

FRONTIER PRODUCTS

Livestock & Equine Management

Grinder Mixer Equipment for Base Machine

Tank Capacity - Bushels: 135
 Tank Capacity - Cubic Ft.: 170
 Tank Diameter: 72"
 Diameter of Mixing Auger: 14" Diameter w/30" Base
 Ladder: Standard - Front Mount Over Mill
 Tank Windows: 2 - Full Length & 1 Port Hole Style
 Overall Height: 10' 7"
 Overall Width w/o Intake Auger: 7' 9"
 Overall Width w/ Intake Auger: ---
 Overall Length: 15' 8"
 Ground Clearance: 11.5 in.
 Supplement Hopper: 18 X 23 in.
 Supplement Hopper Height: 35 in.
 Feeder: Gravity Hopper or Standard Swinging Intake Auger (SIA)
 Fenders: Standard
 PTO Drive: 540 or 1000 RPM
 "H.P. Requirement: 540 RPM 50 to 115 HP
 1000 RPM 50 to 145 HP "
 Tires: 12.5L - 15 - 20 Ply
 Jack: Standard
 Safety Chain: Standard
 Weight w/Auger Feeder: 3,600 lbs
 Auger Feeder Length: 84 in.
 Auger Diameter: 12 in.
 Infeed Hopper: 42" w/Fold-In-Flare - Adjustable as low as 20" Drive: Direct Drive Independent

Hydraulic Motor
 Hammermill Width: 21 in.
 Cylinder Diameter: 20 in.
 Grinder Drive: 8 "A" Section Banded V-Belt
 Grinder Hammers: 66-4 Way Reversible Steel Alloy
 Grinder Screen Area: 600 Sq. In.
 Throat Magnet: 2 - 4"x18"
 Cylinder Speed: 2700 RPM
 Unloading Auger Tube Diameter: 8 in.
 Unloading Auger Length: 12 ft.
 Unloading Auger Rotation: 300 Degrees
 Unloading Auger Reach Standard: 19' @ 53 Degrees
 Unloading Auger w/3' Extension: 21' 6" @ 53 Degrees
 Unloading Auger w/6' Extension: 23' 10" @ 53 Degrees
 Self-Contained: Includes Pulley-Driven Pump, Reservoir & Pressure Relief Valve
 Pump Pressure: 2,600 PSI Maximum
 Oil Flow: 10.5 G.P.M.
 Hydraulic Reservoir: Cyclonic Reservoir
 Oil Filter: 10 Micron

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

5001XF	Grinder Mixer <i>135 bushel tank capacity. Includes Intake Auger, Fenders & Lights</i>	49,085.00
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DISCHARGE AUGER EXTENSION

1120	3 Ft. Discharge Auger Extension <i>Includes Discharge Auger Cradle Extension</i>	846.00
1140	6 Ft Discharge Auger Extension <i>Includes Discharge Auger Cradle Extension</i>	1,024.00
1195	No Discharge Auger Extension	In Base Price

POWER TAKE-OFF (PTO)

1300	540 RPM PTO Overrunning/Torque Limiting Clutch	In Base Price
1320	1000 RPM PTO 1 3/8" Shearbolt	1,062.00

AXLES

1420	EZ 2500 Scale <i>With Net/Tare/Gross modes</i>	3,251.00
1440	EZ 3400 Scale <i>With Net/Tare/Gross/Batch and Ingredient Accumulation modes, with external horn</i>	3,766.00

FRONTIER PRODUCTS
Livestock & Equine Management

Grinder Mixer
Continued

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
AXLES ...Continued...			
1495		Less Scale Monitor	In Base Price
DISCHARGE AUGER CRADLE			
MISCELLANEOUS			
8000		High-Moisture Kit-540 RPM <i>Use with 540 RPM only</i>	1,971.00
8010		High-Moisture Kit - 1000 RPM <i>Use with 1000 RPM only</i>	1,889.00
MISCELLANEOUS			
9000		1 In. Mill Screen	186.00
9010		1-1/2 In. Mill Screen	218.00
9020		1-1/4 In. Mill Screen	201.00
9030		1/2 In. Mill Screen	170.00
9040		1/4 In. Mill Screen	214.00
9050		1/8 In. Mill Screen	274.00
9060		2 In. Mill Screen	216.00
9070		3/16 In. Mill Screen	319.00
9080		3/4 In. Mill Screen	115.00
9090		3/8 In. Mill Screen	148.00
9100		5/16 In. Mill Screen	181.00
9110		5/8 In. Mill Screen	129.00
OPERATOR'S MANUAL AND DECALS			
9200		French Operators Manual and Decal Kit <i>GX1117 Grinder Mixer</i>	No Charge
ATTACHMENTS FOR FIELD CONVERSION			
Miscellaneous:			
5HPGMSCRN1		1" Mill Screen	197.64
5HPGMSCRN112		1-1/2" Mill Screen	230.04
5HPGMSCRN114		1-1/4" Mill Screen	212.76

