HAGEDORN

FEEDS FIELDS

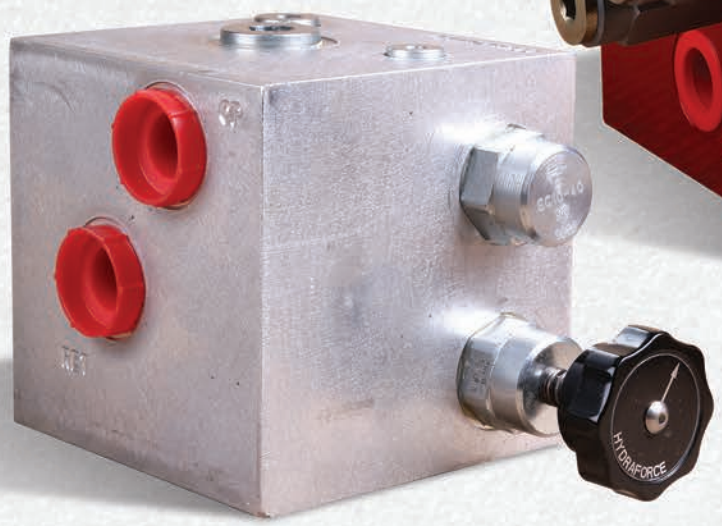
HYDRA-SPREAD HYDRAULIC SYSTEM

Flow Control

Hagedorn manure spreaders feature an innovative Hydra-Spread flow control valve designed for precise unloading and application. Engineered and manufactured exclusively for Hagedorn spreaders, this valve is ideal for all types of hydraulic systems and includes an internal bypass for quick return regardless of unloading speed. The Hydra-Spread flow control valve also provides a reliable processing rate that stays consistent from load to load, resulting in distribution amounts and quality you can trust.

All vertical Hagedorn spreaders come equipped with a standard sequencing valve which is integrated into the flow control valve and prevents the pushgate from engaging before the endgate is raised, thereby preventing accidental damage due to a collision.

Manufactured in North America, the sequencing valve is available as an option on horizontal beater models and is compatible with all modern hydraulic systems.



Easily adjust unloading speed with the turn of a knob

Cylinders

Similar to our flow controls, the push-off cylinders in our spreaders are designed by our engineers and manufactured in North America.

Setting an industry precedent in 1990, our hollow-rod design allows oil flow for extend and retract cycles to be channeled through the rod, eliminating the tangle of hoses that would otherwise occur when the cylinder strokes. The cylinders employ a rugged, ball-type sealing system that easily handles the flexing that comes with stroke lengths of up to 17 feet. Our pistons and glands are made from high-grade ductile iron for maximum wear and durability.

