

HORIZONTAL GRINDERS HG6000/HG6000TX/HG6000E

Vermeer



Time for the triple threat in grinding.

Whether you're working in large-scale land clearing, wood processing or green-waste recycling, each job presents unique challenges. The Vermeer HG6000 line of horizontal grinders is specifically designed to provide the production, versatility and intelligence needed to meet the demands of your jobsite.

The newly redesigned HG6000 delivers superior power and performance to maximize productivity. The revamped HG6000TX with dolly transport system has the versatility to get around the toughest jobsites. And the intelligence behind the HG6000E introduces cleaner and more costeffective methods.

There are common features among Vermeer grinders. Like Thrown Object Deflectors (TOD), remote-controlled operation, our exclusive SmartGrind feed system and the patented Vermeer duplex drum.

But at the end of the day, each horizontal grinder brings something different to the job. Productivity. Versatility. Intelligence. The Vermeer line of horizontal grinders is a triple threat. It's time to change the way you grind on the job.





Powered for ultimate productivity.

The newly redesigned HG6000 provides the power and performance you need to be more productive. Loaded with features engineered to increase efficiency and versatility on the jobsite, the HG6000 is the horizontal grinder for those looking to maximize production in large-scale land clearing, wood processing or green-waste recycling.

A single-piece discharge conveyor belt removes possible bottleneck areas to promote better flow of material from belly to load-out. The dual-screen design gives you a variety of screen choices to maximize input and meet product specifications. And the patented SmartGrind system and hydraulic feed roller down pressure keep material moving so that loading speed and productivity are maximized.

And the recently added CAT C-rated C18 Tier 4i (Stage IIIB) engine generates 755 hp (563 kW), giving you the power to meet the toughest demands of your operation.



1: Single-piece discharge conveyor belt. Our newly redesigned HG6000 now features a single-piece discharge conveyor belt that allows for better flow of material from belly to load-out by getting rid of possible bottleneck areas.

2: Adjustable screen supports. Allows screens to be positioned closely to the cutters for maximized productivity while reducing fines. Or position them back away from the cutters for applications where contaminants may be present.

3: Dual screen design. A variety of screen choices can be mixed and matched, maximizing throughput while meeting end-product specifications. This screen design also allows you to rotate or flip each individual screen for increased screen life to aid in lowering operating costs.



The versatility to move quickly.

The newly revamped HG6000TX with dolly transport system was designed with a keen emphasis on versatility, mobility and speed. Enhanced maneuverability and speed make it the ideal horizontal grinder for tough to reach jobsites and jobs on uneven terrain.

A new dolly transport system eliminates the need for a conventional truck trailer – such as a drop deck – greatly reducing costs and enhancing maneuverability. Ground clearance of at least 7" (17.8 cm) under the tracks allows for easier transportation over uneven ground. The 26" (66 cm) double grouser track pads help to reduce ground pressure. And the addition of a CAT C18 Tier 4i (Stage IIIB) engine produces 755 hp (563 kW) and helps achieve a groundspeed of 2.6 mph (4.2 km/h) – so you can keep pace with excavators.

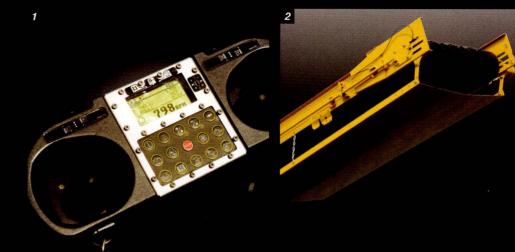
On the job, a longer load-out conveyor allows for the grinder to load over the side of the truck. Or, convert the grinder to a chipper and diversify your end product by incorporating the Fuel Chip Attachment (FCA). The revamped HG6000TX is versatile, rugged and ready to roll when you are.



1: Multifunction wireless remote control units.

Allows operator to engage tracks for onsite maneuverability, view and change a variety of settings during operation, while monitoring various engine parameters from inside the loader cab or in a remote location.

2: Large discharge conveyor. The adjustable, heavy-duty discharge conveyor is 12" (30.5 cm) higher than its predecessor allowing it to be ready to load taller trucks from a longer distance for those jobsites where easy-to-access areas are hard to come by.









Grinding with powerful intelligence.

The Vermeer HG6000E electric-powered horizontal grinder is the product of innovative and intelligent design. Engineered to help save energy and reduce operating costs, the HG6000E gives wood-waste processors a cleaner and more cost-effective method for processing organic materials.

It features smart power. Two electric motors generate 600 hp (447.4 kW) for the hammermill while separate electric motors power the hydraulic circuits and cooling system.