FRONTIER PRODUCTS
Livestock & Equine Management

Grinder Mixer
Continued

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
ATTACHMENTS FOR FIELD CONVERSION ...Continued...			
	5HPGMSCRN12	1/2" Mill Screen	179.28
	5HPGMSCRN14	1/4" Mill Screen	225.72
	5HPGMSCRN18	1/8" Mill Screen	289.44
	5HPGMSCRN2	2" Mill Screen	228.96
	5HPGMOEXT3	3 FT Discharge Auger	972.00
	5HPGMSCRN3163/16"	Mill Screen	338.04
	5HPGMSCRN34	3/4" Mill Screen	126.56
	5HPGMSCRN38	3/8" Mill Screen	162.40
	5HPGMSCRN5165/16"	Mill Screen	191.16
	5HPGMSCRN58	5/8" Mill Screen	141.12
	5HPGMOEXT6	6 FT Discharge Auger	1,170.98
	5HPGMOSCLRB	EZ 2500 Scale <i>With Net/Tare/Gross modes.</i>	2,225.25
	5HPGMOSCLRHEEZ	3400 Scale <i>With Net/Tare/Gross/Batch and Ingredient Accumulation modes, with external horn.</i>	2,806.60
	5HP1009FKGX7	French Operator's Manual and Decal Kit <i>GX1117 Grinder Mixer.</i>	62.53
	5HPGMOHKM1K	Hi-Moisture Kit 1000 RPM	See Parts
	5HPGMOHKM540	Hi-Moisture Kit 540 RPM	2,086.56

FRONTIER PRODUCTS
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Grinder Mixer
Continued

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FRONTIER PRODUCTS
Livestock & Equine Management

MS1117 - 175 Bushel PTO Driven Two Speed Manure Spreader
Equipment for Base Machine

<p>Number of Paddles: 8 Main Apron Chain: T-Rod Tractor HP (2WD): 38 HP Capacity - Cubic Foot Struck Level: 105 Capacity - Heaped (Old Rating) Bushels: 175 Bushels Box Construction: Corrosion Resistant Galvanized Steel Frame Design: Box on Frame Floor Construction: Bonded Poly Shear Bolt Protection: Drive Line Apron Drive: Gearbox, 2 Speed PTO Swing Away Jack: Standard Inside Length: 11 Ft. 1 In. Diameter of Beater: 27 In. Weight with Tires: 2030 lbs. Standard Tire Size: 10R x 22.5 Overall Width with Standard Tires: 83-1/2 In. Overall Height with Hydraulic Endgate: 49 In. Overall Loading Height - Top of Flare: 45-1/2 In. Inside Depth: 25-3/4 In. Inside Width: 54 In. Top of Flare Width: 63-1/2 In.</p>	<p>Approximate Tongue Weight Loaded: 1022 lbs. Approximate Weight Spreader - Fully Loaded: 8508 lbs. Overall Length: 17 Ft. 8 In. Spindle Size: 2 In. Rear Hydraulic Endgate: Optional Semi Liquid Rear Pan: Optional PTO Speed: 540 RPM Drive System - Apron and Beater: PTO Driven Replaceable Paddles: No Hub Style: Greaseable Axle: Single Set-Up Time: 30 Minutes Warranty: 1 Year Parts and Labor, Poly Floors - 10 Year Warranty to Original Owner when used to spread normal agricultural manure.</p>
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CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

0806XF	MS1117 - 175 Bushel PTO Driven Two Speed Manure Spreader <i>Includes 540 RPM PTO</i>	11,895.00
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REAR PAN

7000	Rear Pan <i>Recommended when spreading slurry.</i>	430.00
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END GATE

7050	Hydraulic End Gate	1,438.00
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BEATER

9000	Top Beater	998.00
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ATTACHMENTS FOR FIELD CONVERSION

	Miscellaneous:	
5HPMSO2B175	Hydraulic End Gate	1,521.72
5HPMSO3B3	Rear Pan <i>Recommended when spreading slurry.</i>	454.68
5HPMSOTB175	Top Beater <i>For MS1117.</i>	1,057.32

FRONTIER PRODUCTS
Livestock & Equine Management

MS1117 - 175 Bushel PTO Driven Two Speed Manure Spreader
Continued

FRONTIER PRODUCTS
Livestock & Equine Management

MS1112 - 125 Bushel PTO Driven Two Speed Manure Spreader
Equipment for Base Machine

Swing Away Jack: Standard
Main Apron Chain: #67XH Chain
Tractor HP (2WD): 33 HP
Capacity - Cubic Foot Struck Level: 75
Capacity - Heaped (Old Rating)
Bushels: 125 Bushels
Box Construction:
Corrosion Resistant Galvanized Steel
Frame Design: Box Frame
Floor Construction: Bonded Poly
Shear Bolt Protection:
One Bolt for Both Drive and Beater
Weight with Tires: 1600 lbs.
Number of Paddles: 10
Standard Tire Size: 10.00 x 15
PTO Drive: 540 RPM
Top of Flare Width: 54 In.
Overall Width with Standard Tires: 80 In.
Overall Height with Hydraulic Endgate: N/A
Overall Loading Height
- Top of Flare: 43-1/2 In.
Overall Length: 15 Ft. 3 In.
Inside Depth: 22 In.
Inside Length: 10 Ft. 6 In.