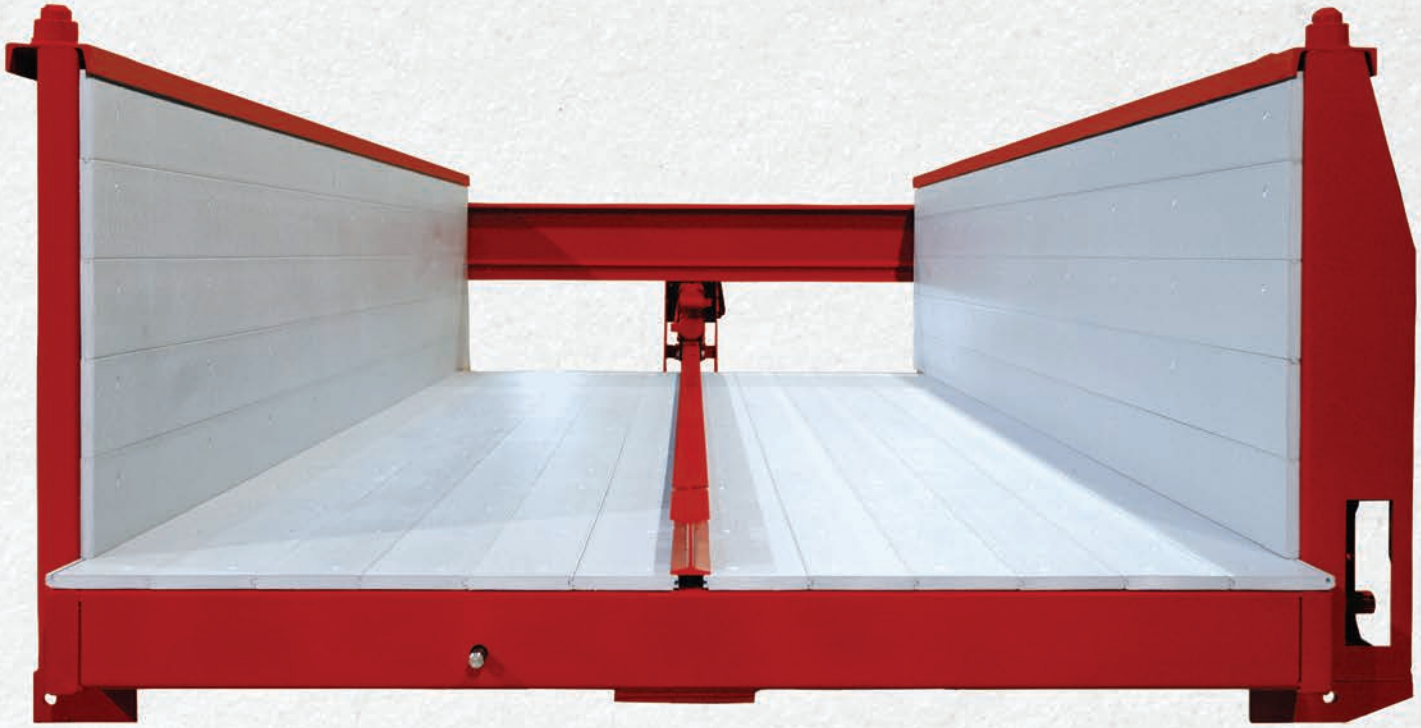
The horizontal beater models and 5000 series Extraverts contain industry standard tie-rod cylinders on the endgate while our Extravert model 8610 features welded endgate cylinders.

Poly Boards

Hagedorn's poly boards meet all the requirements for a material that is strong, flexible, resistant to environmental degradation and very slippery.

Our full-length boards and flush-head fasteners make a smooth, obstruction-free surface for easy unloading. Individual tongue & groove boards make an almost watertight box and, in the event of damage, are easy and inexpensive to replace.

Being plastic (high-density polyethylene), the boards expand and contract with temperature changes. Our frame design and bolting procedure allow the boards to expand and contract freely without undue stress to either boards or frame.



Soil Compaction & Tire Selection

Healthy soil generally consists of 50% soil particles (sand, silt and clay) as well as a 50% mixture of air and water. Compaction, because of natural and cultural practices, limits the soil's ability to transport and store air and water, resulting in stunted seedlings, poor plant growth and reduced yields.

Soil compaction caused by vehicles can be divided into two categories – shallow and deep. Shallow compaction falls within the normal tillage zone (5" to 10") and relates to pressure applied to the surface of the soil. Higher ground pressures increase shallow compaction. All models of Hagedorn spreaders minimize shallow compaction by using low-pressure flotation type tires with a large footprint to cover a bigger surface area.

