Controls

Display type: LCD readout and LED warning lights  
 Gauges: Murphy Powerview with monitors — engine rpm, coolant temperature, oil pressure, volts, engine hours, fuel level, engine load and engine fault codes  
 Controls: Engine ignition, throttle, clutch engage/disengage, raise and lowering of machine, tongue extend and retract, thrown object deflector raise and lower, tethered remote control box located in tow vehicle

### Tow Vehicle Requirement

Min tow vehicle weight: 11,900 lb (5397.7 kg)  
 Min ground speed: 44 fpm (13.4 m/min)  
 Max towing speed: 20 mph (32.2 km/h)  
 Min horsepower: 60 hp (44.7 kW) with optional low-speed creep gear  
 Hitch type: Clevis style

### Options

Low-speed transport package  
 Stainless steel processing tunnel  
 Spray bar attachment  
 Work lights  
 Loader hitch  
 Hard-surfacing flails

For a complete list of specifications, visit [vermeer.com](http://vermeer.com).



# CT718

The CT718 by Wildcat is a self-propelled straddle turner that is built to perform. It is capable of turning 7' (2.1 m) high by 18' (5.5 m) wide windrows, and features a .75" (1.9 cm) thick drum wall and 44" (111.8 cm) flail-tip-to-flail-tip diameter for extra durability and capacity. Its 540-hp (402.7 kW) engine delivers a capacity of up to 5000 tons (4535.9 tonnes) per hour.

The microprocessor-controlled wet hydraulic clutch powers a patented dual poly chain drum-drive system. This eliminates V-belts and chains, resulting in efficient power transfer, low maintenance and longer service life. The climate-controlled, extendable, center-mounted cab provides excellent operator visibility and comfort. The enclosed engine compartment helps keep the radiator clear and minimizes UV exposure damage to hoses and wiring and features convenient service access to both sides of the engine and hydraulic pumps.



## CT718 Specifications

### General Dimensions

Max width: 27.7' (8.4 m)  
Max height (operational): 19' (5.8 m)  
Max height (transport): 13.5' (4.1 m)  
Max length (operational): 14' (4.3 m)  
Max length (transport): 9.5' (2.9 m)  
Max ground clearance: 19" (48.3 cm)  
Weight: 44,000 lb (19,958.1 kg)

### Engine

Make and model: Caterpillar C15 Tier 3  
Number of cylinders: 6  
Horsepower: 540 hp (402.7 kW)  
Battery: 12V – 950 CCA, 2850 CCA total

### Processing Size

Windrow width: 18' (5.5 m)  
Windrow height: 7' (2.1 m)

### Turning System – Drum

Drum diameter (including flails): 44" (111.8 cm)  
Length of drum: 18' (5.5 m)  
Number of flails: 102  
Flail dimensions: .75" x 4" x 11.63" (1.9 cm x 10.2 cm x 29.5 cm)  
Drum wall thickness: .75" (1.9 cm)  
Drum clutch: PT tech microprocessor-controlled wet hydraulic clutch

### Frame

Mainframe: Constructed of 8" x 6" x .4" (20.3 cm x 15.2 cm x 1 cm) and 6" x 6" x .25" (15.2 cm x 15.2 cm x .6 cm) steel tube with continuous welding  
Tires: 48 L x 32-20, 8-ply floatation deep-tread traction tires (4)

### Controls

Display type: LCD readout and LED warning lights  
Gauges: Engine rpm, fuel level, fuel pressure, engine coolant temperature, drum rpm, clutch pressure  
Controls: Engine ignition, throttle, clutch engage/disengage, raise/lower, thrown object deflector, ground drive

### Ground Drive – Tires

Ground drive type: Standard 4-wheel-drive system (2-wheel-drive optional)  
Max speed: 4 mph (6.4 km/h)

### Cab

Climate-controlled  
Operator and training seats

For a complete list of specifications, visit [vermeer.com](http://vermeer.com).

# CT820

The CT820 by Wildcat is a high-performing, self-propelled straddle turner capable of turning windrows 8' (2.4 m) high by 20' (6.1 m) wide. It features a .75" (1.9 cm) thick drum wall and a 54" (137.2 cm) flail-tip-to-flail-tip drum diameter for extra capacity and durability. The CT820 is capable of turning up to 6300 tons (5715.3 tonnes) per hour.

As with the CT718, the CT820 also features a microprocessor-controlled wet hydraulic clutch to power a patented dual poly chain drum-drive system. This eliminates V-belts and chains, resulting in efficient power transfer, low maintenance and longer service life. The turner also has a climate-controlled, extendable, center-mounted cab that provides excellent operator visibility and comfort. The enclosed engine compartment helps keep the radiator clear and minimizes UV exposure damage to hoses and wiring and features convenient service access to both sides of the engine and hydraulic pumps.