Inside Width: 48 In.
Spindle Size: 2 In.
Diameter of Beater: 22 In.
Approximate Tongue Weight Loaded: 997 lbs.
Approximate Weight Spreader
- Fully Loaded: 6820 lbs.
Semi Liquid Rear Pan: Optional
Drive System - Apron and Beater: PTO Driven
Apron Drive: Timken Drive, Two Speed
Apron Speed: Single Speed
Replaceable Beaters: No
Hub Style: Greaseable
Axle: Single
Set-Up Time: 30 Minutes
Warranty: 1 Year Parts and Labor,
Poly Floors - 10 Year Warranty
to Original Owner when used to spread normal
agricultural manure.

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

0805XF	MS1112 - 125 Bushel PTO Driven Two Speed Manure Spreader <i>Includes 540 RPM PTO</i>	9,289.00
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REAR PAN

7000	Rear Pan <i>Recommended when spreading slurry.</i>	395.00
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ATTACHMENTS FOR FIELD CONVERSION

5HPMSOPAN12	Miscellaneous: Rear Pan <i>Recommended when spreading slurry.</i>	See Parts
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FRONTIER PRODUCTS
Livestock & Equine Management

MS1112 - 125 Bushel PTO Driven Two Speed Manure Spreader
Continued

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FRONTIER PRODUCTS
Livestock & Equine Management

MS1108 - 80 Bushel PTO Driven Two Speed Manure Spreader
Equipment for Base Machine

Swing Away Jack: Standard
Standard Tire Size: 6.70 x 15
PTO Speed: 540 RPM
Floor Construction: Bonded Poly
Shear Bolt Protection:
 Drive Line and Beater
Box Construction:
 Corrosion Resistant Galvanized Steel
Frame Design: Box Frame
Capacity - Heaped (Old Rating)
 Bushels: 80 Bushels
Capacity - Cubic Foot Struck Level: 53
Main Apron Chain: #67H Chain
Tractor HP (2WD): 23 HP
Number Of Paddles: 10
Weight with Tires: 1140 lbs.
Approximate Tongue Weight Loaded: 737 lbs.
Approximate Weight Spreader
 - Fully Loaded: 4923 lbs.
Overall Width with Standard Tires: 76 In.
Overall Height with Hydraulic Endgate: N/A
Overall Loading Height -
 Top of Flare: 37 In.
Overall Length: 13 Ft. 8 In.

Inside Depth: 17 In.
Inside Length: 96 In.
Inside Width: 48 In.
Top of Flare Width: 51 In.
Spindle Size: 2 In.
Diameter of Beater: 18-1/2 In.
Semi Liquid Rear Pan: Optional
Drive System - Apron and Beater: PTO Driven
Apron Drive: Timken Drive, Two Speed
Apron Speed: Two Speed
Replaceable Paddle: No
Hub Style: Greaseable
Axle: Single
Set-Up Time: 30 Minutes
Warranty: 1 Year Parts and Labor,
 Poly Floors - 10 Year Warranty
 to Original Owner when used to spread normal
agricultural manure.

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

0804XF	MS1108 - 80 Bushel PTO Driven Two Speed Manure Spreader <i>Includes 540 RPM PTO</i>	7,279.00
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REAR PAN

7000	Rear Pan <i>Recommended when spreading slurry.</i>	365.00
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ATTACHMENTS FOR FIELD CONVERSION

5HPMSO3C	Miscellaneous: Rear Pan <i>Recommended when spreading slurry.</i>	386.64
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FRONTIER PRODUCTS
Livestock & Equine Management

MS1108 - 80 Bushel PTO Driven Two Speed Manure Spreader
Continued

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FRONTIER PRODUCTS
Livestock & Equine Management

MS1108G - 80 Bushel Ground Driven Manure Spreader
Equipment for Base Machine

Spindle Size: 2 In.
 Overall Height with Hydraulic Endgate: N/A
 Overall Loading Height -
 Top of Flare: 37 In.
 Overall Length: 13 Ft. 8 In.
 Inside Depth: 17 In.
 Inside Length: 96 In.
 Inside Width: 48 In.
 Top of Flare Width: 51 In.
 Standard Tire Size: 6.70 x 15
 Approximate Tongue Weight Loaded: 570 lbs.
 Approximate Weight Spreader
 - Fully Loaded: 4276 lbs.
 Weight with Tires: 1140 lbs.
 Swing Away Jack: Standard
 Apron Drive: Adjustable Ratchet
 Drive - Ground Driven
 Apron Speed: Single Speed
 Floor Construction: Bonded Poly
 Shear Bolt Protection: Driveline and Beater
 Frame Design: Box Frame
 Box Construction:
 Corrosion Resistant Galvanized Steel
 Capacity - Cubic Foot Struck Level: 53

Main Apron Chain: #67H Chain
 Tractor HP (2WD): 23 HP
 Number Of Paddles: 10
 Diameter Of Beater: 18-1/2 In.
 Capacity - Heaped (Old Rating)
 Bushels: 80 Bushels
 Overall Width with Standard Tires: 76 In.
 Semi Liquid Rear Pan: Optional
 Drive System - Apron and Beater:
 Ground Driven
 Replaceable Paddles: No
 Hub Style: Greaseable
 Axle: Single
 Set-Up Time: 30 Minutes
 Warranty: 1 Year Parts and Labor,
 Poly Floors - 10 Year Warranty
 to Original Owner when used to spread normal
 agricultural manure.