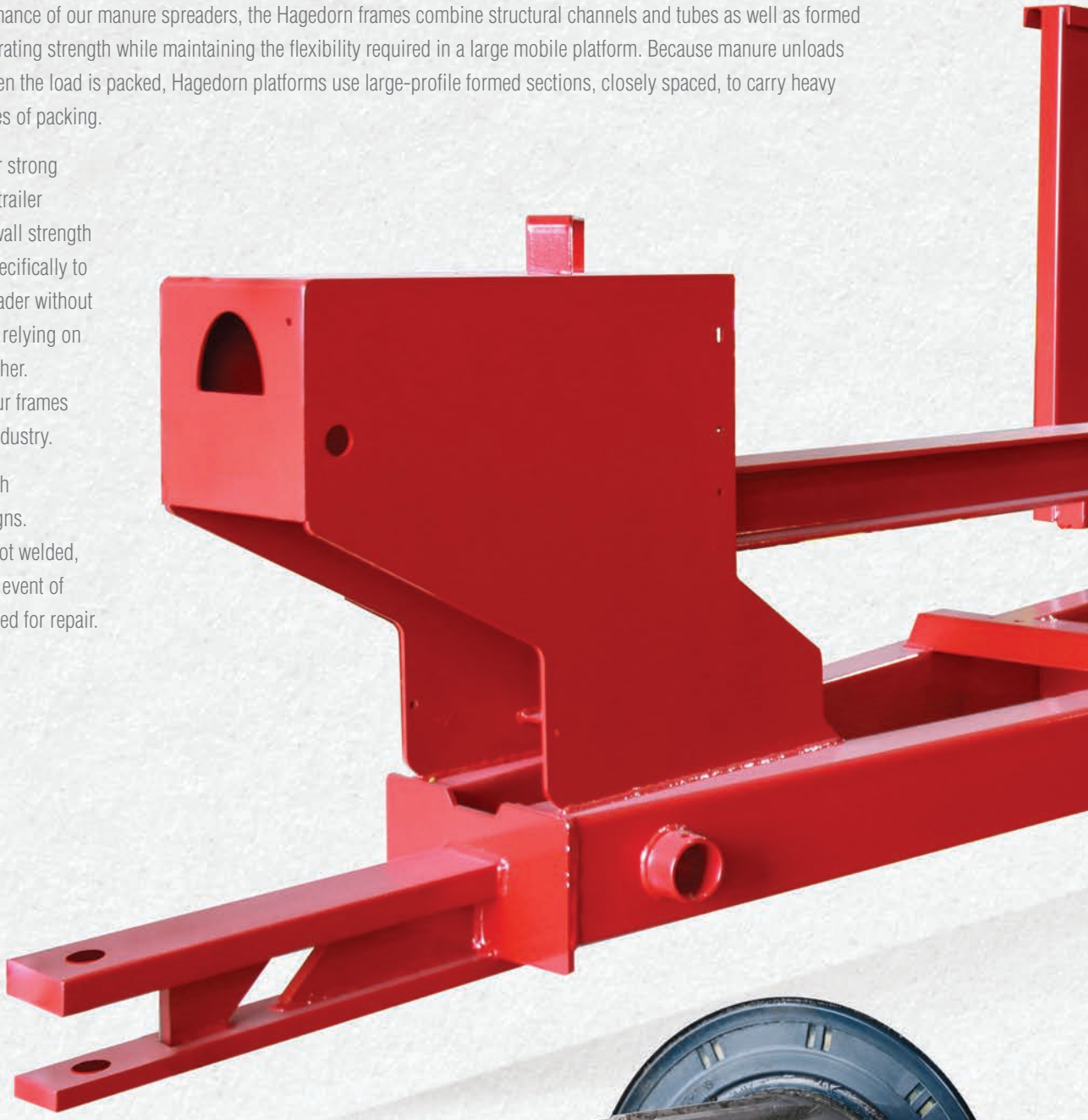
Occurring below the normal tillage zone, deep compaction is usually related to total axle load. It is not mitigated by tire size or inflation pressure unless ground pressure (tire inflation pressure) is reduced to 12 psi or lower. Deep compaction can be minimized by sharing the total load across more than one axle.

FRAME CONSTRUCTION

Integral to the overall performance of our manure spreaders, the Hagedorn frames combine structural channels and tubes as well as formed sections to achieve peak operating strength while maintaining the flexibility required in a large mobile platform. Because manure unloads and spreads more evenly when the load is packed, Hagedorn platforms use large-profile formed sections, closely spaced, to carry heavy loads and withstand the forces of packing.