Reversible hammers and cutter blocks simplify maintenance, allow for longer life and provide optimum cutting performance. A super-sized, open-ended feed conveyor and adjustable down pressure feed roller let you handle large material without trimming. And the exclusive SmartGrind system automatically controls grinding speed based on motor amperage levels - increasing productivity and saving energy.

Available with either a skid-mount or trailer to meet your jobsite requirements – the HG6000E is intelligent.



1: Motors. The HG6000E drum is powered by two electric motors that deliver a combined 600 hp (447.4 kW). A separate 60 hp (44.7 kW) electric motor powers the pump for the hydraulic circuits, while a 2 hp (1.5 kW) electric motor is used to cool the hydraulic system.

2: Motor starter panel. A motor starter panel is optional and mounted separately from the machine and contains circuit breakers, a soft start module, DC injection braking system, and control systems for running the unit.

3: Thrown object deflector (TOD). The TOD reduces the quantity and distance of thrown material debris and is strategically placed to reduce interference when loading over-length material.



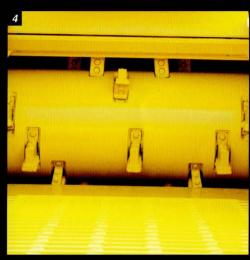


5: Patented SmartGrind System. The SmartGrind system and hydraulic feed roller down pressure keep material moving so that loading speed and productivity are maximized. Open-ended, wide feed tables are designed to make over-the-side loading easy and efficient.











HG6000 HORIZONTAL GRINDER SPECIFICATIONS

HG6000

GENERAL

Weight: 65,000 lb (29,483.5 kg)
Transportation length: 38.8' (11.8 m)
Conveyor unfolded length: 54.1' (16.5 m)

Width: 8.2' (2.5 m) Height: 13.1' (4 m)

HAMMERMILL

Millbox opening width: 60" (152.4 cm)
Millbox opening height: 32" (81.3 cm)

Drum diameter: 28" (71.1 cm) **Tip diameter:** 36.4" (92.5 cm)

Drum cutting width: 62.4" (158.9 cm)

Drum speed: 1086 rpm **Number of hammers:** 10 **Number of cutters:** 20

Anvil: Fabricated steel with replaceable wear surfaces

Bearing type: Double roll, spherical roller Bearing inner race diameter: 5.5" (14 cm)

ENGINE

Option 1

Model: Caterpillar C18 Tier 4i (Stage IIIB)

Aspiration: Dual turbocharged and air-to-air charge cooled

Number of cylinders: 6

Full-load gross hp: 755 hp (563 kW)

Cooling medium: Liquid

Air cleaner: Dry-type with primary and secondary elements and restriction indicator

Oil filter: Full flow, spin-on Electrical system: 24 V starting Fuel tank capacity: 350 gal (1324.9 L)

Option 2*

Model: Caterpillar C18 Tier 3

Aspiration: Dual turbocharged and air-to-air charge cooled

Number of cylinders: 6

Full-load gross hp: 630 hp (469.8 kW)

Cooling medium: Liquid

Air cleaner: Dry-type with primary and secondary elements and restriction indicator

Oil filter: Full flow, spin-on Electrical system: 24 V starting Fuel tank capacity: 350 gal (1324.9 L)

DRIVE LINE

Hydraulic-operated wet clutch with PTO

TRAILER

Axle rating: 25,000 lb (11,339.8 kg)

Number of axles: 3 Tire size: 385/65R22.5

Brakes: Air-actuated with spring-applied parking brake

Tongue weight: 21,000 lb (9,525.4 kg)

Hitch type: 5th wheel

CONTROLS

Full-function operator's station and multifunction radio remote Radio remote control functions:

Engine throttle

Feed roller reverse and forward Feed table reverse and forward

Smart Grind on/off

Feed roller raise and lower

Feed roller float and down pressure

Engine stop

Thrown Object Deflector raise and lower

Fan reverse

DISCHARGE

Conveyor type: Open-loop Conveyor width: 48" (121.9 cm) Conveyor length: 81.3' (24.8 m)

Load height: 15' (4.6 m)

INFEED SYSTEM

Feed roller width: 56.3" (143 cm) Feed roller diameter: 36.1" (91.7 cm) Feed roller tooth style: Serrated bars

Number of teeth: 13

Feed roller weight: 1300 lb (589.7 kg)

Feed roller down-pressure: Hydraulic, adjustable

Feed table width: 60" (152.4 cm) Feed table length: 20' (6.1 m)