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

0803XF		MS1108G - 80 Bushel Ground Driven Manure Spreader	5,802.00
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REAR PAN

7000		Rear Pan <i>Recommended when spreading slurry.</i>	365.00
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ATTACHMENTS FOR FIELD CONVERSION

	5HPMSO3C	Miscellaneous: Rear Pan <i>Recommended when spreading slurry.</i>	386.64
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FRONTIER PRODUCTS
Livestock & Equine Management

MS1108G - 80 Bushel Ground Driven Manure Spreader
Continued

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FRONTIER PRODUCTS
Livestock & Equine Management

MS1105G - 50 Bushel Ground Driven Manure Spreader
Equipment for Base Machine

Spindle Size: 1-3/4 In.
Capacity - Cubic Foot Struck Level: 35
Swing Away Jack: Standard
Weight with Tires: 790 lbs.
Apron Drive: Adjustable Ratchet
Drive - Ground Driven
Apron Speed: Two Speed - per Adjustable Ratchet
Floor Construction: Bonded Poly
Capacity - Heaped (Old Rating)
Bushels: 50 Bushels
Main Apron Chain: #62 Chain
Tractor HP (2WD): 17.7 HP
Number of Paddles: 8
Diameter of Beater: 17-1/2 In.
Inside Width: 36 In.
Frame Design: Box Frame
Box Construction:
Corrosion Resistant Galvanized Steel
Standard Tire Size: 7.60 x 15
Top of Flare Width: 36 In.
Inside Length: 97 In.
Inside Depth: 17-1/2 In.
Overall Length: 13 Ft. 4 In.
Approximate Tongue Weight Loaded: 422 lbs.

Approximate Weight Spreader
- Fully Loaded: 3266 lbs.
Overall Loading Height
- top Of Flare: 32-1/2 In.
Overall Height with Hydraulic Endgate: N/A
Overall Width with Standard Tires: 58 In.
Semi Liquid Rear Pan: Optional
Drive System - Apron and Beater:
Ground Driven
Replaceable Paddle: No
Hub Style: Greaseable
Axle: Single
Set-Up Time: 30 Minutes
Warranty: 1 Year Parts and Labor,
Poly Floors - 10 Year Warranty
to Original Owner when used to spread normal
agricultural manure.

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

0802XF	MS1105G - 50 Bushel Ground Driven Manure Spreader	5,084.00
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REAR PAN

7000	Rear Pan <i>Recommended when spreading slurry.</i>	304.00
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ATTACHMENTS FOR FIELD CONVERSION

5HPMSO3D	Miscellaneous: Rear Pan <i>Recommended when spreading slurry.</i>	321.84
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FRONTIER PRODUCTS
Livestock & Equine Management

MS1105G - 50 Bushel Ground Driven Manure Spreader
Continued

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FRONTIER PRODUCTS
Livestock & Equine Management

MS1102G - 25 Bushel Ground Driven Manure Spreader
Equipment for Base Machine

Main Apron Chain: #55 Chain
 Tractor HP (2WD): 17.7 HP
 Diameter of Beater: 20 In.
 Standard Tire Size: 5 x 12
 Overall Width with Standard Tires: 42 In.
 Overall Height with
 Hydraulic Endgate: N/A
 Apron Drive: Adjustable Ratchet
 Drive - Ground Driven
 Number of Paddles: 8
 Floor Construction: Bonded Poly
 Overall Loading Height
 - Top of Flare: 30 In.
 Weight with Tires: 350 lbs.
 Swing Away Jack: N/A
 Inside Width: 22 In.
 Inside Length: 72 In.
 Inside Depth: 17 In.
 Overall Length: 9 Ft. 1 In.
 Spindle Size: 1-1/4 In.
 Approximate Tongue Weight Loaded: 136 lbs.
 Approximate Weight Spreader
 - Fully Loaded: 1441 lbs.
 Box Construction:

Corrosion Resistant Galvanized Steel
 Frame Design: Box Frame
 Capacity:
 Heaped (Old Rating) Bushels: 25 Bushels
 Cubic Foot Struck Level: 13.6
 Top of Flare Width: 28-1/2 In.
 Semi Liquid Rear Pan: Optional
 Drive System - Apron and Beater:
 Ground Driven
 Replaceable Paddles: No
 Hub Style: Greaseable
 Axle: Single
 Set-Up Time: 30 Minutes
 Warranty: 1 Year Parts and Labor,
 Poly Floors - 10 Year Warranty
 to Original Owner when used to spread normal
 agricultural manure.