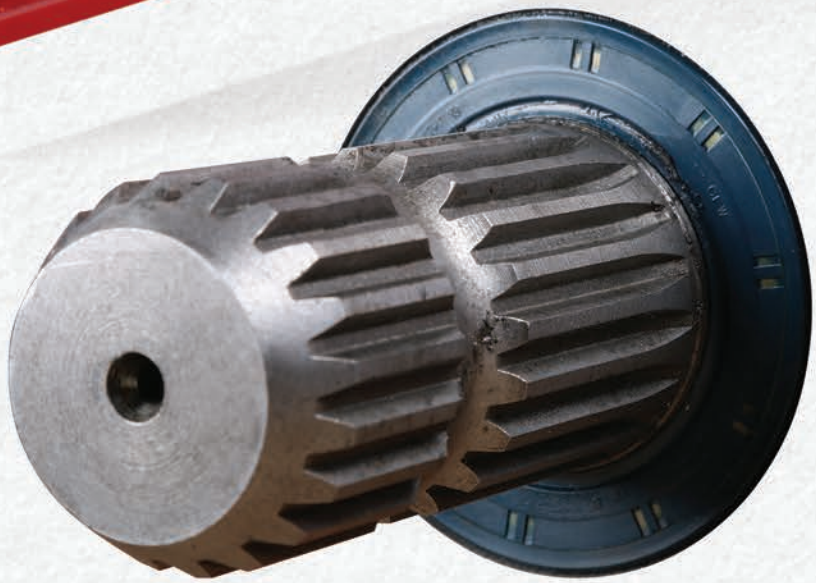
Hagedorn delivers a spreader strong enough to use as a push-off trailer without worrying about sidewall strength and the frame is designed specifically to support the sides of the spreader without bulky horizontal members or relying on the beaters to tie things together. Weight distribution across our frames sets the benchmark for the industry.

We also offer a variety of hitch configurations and axle designs. Our axle frames are bolted, not welded, to the main frame and, in the event of damage, can be easily removed for repair.



Powertrain

Our drivetrain is easy to maintain and service. Every shaft connection on a Hagedorn Spreader features splines. Unlike keyed drives that focus the load on a single stress point, the splines in our spreaders transmit power efficiently by spreading loads to the entire shaft and can be quickly assembled and disassembled.



Bearings

The life of a bearing can usually be determined by the quality of its seals. Hagedorn spreaders boast custom-designed pillow block bearings with triple-lip seals, another industry first, that have proven successful in tillage and planting equipment. All Hagedorn bearings are lubricated for their lifetime and contain an extended inner race with double set screws, eliminating maintenance and assuring longevity.

Bearing Housings

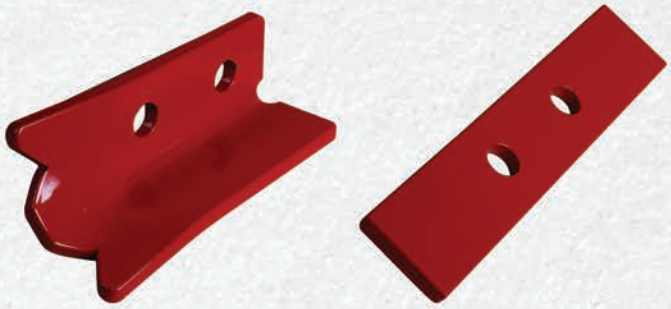
Our virtually indestructible ductile iron pillow blocks are standard for Hagedorn, built to withstand heavy loads that would shatter ordinary grey-iron housings. We engineered split housings for the input shaft to allow the shaft to be removed from the machine quickly and easily without removing the bearings from the shaft, continuing our commitment to manufacturing simple, easy-to-service spreaders.

VERTICAL BEATER

Hagedorn is a recognized leader in hydraulic push-off technology. Increased spreading performance with our BERMA vertical beaters, combined with innovative design, means that our Extravert beater system delivers performance and control that maximize the nutrient value of your manure.

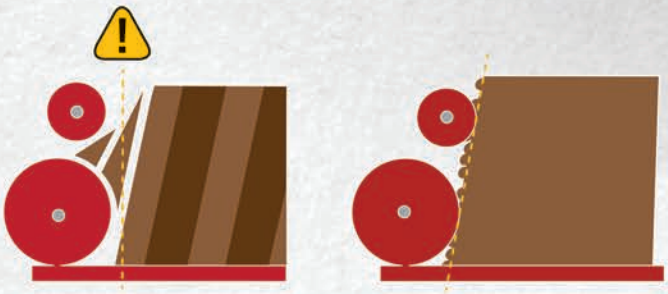
Working with BERMA, a world leader in vertical beater design, our engineering team built upon basic beater designs to better suit the harsh conditions of North American agriculture. The resulting Extravert beater system has closely-spaced spirals and overlapping beater tips for finer processing and improved distribution. Hagedorn Extravert beater spirals extend to the bottom of the beater with no dead spots while an impeller at the bottom of each beater ensures proper distribution of fine materials and semi-solids.