## CT820 Specifications

### General Dimensions

Max width: 30' (9.1 m)  
Max height (operational): 20' (6.1 m)  
Max height (transport): 14.5' (4.4 m)  
Max length (operational): 16' (4.9 m)  
Max length (transport): 9.5' (2.9 m)  
Max ground clearance: 19" (48.3 cm)  
Weight: 52,000 lb (23,586.8 kg)

### Engine

Make and model: Caterpillar C15 Tier 3  
Number of cylinders: 6  
Horsepower: 540 hp (402.7 kW)  
Battery: 12V – 950 CCA, 2850 CCA total

### Processing Size

Windrow width: 20' (6.1 m)  
Windrow height: 8' (2.4 m)

### Turning System – Drum

Drum diameter (including flails): 54" (137.2 cm)  
Length of drum: 18' (5.5 m)  
Number of flails: 114  
Flail dimensions: .75" x 4" x 11.63" (1.9 cm x 10.2 cm x 29.5 cm)  
Drum wall thickness: .75" (1.9 cm)  
Drum clutch: PT tech microprocessor-controlled wet hydraulic clutch

### Frame

Mainframe: Constructed of 6" x 6" x .25" (15.2 cm x 15.2 cm x .6 cm), 6" x 4" x .38" (15.2 cm x 10.2 cm x 1 cm) and 8" x 6" x .5" (20.3 cm x 15.2 cm x 1.3 cm) steel tube with continuous welding  
Tires: 54 L x 37-25, 12-ply floatation deep-tread traction tires (4)

### Controls

Display type: LCD readout and LED warning lights  
Gauges: Engine rpm, fuel level, fuel pressure, engine coolant temperature, drum rpm, clutch pressure  
Controls: Engine ignition, throttle, clutch engage/disengage, raise/lower, thrown object deflector, ground drive

### Ground Drive – Tires

Ground drive type: Standard 4-wheel-drive system (2-wheel optional)  
Max speed: 4.4 mph (7.1 km/h)

### Cab

Climate-controlled  
Operator and training seats

For a complete list of specifications, visit [vermeer.com](http://vermeer.com).



# CT1010TX

The self-propelled CT1010TX is a great choice for compost operations wanting to optimize space. With its patented elevating-face technology, the CT1010TX lifts, inverts and aerates organic material on a single pass.

Equipped with an optional side discharge conveyor and SmartTrack advanced ground drive control system, the CT1010TX allows for efficient continuous stacking to save space and time. The two-speed planetary track-drive system helps reduce transport times, while also providing more control in wet, heavy material. The CT1010TX also reduces plugging via a single-touch switch that staggers the start times of the conveyor and elevating face.

## CT1010TX Specifications

### General Dimensions

Max width (operational): 25.1' (7.7 m)  
 Max width (transport): 12' (3.7 m)  
 Max height (operational): 19.6' (6 m)  
 Max height (transport): 12.3' (3.8 m)  
 Max length (operational): 20' (6.1 m)  
 Max length (transport): 17.9' (5.5 m)  
 Max ground clearance: 10" (25.4 cm)  
 Weight: 43,000 lb (19,504.5 kg)  
 Weight with optional conveyor: 48,000 lb (21,772.4 kg)

### Engine

Make and model: Cummins QSB6.7L Tier 4i (Stage IIIB)  
 Number of cylinders: 6  
 Horsepower: 225 hp (167.8 kW)  
 Battery: 2 – 950 CCA

### Processing Size

Stack width: Infinite/Endless  
 Stack height: 9' (2.7 m)

### Turning System – Elevating Face

Face width: 10' (3 m)  
 Face height: 10' (3 m)  
 Teeth type: 2-bolt cup cutter  
 Teeth quantity: 517  
 Pump flow @ max rpm: 61 gpm (230.9 L/min)  
 System relief pressure: 3500 psi (241.3 bar)

### Discharge Conveyor System

Conveyor type: Belt 24' x 48" (7.3 m x 121.9 cm)  
 Max belt speed: 780 fpm (237.7 m/min)  
 Stacking height: 10.5' x 13.5' (3.2 m x 4.1 m)  
 Pump flow @ max rpm: 43 gpm (162.8 L/min)  
 System relief pressure: 3500 psi (241.3 bar)

### Controls

Display type: LCD readout and LED warning  
 Gauges: Engine rpm, fuel level, temperature  
 Controls: Ground drive, lift, throttle, face chain, conveyor

### Cab

Climate-controlled

### Ground Drive – Tracks

Track type: D4 triple grouser  
 Track width: 24" (61 cm)  
 High-speed travel: 3.2 mph (5.1 km/h)  
 Low-speed travel: 6.2 fpm (1.9 m/min)

For a complete list of specifications, visit [vermeer.com](http://vermeer.com).



The compost turner line-up joins the family of Vermeer products serving the woodwaste processing and recycling industries:



Available in both trailer-mounted and track-driven configurations, Vermeer horizontal grinders offer the industry-recognized SmartGrind feed system and the service friendly series II duplex drum standard.



The operator-inspired group of Wildcat by Vermeer trommel screens offer a range of options to fit your needs and budget.



With power and features for tomorrow's high volume land clearing and wood recycling applications, look to the proven lineup of Vermeer tub grinders.



Backed by decades of market experience, Vermeer offers the industry's largest and most diverse list of tree-focused solutions, including brush chippers, stump cutters and whole tree chippers (shown).