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

0801XF		MS1102G - 25 Bushel Ground Driven Manure Spreader <i>Order in multiples of two.</i>	3,155.00
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REAR PAN

7000		Rear Pan <i>Recommended when spreading slurry.</i>	256.00
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ATTACHMENTS FOR FIELD CONVERSION

5HPMSO3E		Miscellaneous: Rear Pan <i>Recommended when spreading slurry.</i>	271.08
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FRONTIER PRODUCTS
Livestock & Equine Management

MS1102G - 25 Bushel Ground Driven Manure Spreader
Continued

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FRONTIER PRODUCTS
Livestock & Equine Management

MS1223 - 235 Bushel Chain Unloading Manure Spreader
Equipment for Base Machine

Minimum Tractor Weight: 7,742 lbs.
 Top of Flare Width: 68 In.
 Inside Width: 60 In.
 Inside Length: 12 Ft. 1 In.
 Inside Depth: 28-3/8 In.
 Overall Width with Standard Tires: 92-1/2 In.
 Spindle Size: 2 In.
 Overall Length: 18 Ft. 6 In.
 Overall Loading Height
 - Top of Flare: 51-1/2 In.
 Overall Height with Hydraulic Endgate: 55 In.
 Diameter of Beater: 29 In.
 Upper Beater: Optional
 Weight with Tires: 2890 lbs.
 Capacity - Old Rating: 235
 Capacity Cubic Foot Struck Level: 143
 Rear Hydraulic End Gate: Optional
 Semi Liquid Rear Pan: Standard

PTO Speed: 540 RPM
 Swing Away Jack: Standard
 Drive: 2 Speed
 Variable Speed Hydraulic Drive: Optional
 Front Splash Panel: Standard
 Hydraulic Cylinder on
 Hydraulic Endgate: One/2 Optional
 Warranty: 1st Year Parts and Labor
 Lifetime Warranty:
 Bonded Polyethylene Floor and Sides
 10-Year Warranty: Plywood (Against Rot) with normal
 agricultural manure

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

0821XF	MS1223 - 235 Bushel Chain Unloading Manure Spreader <i>Includes 540 RPM PTO, and End Gate.</i>	15,885.00
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END GATE

1000	End Gate	In Base Price
1095	Less End Gate	-1,677.00

END GATE CYLINDERS

1105	One Cylinder	In Base Price
1110	Two Cylinders	576.00
1195	Less Cylinder	In Base Price

APRON DRIVE

2000	Two Speed PTO Driven Apron	In Base Price
2020	Variable Speed Hydraulic Apron	Same Price

APRON CONTROLS

2040	Two Speed PTO Rope Control	In Base Price
2050	Electric Variable Speed Apron Control	469.00
2055	Manual Variable Speed Apron Control	Same Price

REAR PAN

FRONTIER PRODUCTS
Livestock & Equine Management

MS1223 - 235 Bushel Chain Unloading Manure Spreader

Continued

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
REAR PAN ...Continued...			
4000		Rear Pan	In Base Price
4020		No Rear Pan	-491.00
HYDRAULIC HOSE HOOK-UP			
2110		Standard Hose Hook-up	In Base Price
2105		2 Hose Hook-up <i>One SCV required, Tailgate and apron both controlled with one SCV. There is a sequence valve.</i>	1,793.00
2125		4 Hose Hook-up <i>Two SCV's required, One SCV will control the tailgate and One SCV will control the apron.</i>	1,520.00
TIRES			
3005		16.5 x 16.1 Flotation Tires	1,135.00
3060		295 x 22.5 Recapped Tires	In Base Price
BEATER			
9000		Top Beater	1,146.00
OPERATOR'S MANUAL AND DECALS			
9200		French Operators Manual and Decals	No Charge
ATTACHMENTS FOR FIELD CONVERSION			
Miscellaneous:			
5HPMSO2B235		End Gate (MS1223)	1,903.71
5HPMSO235HD4		Four Hose Hook-up (MS1223, & MS1227)	1,608.12
5HP608FK1223		French Operators Manual and Decals (MS1223)	40.40
5HPMSOPAN235		Rear Pan (MS1223, & MS1227)	510.33
5HPMSOTB235		Top Beater <i>For MS1223, MS1227 and MS1231.</i>	1,212.84
5HPMSO235HD2		Two Hose Hook-Up (MS1223, & MS1227)	1,898.64

FRONTIER PRODUCTS
Livestock & Equine Management

MS1227 - 270 Bushel Chain Unloading Manure Spreader
Equipment for Base Machine

Minimum Tractor Weight: 9,068 lbs.
 Top of Flare Width: 68 In.
 Inside Width: 60 In.
 Inside Length: 14 Ft. 1 In.
 Inside Depth: 28-3/8 In.
 Overall Width with Standard Tires: 92-1/2 In.
 Spindle Size: 2-1/2 In.
 Overall Length: 20 Ft. 5-1/2 In.
 Overall Loading Height
 - Top of Flare: 51-1/2 In.
 Overall Height with Hydraulic Endgate: 55 In.
 Diameter of Beater: 29 In.
 Upper Beater: Optional
 Weight with Tires: 3230 lbs.
 Capacity - Old Rating: 270
 Capacity Cubic Foot Struck Level: 167
 Rear Hydraulic End Gate: Optional
 Semi Liquid Rear Pan: Standard

PTO Speed: 540 RPM
 Swing Away Jack: Standard
 Drive: 2 Speed
 Variable Speed Hydraulic Drive: Optional
 Front Splash Panel: Standard
 Hydraulic Cylinder on
 Hydraulic Endgate: One/2 Optional
 Warranty: 1st Year Parts and Labor
 Lifetime Warranty:
 Bonded Polyethylene Floor and Sides
 10-Year Warranty: Plywood (Against Rot) with normal
 agricultural manure