Feed conveyor type: Welded steel slat chain

HYDRAULIC SYSTEM

Implement

Type: Open-loop, pressure- and flow-compensated

Oil tank capacity: 100 gal (378.5 L)
Oil type: Vermeer HyPower 68

Fan drive

Type: Open-loop, pressure- and flow-compensated

Oil type: Vermeer HyPower 68

OPTIONS

Magnetic head pulley and tray Air compressor: 30 gal (113.6 L)

Honda (11.7 hp (8.7 kW) gas engine)

Screen sizes
Extended warranty
Special paint

Fuel chip attachment (FCA) Heavy-duty feed roller Belt tension meter

Torque wrenches

Deluxe silencer with spark arrestor Bolt-in abrasion-resistant mill liner

HG6000TX

GENERAL

Weight: 75,000 lb (34,019.4 kg) Transportation length: 37.3' (11.4 m) Conveyor unfolded length: 54.5' (16.6 m) Width: 9.2' (2.8 m) Height: 12.3' (3.7 m)

HG6000TX with Dolly Transport System

Weight: 86,500 lb (39,235.7 kW) Transportation length: 45.8' (14 m) Width: 9.8' (3 m) Height: 12.9' (3.9 m)

HAMMERMILL

Millbox opening width: 60" (152.4 cm) Millbox opening height: 32" (81.3 cm)

Drum diameter: 28" (71.1 cm) **Tip diameter:** 36.4" (92.5 cm) **Drum cutting width:** 62.4" (158.9 cm)

Drum speed: 1086 rpm **Number of hammers:** 10 **Number of cutters:** 20

Anvil: Fabricated steel with replaceable wear surfaces

Bearing type: Double roll, spherical roller **Bearing inner race diameter:** 5.5" (14 cm)

ENGINE

Option 1

Model: Caterpillar C18 Tier 4i (Stage IIIB)

Aspiration: Dual turbocharged and air-to-air charge cooled

Number of cylinders: 6

Full-load gross hp: 755 hp (563 kW)

Cooling medium: Liquid

Air cleaner: Dry-type with primary and secondary elements and restriction indicator

Oil filter: Full flow, spin-on Electrical system: 24 V starting Fuel tank capacity: 350 gal (1324.9 L)

Option 2*

Model: Caterpillar C18 Tier 3

Aspiration: Dual turbocharged and air-to-air charge cooled

Number of cylinders: 6

Full-load gross hp: 630 hp (469.8 kW)

Cooling medium: Liquid

Air cleaner: Dry-type with primary and secondary elements and restriction indicator

Oil filter: Full flow, spin-on Electrical system: 24 V starting Fuel tank capacity: 350 gal (1324.9 L)

DRIVE LINE

Hydraulic-operated wet clutch with PTO

DISCHARGE

Conveyor type: Open-loop Conveyor width: 48" (121.9 cm) Conveyor length: 81.3' (24.8 m) Load height: 14' (4.3 m)

CONTROLS

Full-function operator's station and multifunction radio remote Radio remote control functions:

Engine throttle

Feed roller reverse and forward Feed table reverse and forward

SmartGrind on/off

Feed roller raise and lower

Feed roller float and down pressure

Engine stop

Thrown object deflector raise and lower

Fan reverse Track engagement

TRACKS

Track frame description: Rigid frame with reinforced box section

Track type: D5 double grouser

Track brake type: Multi-disk parking brake (spring activated)

High speed travel: 2.6 mph (4.2 km/h) Track length on ground: 142" (360.7 cm)

Track width - Option 1: 26" (66 cm)

- Ground Bearing Pressure - Soft Ground 10.2 psi

- Ground Bearing Pressure - Hard Ground 55.6 psi

Track width - Option 2: 20" (50.8 cm)

- Ground Bearing Pressure - Soft Ground 13.2 psi

- Ground Bearing Pressure - Hard Ground 72.2 psi

INFEED SYSTEM

Feed roller width: 56.3" (143 cm)
Feed roller diameter: 36.1" (91.7 cm)
Feed roller tooth style: Serrated bars

Number of teeth: 13

Feed roller weight: 1300 lb (589.7 kg)

Feed roller down-pressure: Hydraulic, adjustable

Feed table width: 60" (152.4 cm) Feed table length: 20' (6.1 m)

Feed conveyor type: Welded steel slat chain

HYDRAULIC SYSTEM

Implement

Type: Open-loop, pressure- and flow-compensated

Oil tank capacity: 100 gal (378.5 L)
Oil type: Vermeer HyPower 68

Fan drive

Type: Open-loop, pressure- and flow-compensated

Oil type: Vermeer HyPower 68

OPTIONS

Magnetic head pulley and tray Air compressor: 30 gal (113.6 L) Honda 11.7 hp (8.7 kW) gas engine

Screen sizes
Extended warranty

DT6, dolly transport system Fuel chip attachment (FCA) Heavy-duty feed roller

Belt tension meter Torque wrenches

Deluxe silencer with spark arrestor Bolt-in abrasion-resistant mill liner

*Engine option availability is dependent on your region. Please check with your local Vermeer dealer as to which engine option complies with your region emission standards.