Extravert beater tips feature a combination of blades and cups. Blades slice and shred through tough materials, such as corn and bean stalks, to an exceptionally fine level. Cups fling finer materials and semi-solids. These blades and cups can be easily reconfigured according to your needs using different combinations. To withstand areas of high-use applications as well as abrasive materials, we also offer optional forged and hardened components.



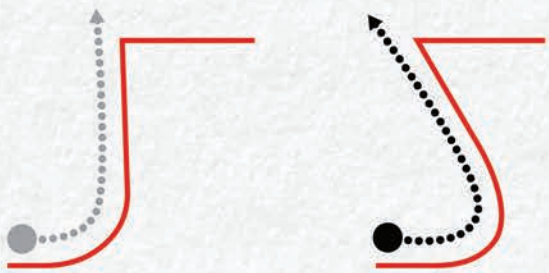
HORIZONTAL BEATER

Hagedorn horizontal spreaders showcase consistent performance and results. With low-profile loading heights, our horizontals fit many operations where larger spreaders cannot go. In areas prone to the inclusion of foreign objects in manure, our time-proven and adaptable RipGrip beater system stands up to abuse that can cause failure in other designs.



The RipGrip beaters are optimal for fine, wide and uniform horizontal spreading. The RipGrip system, which includes a stepped beater position and aggressive beater paddles, allows for improved manure processing.

Unlike traditional beaters, where manure from the upper part of the load can break away and tumble into the lower beater causing a light/heavy/light spread pattern, our stepped beaters are positioned with the top beater ahead of the lower beater so manure is removed before it can tumble, spreading manure farther and more uniformly across your field.



RipGrip beater paddles are designed with a unique shape to aggressively rip the manure and hold onto it for a fraction of a second, resulting in a spread pattern that puts manure behind the spreader rather than into the air. Position and spacing of the paddle give the widest and most uniform spread pattern available in horizontal spreaders.

Conventional Paddle Spread

Rip Grip Paddle Spread

SPECIFICATIONS

H/227

Recommended HP - 80
Volume (heaped) in Cu Ft - 458

Capacity
Cubic Feet Struck Level: 236
(ASAE S324.1)
Heaped Bushels: 368
(ASAE S237.1)

Dimensions
Inside Width (Inches): 71.5
Inside Depth (Inches): 34
Inside Length (Feet): 14
(ASAE S324.1)
Overall Length (Feet): 24
Overall Width - with Tires (Inches)
-425 x 22.5 Truck Type Tires: 124
-44/18.00x20 Traction Implement: 128
-550/60x22.5 Traction Implement: 136

Beaters
Beater Configuration: Stepped
Lower Beater Diameter/Speed: 24/385
Upper Beater Diameter/Speed: 16/360

Axles
Axle Type: Oscillating Tandem
Hub Type: 8 Bolt
Hub Capacity: 12,000 Lbs
Wheel Spindle Diameter (Inches): 3
Tandem Spindle Diameter (Inches): 4
Drop Axles (Optional): 6 Inch Drop

General
End Gate: Standard
Wood Rails: Standard
Beater Pan: Standard

Hydraulics / PTO
Available Flow Control: Sequencing Type
Available Flow Control: Non-Sequenced

Available PTO: 540 RPM / 1 3/8-6
Available PTO: 1000 RPM / 1 3/8-21

H/277

Recommended HP - 80
Volume (heaped) in Cu Ft - 524

Capacity
Cubic Feet Struck Level: 270
(ASAE S324.1)
Heaped Bushels: 421
(ASAE S237.1)

