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.
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 but they cannot be used in continuous-stack applications.

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 windrow or continuous-stack applications, which enable a facility to produce more compost per acre with a limited amount of facility space.
Drum-Style Turners

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: 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
PTO: 1000 rpm
Hydraulics: 2 outlets, min 10 gpm (37.9 L/min) @ 2000 psi (137.9 bar)

Options
Low-speed transport package

For a complete list of specifications, visit vermeer.com.
Drum-Style Turners

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: 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

For a complete list of specifications, visit vermeer.com.
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 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 80-4 roller chain drive.

The CT616 also features an enclosed engine compartment that helps keep the radiator clear, minimizes UV exposure damage to hoses and wiring and features convenient service access to both sides of the engine.

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): 11.5' (3.5 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: 1800 lb (816.5 kg)

**Engine**
- Make and model: John Deere PowerTech RG6090HF Tier 3
- 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 4" x .25" (10.2 cm x 10.2 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

For a complete list of specifications, visit 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.
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.
The Vermeer CT670 is a towable compost turner featuring patented elevating-face technology designed to lift and tumble material up and over, then turn it back into a windrow, fully aerated. In just two passes, the CT670 with its 48-hp (35.8 kW) diesel engine can completely aerate a windrow up to 12' (3.7 m) wide by 6' (1.8 m) high, processing up to 2000 cu yd (1529 m³) per hour.

The four metal vanes on the CT670 direct material off the elevating face into a better-built, neatly formed windrow as it leaves the machine. A handy, tethered remote control with LCD screen provides full control of the unit from the convenience of the tow vehicle.
The self-propelled CT1010tx is the largest elevating-face compost turner in our line and 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, whether in a continuous stack or a 20' (6.1 m) wide by 9' (2.7 m) high windrow configuration.

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: Cummings QSB6.7 L
Number of cylinders: 6
Horsepower: 215 hp (160.3 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: 750 fpm (228.6 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: 6.5 fpm (2 m/min)

For a complete list of specifications, visit vermeer.com.
Vermeer backs every product with industry-leading service and support.

When you need service, you can count on your local Vermeer dealer. With multiple locations, your Vermeer dealer offers reliable service that helps keep your equipment running.

Whether you need new parts or replacements, when you use Vermeer you can be sure you’re getting top quality. That’s because all of our parts are designed and manufactured to original Vermeer specifications for maximum performance and durability.

For more information or to schedule a demonstration, contact your local independent, authorized Vermeer dealer today.

Vermeer EMEA
(Europe, Middle East, Africa and CIS)
P.O. Box 323
4460 AS Goes
the Netherlands
Phone: +31 113 272700
Fax: +31 113 272727

Vermeer Asia Pacific
48 Toh Guan Road East
#01-105 Enterprise Hub
Singapore 608586
Phone: +65 6516 9560
Fax: +65 6515 9218

Vermeer Latin America
Estrada Duilio Beltramini, 6975
Chacaras Sao Bento - 13278-078
Valinhos, SP – Brazil
Phone: +55-19-3881-3848
Fax: +55-19-3881-3848 Ext. 108

Vermeer Corporation
1210 Vermeer Road East
P.O. Box 200
Pella, IA 50219 USA
Phone: +1 (641) 628-3141
Fax: +1 (641) 621-7773
1-888-VERMEER
www.vermeer.com

Equipment shown is for illustrative purposes only and may display optional accessories or components. Please contact your local Vermeer dealer for more information about machine specifications.

Vermeer Corporation reserves the right to make changes in engineering, design and specifications; add improvements; or discontinue manufacturing at any time without notice or obligation.

Wildcat Mfg. Co., Incorporated reserves the right to make changes in engineering, design and specifications; add improvements; or discontinue manufacturing at any time without notice or obligation.

Caterpillar is a trademark of Caterpillar, Inc. John Deere is a trademark of Deere and Company. Vermeer and the Vermeer logo are trademarks of Vermeer Manufacturing Company in the United States and/or other countries. Wildcat is a trademark of Wildcat Mfg. Co., Incorporated.

© 2010 Vermeer Corporation. All Rights Reserved