HG6000 HORIZONTAL GRINDER SPECIFICATIONS

HG6000E

GENERAL (TRAILER MOUNT WITH LONG INFEED)

Width (transport): 106.8" (271.3 cm) Length (transport): 544.8" (1383.8 cm) Length (with hitch): 68.4' (20.9 m) Height (transport): 158.4" (402.3 cm)

Weight: 58,780 lb (26,662.2 kg)

GENERAL (SKID MOUNT WITH SHORT INFEED)

Width: 106.8" (271.3 cm)

Length (belly conveyor): 30.6' (9.3 m)
Height (belly conveyor): 11.9' (3.6 m)
Length (fixed conveyor): 40.8' (12.4 m)
Height (fixed conveyor): 12.1' (3.7 m)
Length (folding conveyor): 53.9' (16.4 m)
Height (folding conveyor): 12.7' (3.9 m)

Weight: 51,500 lb (23,360 kg)

GENERAL (SKID MOUNT WITH LONG INFEED)

Width: 106.8" (271.3 cm)

Length (belly conveyor): 35.9' (10.9 m) Height (belly conveyor): 11.9' (3.6 m) Length (fixed conveyor): 46.1' (14.1 m) Height (fixed conveyor): 12.1' (3.7 m) Length (folding conveyor): 59.2' (18 m) Height (folding conveyor): 12.7' (3.9 m)

Weight: 55,500 lb (25,174.4 kg)

HAMMERMILL

Millbox opening height: 32" (81.3 cm)

Drum diameter: 30" (76.2 cm) Tip diameter: 36" (91.4 cm) Drum speed: 1050 rpm Number of hammers: 10 Number of cutters: 20

Bearing type: Double row, spherical roller Bearing (inner race diameter): 5.5" (14 cm)

ELECTRICAL PANEL

Height: 90.1" (228.9 cm) Width: 112" (284.5 cm) Depth: 16.3" (41.4 cm) Weight: 3200 lb (1451.5 kg)

TRAILER

Axle rating: 25,000 lb (11,339.8 kg)

Number of axles: 3 Tire size: 385/65R22.5

Brakes: Air-actuated with spring-applied parking brake

Tongue weight: 21,000 lb (9525.4 kg)

Hitch type: 5th wheel

ELECTRIC FAN MOTOR

Option 1

Manufacturer: Toshiba

Frame: 145TC

Horsepower: 2 hp (1.5 kW)

Voltage: 460 Frequency: 60 Hz

Phase: 3

Rated speed: 1710 rpm Enclosure: TEFC

Full load amps: 2.8
Locked rotor amps: 21
Service factor: 1.15
Duty cycle: Continuous
NEMA design: B

Insulation class: F

Full load torque: 6.1 ft-lb (8.3 Nm)

Locked rotor (%): 250 Break down: 290

Ambient temperature: 40 c (1352 f)

Nominal efficiency: 84 Power factor: 80.5

Approximate weight: 50 lb (22.7 kg)

Option 2

Manufacturer: Weg

Frame: 145T

Horsepower: 2 hp (1.5 kW)

Voltage: 380-415 Frequency: 50 Hz

Phase: 3

Rated speed: 1430 rpm Enclosure: TEFC Full load amps: 3.52-3.22 Locked rotor amps: 20.8-19

Service factor: 1.15 Duty cycle: S1 NEMA design: A Insulation class: F

Full load torque: 7.3 ft-lb (9.8 Nm)

Locked rotor (%): 170 Break down: 210

Ambient temperature: 40 C (1352 F)

Nominal efficiency: 80 Power factor: 81

Approximate weight: 47.8 lb (21.7 kg)

ELECTRIC HYRAULIC MOTOR

Option 1

Manufacturer: Toshiba Frame: 364TR

Horsepower: 60 hp (44.7 kW)

Voltage: 460 Frequency: 60 Hz

Phase: 3

Rated speed: 1770 rpm
Enclosure: TEFC
Full load amps: 72
Locked rotor amps: 435
Service factor: 1.15
Duty cycle: Continuous
NEMA design: B
Insulation class: FBK1

Full load torque: 178 ft-lb (241.3 Nm)