Dimensions
Inside Width (Inches): 71.5
Inside Depth (Inches): 34
Inside Length (Feet): 16
(ASAE S324.1)
Overall Length (Feet): 27
Overall Width - with Tires (Inches)
-425 x 22.5 Truck Type Tires: 124
-44/18.00x20 Traction Implement: 128
-550/60x22.5 Traction Implement: 136

Beaters
Beater Configuration: Stepped
Lower Beater Diameter/Speed: 24/385
Upper Beater Diameter/Speed: 16/360

Axles
Axle Type: Oscillating Tandem
Hub Type: 8 Bolt
Hub Capacity: 12,000 Lbs
Wheel Spindle Diameter (Inches): 3
Tandem Spindle Diameter (Inches): 4
Drop Axles (Optional): 6 Inch Drop

General
End Gate: Standard
Wood Rails: Standard
Beater Pan: Standard

Hydraulics / PTO
Available Flow Control: Sequencing Type
Available Flow Control: Non-Sequencing

Available PTO: 540 RPM / 1 3/8-6
Available PTO: 1000 RPM / 1 3/8-21

V/5290

Recommended HP - 125
Volume (heaped) in Cu Ft - 524

Capacity
Cubic Feet Struck Level: 290
(ASAE S324.1)
Heaped Bushels: 421
(ASAE S237.1)

Dimensions
Inside Width (Inches): 67
Inside Depth (Inches): 40
Inside Length (Feet): 16
(ASAE S324.1)
Overall Length (Feet): 28
Overall Width - with Tires (Inches):
-425 x 22.5 Truck Type Tires: 120
-44/18x20 Traction Implement: 124
-550/60x22.5 Traction Implement: 132

Beaters
Beater Configuration: Vertical
Beater Diameter: 34.6"
Beater Speed: 420 RPM

Axles
Axle Type: Oscillating Tandem
Wheel Hub Type: 8 Bolt
Wheel Hub Capacity: 12,000 Lbs
Wheel Spindle Diameter (Inches): 3
Tandem Spindle Diameter (Inches): 4
Drop Axles (Optional): 6" Drop

General
End Gate: Standard
Wood Rails: Standard
Beater Pan: Standard
Stone Guard: Standard

Hydraulics / PTO
Sequencing Valve: Standard

Available PTO: 1000 RPM / 1 3/8-21
Available PTO: 1000 RPM / 1 3/4-20

V/5440

Recommended HP - 150
Volume (heaped) in Cu Ft - 684

Capacity
Cubic Feet Struck Level: 440
(ASAE S324.1)
Heaped Bushels: 550
(ASAE S237.1)

Dimensions
Inside Width (Inches): 67
Inside Depth (Inches): 59.5
Inside Length (Feet): 16
(ASAE S324.1)
Overall Length (Feet): 28
Overall Width - with Tires (Inches)
-425 x 22.5 Truck Type Tires: 124
-550/60x22.5 Traction Implement: 132
-700/50x22.5 Traction Implement: 145.5

Beaters
Beater Configuration: Vertical
Beater Diameter: 34"
Beater Speed: 420 RPM

Axles
Axle Type: Oscillating Tandem
Wheel Hub Type: 10 Bolt
Wheel Hub Capacity: 16,000 Lbs
Wheel Spindle Diameter (Inches): 4
Tandem Spindle Diameter (Inches): 5
Drop Axles (Optional): 5 Inch Drop

Box
End Gate: Standard
Wood Rails: Standard
Beater Pan: Standard
Stone Guard: Standard

Hydraulics / PTO
Sequencing Control: Standard

Available PTO: 1000 RPM / 1 3/8-21
Available PTO: 1000 RPM / 1 3/4-20

HAGEDORN

H/2277

Recommended HP - 80
Volume (heaped) in Cu Ft - 524

Capacity
Cubic Feet Struck Level: 270
(ASAE S324.1)
Heaped Bushels: 421
(ASAE S237.1)

Dimensions
Inside Width (Inches): 71.5
Inside Depth (Inches): 34
Inside Length (Feet): 16
(ASAE S324.1)
Overall Length (Feet): 27.4
Overall Width - with Tires (Inches)
-425 x 22.5 Truck Type Tires: 124
-44/18.00x20 Traction Implement: 128
-550/60x22.5 Traction Implement: 136