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

0822XF	MS1227 - 270 Bushel Chain Unloading Manure Spreader <i>Includes 540 RPM PTO, and End Gate.</i>	17,391.00
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END GATE

1000	End Gate	In Base Price
1095	Less End Gate	-1,680.00

END GATE CYLINDERS

1105	One Cylinder	In Base Price
1110	Two Cylinders	576.00
1195	Less Cylinder	In Base Price

APRON DRIVE

2000	Two Speed PTO Driven Apron	In Base Price
2020	Variable Speed Hydraulic Apron	Same Price

APRON CONTROLS

2040	Two Speed PTO Rope Control	In Base Price
2050	Electric Variable Speed Apron Control	469.00
2055	Manual Variable Speed Apron Control	Same Price

REAR PAN

FRONTIER PRODUCTS
Livestock & Equine Management

MS1227 - 270 Bushel Chain Unloading Manure Spreader

Continued

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
REAR PAN ...Continued...			
4000		Rear Pan	In Base Price
4020		No Rear Pan	-491.00
HYDRAULIC HOSE HOOK-UP			
2110		Standard Hose Hook-up	In Base Price
2105		2 Hose Hook-up <i>One SCV required, Tailgate and apron both controlled with one SCV. There is a sequence valve.</i>	1,793.00
2125		4 Hose Hook-up <i>Two SCV's required, One SCV will control the tailgate and One SCV will control the apron.</i>	1,520.00
TIRES			
3005		16.5 x 16.1 Flotation Tires	1,135.00
3060		295 x 22.5 Recapped Tires	In Base Price
BEATER			
9000		Top Beater	1,146.00
OPERATOR'S MANUAL AND DECALS			
9200		French Operators Manual and Decals	No Charge
ATTACHMENTS FOR FIELD CONVERSION			
Miscellaneous:			
5HPMSO2B270		End Gate (MS1227)	1,902.27
5HPMSO235HD4		Four Hose Hook-up (MS1223, & MS1227)	1,608.12
5HP608FK1227		French Operators Manual and Decals (MS1227)	40.40
5HPMSOPAN235		Rear Pan (MS1223, & MS1227)	510.33
5HPMSOTB235		Top Beater <i>For MS1223, MS1227 and MS1231.</i>	1,212.84
5HPMSO235HD2		Two Hose Hook-Up (MS1223, & MS1227)	1,898.64

FRONTIER PRODUCTS
Livestock & Equine Management

MS1231 - 310 Bushel Chain Unloading Manure Spreader
Equipment for Base Machine

Minimum Tractor Weight: 10,532 lbs.
 Top of Flare Width: 68 In.
 Inside Width: 60 In.
 Inside Length: 15 Ft. 7 In.
 Inside Depth: 28-3/8 In.
 Overall Width with Standard Tires: 97 In.
 Spindle Size: 2-1/4 In.
 Overall Length: 21 Ft. 11-1/2 In.
 Overall Loading Height
 - Top of Flare: 51-1/2 In.
 Overall Height with Hydraulic Endgate: 55 In.
 Diameter of Beater: 29 In.
 Upper Beater: Optional
 Weight with Tires: 4190 lbs.
 Capacity - Old Rating: 310
 Capacity Cubic Foot Struck Level: 185
 Rear Hydraulic End Gate: Standard
 Semi Liquid Rear Pan: Optional

PTO Speed: 540, 1000 RPM Optional
 Swing Away Jack: Standard
 Drive: 2 Speed
 Variable Speed Hydraulic Drive: Optional
 Front Splash Panel: Standard
 Hydraulic Cylinder on
 Hydraulic Endgate: One/2 Optional
 Warranty: 1st Year Parts and Labor
 Lifetime Warranty:
 Bonded Polyethylene Floor and Sides
 10-Year Warranty: Plywood (Against Rot) with normal
 agricultural manure

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

0823XF	MS1231 - 310 Bushel Chain Unloading Manure Spreader <i>Hydraulic Endgate, and Rear Pan are standard.</i>	22,383.00
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END GATE CYLINDERS

1105	One Cylinder	In Base Price
1110	Two Cylinders	576.00

APRON DRIVE

2000	Two Speed PTO Driven Apron	In Base Price
2020	Variable Speed Hydraulic Apron	Same Price

APRON CONTROLS

2040	Two Speed PTO Rope Control	In Base Price
2050	Electric Variable Speed Apron Control	469.00
2055	Manual Variable Speed Apron Control	Same Price

REAR PAN

4000	Rear Pan	In Base Price
4020	No Rear Pan	-491.00

HYDRAULIC HOSE HOOK-UP

2110	Standard Hose Hook-up	In Base Price
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FRONTIER PRODUCTS
Livestock & Equine Management