Locked rotor (%): 170 Break down: 260

Ambient temperature: 40 C (1352 F)

Nominal efficiency: 93.6

Power factor: 84

Approximate weight: 610 lb (276.7 kg) **Added Items:** SAE C Pad Adapter

Option 2

Manufacturer: Weg Frame: 364/5T

Horsepower: 60 hp (44.7 kW)

Voltage: 380/415 Frequency: 50 Hz

Phase: 3

Rated speed: 1475 rpm Enclosure: TEFC Full load amps: 3.52-3.22

Locked rotor amps: 20.8-19

Service factor: 1.15 Duty cycle: S1 NEMA design: A Insulation class: F

Full load torque: 7.3 ft-lb (9.8 Nm)

Locked rotor (%): 170 Break down: 210

Ambient temperature: 40 c (1352 F)

Nominal efficiency: 80 Power factor: 81

Approximate weight: 47.8 lb (21.7 kg)

HG6000E CONT.

CONTROLS

Full-function operator's station with standard radio remote

Radio remote control functions:

Engine throttle

Feed roller reverse and forward Feed table reverse and forward

reed table reverse and forward

SmartGrind on/off

Feed roller raise and lower

Feed roller float and down pressure

Engine stop

Thrown object deflector raise and lower

Fan reverse

HYDRAULIC SYSTEM

Implement

Type: Open-loop, pressure- and flow-compensated

Tank capacity: 50 gal (189.3 l)
Oil type: Vermeer HyPower 68

ELECTRIC MILL MOTOR

Option 1

Manufacturer: Toshiba Frame: N587UZQ

Horsepower: 300 hp (223.7 kW)

Voltage: 460 Frequency: 60 Hz

Phase: 3

Rated speed: 1780 rpm Enclosure: TEFC

Full load amps: 350 Locked rotor amps: 2180

Service factor: 1.15

Duty cycle: Continuous

NEMA design: B
Insulation class: FBK1

Full load torque: 883 ft-lb (1197.2 Nm)

Locked rotor (%): 260 Break down: 216

Ambient temperature: 40 c (1352 f)

Nominal efficiency: 94.1 Power factor: 85.7

Approximate weight: 3850 lb (1746.3 kg)

Option 2

Manufacturer: Weg Frame: 586/7T

Horsepower: 300 hp (223.7 kW)

Voltage: 380/415 Frequency: 50 Hz

Phase: 3

Rated speed: 1490 rpm

Enclosure: TEFC

Full load amps: 415/380

Locked rotor amps: 3030/2770

Service factor: 1.15 Duty cycle: S1 NEMA design: A Insulation class: F

Full load torque: 1040 ft-lb (1410.1 Nm)

Locked rotor (%): 250 Break down: 270

Ambient temperature: 40 c (1352 f)

Nominal efficiency: 95.8

Power factor: 84

Approximate weight: 3371 lb (1529.1 kg)

INFEED SYSTEM

Feed roller width: 57" (144.8 cm)
Feed roller height: 48.7" (123.7 cm)
Feed roller diameter: 36" (91.4 cm)
Tooth design: Serrated bars

Number of teeth: 13

Drive motor: Open-loop hydraulic Feed roller down pressure: Adjustable Feed table width: 60" (152.4 cm) Feed table depth: 28.8" (73.2 cm)

Feed table length (option one): 20' (6.1 m) Feed table length (option two): 14' (4.3 m)

OPTIONS

Screens

Special tools group:

Extended warranty
Preventive maintenance

Special paint

DISCHARGE

Option 1

Type: Dual belt design

Conveyor length: 56.2' (17.1 m) Conveyor width: 30" (76.2 cm)

Belt design: V cleat Splice: R2 - stainless steel Return roller quantity: 2 Idler roller diameter: 8" (20.3 cm)

Bearings: 1-7/16 2-bolt flange

Standard drive roller diameter: 8" (20.3 cm)

Drive motor: Fixed displacement, geroller

Drive motor bearings: 1-7/16 2-bolt flange

Loading height: 8.2' (2.5 m)

Option 2

Type: Single belt design
Length: 32' (9.8 m)
Width: 48" (121.9 cm)
Belt design: Smooth
Splice: R2 - stainless steel
Return roller quantity: 2

Idler roller diameter: 12" (30.5 cm)
Idler roller bearing: 1-15/16 pillow block
Standard drive roller diameter: 12" (30.5 cm)

Drive motor: Fixed displacement

Drive motor bearings: 1-15/16 4 bolt flange

Belt speed: 600 ft/min (182.9 m/min)

Loading height: 8.2' (2.5 m)