Beaters
Beater Configuration: Stepped
Lower - Diameter/Speed: 25.6/385
Upper - Diameter/Speed: 18/360

Axles
Axle Type: Oscillating Tandem
Hub Type: 8 Bolt
Hub Capacity: 12,000 Lbs
Wheel Spindle Diameter (Inches): 3
Tandem Spindle Diameter (Inches): 4
Drop Axles (Optional): 6 Inch Drop

General
End Gate: Standard
Wood Rails: Standard
Beater Pan: Standard

Hydraulics / PTO
Available Flow Control: Sequencing Type
Available Flow Control: Non-Sequencing

Available PTO: 1000 RPM / 1 3/8-21
Available PTO: 1000 RPM / 1 3/4-20

H/2414

Recommended HP - 100
Volume (heaped) in Cu Ft - 684

Capacity
Cubic Feet Struck Level: 428
(ASAE S324.1)
Heaped Bushels: 550
(ASAE S237.1)

Dimensions
Inside Width (Inches): 71.5
Inside Depth (Inches): 53.5
Inside Length (Feet): 16
(ASAE S324.1)
Overall Width - with Tires (Inches)
-425 x 22.5 Truck Type Tires: 124
-550/60x22.5 Traction Implement: 136
-700/50x22.5 Traction Implement: 149.5

Beaters
Beater Configuration: Stepped
Lower - Diameter/Speed: 25.6/385
Upper - Diameter/Speed: 25.6/385

Axles
Axle Type: Oscillating Tandem
Wheel Hub Type: 10 Bolt
Wheel Hub Capacity: 16,000 Lbs
Wheel Spindle Diameter (Inches): 4
Tandem Spindle Diameter (Inches): 5
Drop Axles (Optional): 5 Inch Drop

General
End Gate: Standard
Wood Rails: Standard
Beater Pan: Standard

Hydraulics / PTO
Available Flow Control: Sequencing Type
Available Flow Control: Non-Sequencing

Available PTO: 1000 RPM / 1 3/8-21
Available PTO: 1000 RPM / 1 3/4-20

V/8610

Recommended HP - 250
Volume (heaped) in Cu Ft - 921

Capacity
Cubic Feet Struck Level: 594
(ASAE S324.1)
Heaped Bushels: 740
(ASAE S237.1)

Dimensions
Inside Width (Inches): 79
Inside Depth (Inches): 60.1
Inside Length (Feet): 18
(ASAE S324.1)
Overall Length (Feet): 32
Overall Width - with Tires (Inches):
-750/45R26.5 Traction Imp Radial: 162.2

Beaters
Beater Configuration: Vertical
Beater Diameter: 39
Beater Speed: 437 RPM

Axles
Axle Type: Oscillating Tandem
Wheel Hub Type: 10 Bolt
Wheel Hub Capacity: 20,000 Lbs
Wheel Spindle Diameter (Inches): 5
Tandem Spindle Diameter (Inches): 6

General
End Gate: Standard
Wood Rails: Standard
Beater Pan: Standard
Stone Guard: Standard

Hydraulics / PTO
Sequencing Valve: Standard
Constant Velocity Joint

Available PTO: 1000 RPM / 1 3/4-20

TO FARM TO FIELD FIELD

FEED WITH PENTA

FROM FIELD TO FARM

The Penta line of Dump Trailers are designed to get your crop from the field to your farm. Ranging in size from 1050 cubic feet to 2475 cubic feet there is one ready for you. Farmer focused features like better visibility in the box and the unique reverse tilt for better filling, all built as tough as you.

FARM FEEDING

The best quality feed needs the best quality mix. Penta TMR mixers are designed, tested and farm proven to deliver the best mix on the market. Our Hurricane auger allows forage to circulate faster through the mix for quicker processing and mixing times.

FROM FARM TO FIELD

The Penta (Hagedorn) line of manure spreaders allows you to make the best use of your organic nutrient resources. The Hagedorn processes the manure finer and delivers the best spread pattern. This lets your field make the best use of this rich resource.

888-844-7788 **www.pentaequipment.com**