MS1231 - 310 Bushel Chain Unloading Manure Spreader

Continued

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
HYDRAULIC HOSE HOOK-UP ...Continued...			
2105		2 Hose Hook-up <i>One SCV required, Tailgate and apron both controlled with one SCV. There is a sequence valve.</i>	1,779.00
2125		4 Hose Hook-up <i>Two SCV's required, One SCV will control the tailgate and One SCV will control the apron.</i>	1,506.00
TIRES			
3005		16.5 x 16.1 Flotation Tires	2,206.00
3060		295 x 22.5 Recapped Tires	In Base Price
POWER TAKE-OFF (PTO)			
5012		540 RPM PTO	In Base Price
5011		1000 RPM PTO 1 3/8"	493.00
BEATER			
9000		Top Beater	1,146.00
OPERATOR'S MANUAL AND DECALS			
9200		French Operators Manual and Decals	No Charge
ATTACHMENTS FOR FIELD CONVERSION			
Miscellaneous:			
5HPMSOEC		Electric Variable Speed Hydraulic Apron Control	495.72
5HPMSO310HD4		Four Hose Hook-Up (MS1231, MS1237, & MS1243)	1,595.16
5HP608FK1231		French Operators Manual and Decals (MS1231)	39.37
5HPMSOPAN310		Rear Pan (MS1231, MS1237, & MS1243)	510.33
5HPMSOTB235		Top Beater <i>For MS1223, MS1227 and MS1231.</i>	1,212.84
5HPMSO310HD2		Two Hose Hook-Up (MS1231, MS1237, & MS1243)	1,883.52

FRONTIER PRODUCTS
Livestock & Equine Management

MS1237 - 370 Bushel Chain Unloading Manure Spreader
Equipment for Base Machine

Minimum Tractor Weight: 13,264 lbs.
 Top of Flare Width: 68 In.
 Inside Width: 60 In.
 Inside Length: 16 Ft. 6 In.
 Inside Depth: 34-3/8 In.
 Overall Width with Standard Tires: 97 In.
 Spindle Size: 2-1/2 In.
 Overall Length: 23' 2-1/2 In.
 Overall Loading Height
 - Top of Flare: 57-1/2 In.
 Overall Height with Hydraulic Endgate: 61 In.
 Diameter of Beater: 29 In.
 Upper Beater: Optional
 Weight with Tires: 4920 lbs.
 Capacity - Old Rating: 370
 Capacity Cubic Foot Struck Level: 235
 Rear Hydraulic End Gate: Standard
 Semi Liquid Rear Pan: Optional

PTO Speed: 540, 1000 RPM Optional
 Swing Away Jack: Standard
 Drive: 2 Speed
 Variable Speed Hydraulic Drive: Optional
 Front Splash Panel: Standard
 Hydraulic Cylinder on
 Hydraulic Endgate: Two
 Warranty: 1st Year Parts and Labor
 Lifetime Warranty:
 Bonded Polyethylene Floor and Sides
 10-Year Warranty: Plywood (Against Rot) with normal
 agricultural manure

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

0824XF	MS1237 - 370 Bushel Chain Unloading Manure Spreader <i>Hydraulic Endgate, and Rear Pan are standard.</i>	24,924.00
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APRON DRIVE

2000	Two Speed PTO Driven Apron	In Base Price
2020	Variable Speed Hydraulic Apron	Same Price

APRON CONTROLS

2040	Two Speed PTO Rope Control	In Base Price
2050	Electric Variable Speed Apron Control	469.00
2055	Manual Variable Speed Apron Control	Same Price

REAR PAN

4000	Rear Pan	In Base Price
4020	No Rear Pan	-491.00

HYDRAULIC HOSE HOOK-UP

2110	Standard Hose Hook-up	In Base Price
2105	2 Hose Hook-up <i>One SCV required, Tailgate and apron both controlled with one SCV. There is a sequence valve.</i>	1,779.00

FRONTIER PRODUCTS
Livestock & Equine Management

MS1237 - 370 Bushel Chain Unloading Manure Spreader

Continued

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
2125		HYDRAULIC HOSE HOOK-UP ...Continued... 4 Hose Hook-up <i>Two SCV's required, One SCV will control the tailgate and One SCV will control the apron.</i>	1,506.00
TIRES			
3005		16.5 x 16.1 Flotation Tires	2,206.00
3060		295 x 22.5 Recapped Tires	In Base Price
POWER TAKE-OFF (PTO)			
5012		540 RPM PTO	In Base Price
5011		1000 RPM PTO 1 3/8"	493.00
BEATER			
9000		Top Beater	1,148.00
OPERATOR'S MANUAL AND DECALS			
9200		French Operators Manual and Decals	No Charge
ATTACHMENTS FOR FIELD CONVERSION			
Miscellaneous:			
5HPMSOEC		Electric Variable Speed Hydraulic Apron Control	495.72
5HPMSO310HD4		Four Hose Hook-Up (MS1231, MS1237, & MS1243)	1,595.16
5HP608FK1237		French Operators Manual and Decals (MS1237)	39.37
5HPMSOPAN310		Rear Pan (MS1231, MS1237, & MS1243)	510.33
5HPMSOTB370		Top Beater <i>For MS1237 and MS1243.</i>	1,216.08
5HPMSO310HD2		Two Hose Hook-Up (MS1231, MS1237, & MS1243)	1,883.52

FRONTIER PRODUCTS
Livestock & Equine Management

MS1243 - 430 Bushel Chain Unloading Manure Spreader
Equipment for Base Machine

Minimum Tractor Weight: 15,340 lbs.
 Top of Flare Width: 68 In.
 Inside Width: 60 In.
 Inside Length: 16 Ft. 6 In.
 Inside Depth: 40-3/8 In.
 Overall Width with Standard Tires: 107 In.
 Spindle Size: 2-1/2 In.
 Overall Length: 23 Ft. 2-1/2 In.
 Overall Loading Height
 - Top of Flare: 63-1/2 In.
 Overall Height with Hydraulic Endgate: 67 In.
 Diameter of Beater: 29 In.
 Upper Beater: Optional
 Weight with Tires: 5220 lbs.
 Capacity - Old Rating: 430
 Capacity Cubic Foot Struck Level: 275
 Rear Hydraulic End Gate: Standard
 Semi Liquid Rear Pan: Optional

PTO Speed: 540, 1000 RPM Optional
 Swing Away Jack: Standard
 Drive: 2 Speed
 Variable Speed Hydraulic Drive: Optional
 Front Splash Panel: Standard
 Hydraulic Cylinder on
 Hydraulic Endgate: Two
 Warranty: 1st Year Parts and Labor
 Lifetime Warranty:
 Bonded Polyethylene Floor and Sides
 10-Year Warranty: Plywood (Against Rot) with normal
 agricultural manure

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

0825XF	MS1243 - 430 Bushel Chain Unloading Manure Spreader <i>Top Beater, Hydraulic Endgate, and Rear Pan are standard.</i>	28,280.00
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APRON DRIVE

2000	Two Speed PTO Driven Apron	In Base Price
2020	Variable Speed Hydraulic Apron	Same Price

APRON CONTROLS

2040	Two Speed PTO Rope Control	In Base Price
2050	Electric Variable Speed Apron Control	469.00
2055	Manual Variable Speed Apron Control	Same Price

REAR PAN

4000	Rear Pan	In Base Price
4020	No Rear Pan	-491.00

HYDRAULIC HOSE HOOK-UP

2110	Standard Hose Hook-up	In Base Price
2105	2 Hose Hook-up <i>One SCV required, Tailgate and apron both controlled with one SCV. There is a sequence valve.</i>	1,779.00

FRONTIER PRODUCTS
Livestock & Equine Management

MS1243 - 430 Bushel Chain Unloading Manure Spreader

Continued

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
2125		HYDRAULIC HOSE HOOK-UP ...Continued... 4 Hose Hook-up <i>Two SCV's required, One SCV will control the tailgate and One SCV will control the apron.</i>	1,506.00
<hr/>			
POWER TAKE-OFF (PTO)			
5012		540 RPM PTO	In Base Price
5011		1000 RPM PTO 1 3/8"	493.00
<hr/>			
OPERATOR'S MANUAL AND DECALS			
9200		French Operators Manual and Decals	No Charge
 ATTACHMENTS FOR FIELD CONVERSION			
		Miscellaneous:	
5HPMSOEC		Electric Variable Speed Hydraulic Apron Control	495.72
5HPMSO310HD4		Four Hose Hook-Up (MS1231, MS1237, & MS1243)	1,595.16
5HP608FK1243		French Operators Manual and Decals (MS1243)	39.37
5HPMSOPAN310		Rear Pan (MS1231, MS1237, & MS1243)	510.33
5HPMSOTB370		Top Beater <i>For MS1237 and MS1243.</i>	1,216.08
5HPMSO310HD2		Two Hose Hook-Up (MS1231, MS1237, & MS1243)	1,883.52

FRONTIER PRODUCTS
Livestock & Equine Management

MS1256 - 560 Bushel Chain Unloading Manure Spreader
Equipment for Base Machine

Minimum Tractor Weight: 20,282 lbs.
 Top of Flare Width: 89-1/2 In.
 Inside Width: 80 In.
 Inside Length: 17 Ft. 5 In.
 Inside Depth: 36 In.
 Overall Width with Standard Tires: 130 In.
 Spindle Size: 3 In.
 Overall Length: 26 Ft. 10 In.
 Overall Loading Height
 - Top of Flare: 60 In.
 Overall Height with Hydraulic Endgate: 75 In.
 Diameter of Beater: 29 In.
 Upper Beater: Standard
 Weight with Tires: 8140 lbs.
 Capacity - Old Rating: 560
 Capacity Cubic Foot Struck Level: 353
 Rear Hydraulic End Gate: Standard
 Semi Liquid Rear Pan: Optional

PTO Speed: 1000 RPM Optional
 Swing Away Jack: Standard
 Drive: Hydraulic
 Variable Speed Hydraulic Drive: Optional
 Front Splash Panel: Standard
 Hydraulic Cylinder on
 Hydraulic Endgate: Two
 Warranty: 1st Year Parts and Labor
 Lifetime Warranty:
 Bonded Polyethylene Floor and Sides
 10-Year Warranty: Plywood (Against Rot) with normal
 agricultural manure

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

0826XF	MS1256 - 560 Bushel Chain Unloading Manure Spreader <i>Top Beater, Hydraulic Endgate, and Rear Pan are standard. Includes 1 3/8" 1000 RPM PTO</i>	41,755.00
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REAR PAN

4000	Rear Pan	In Base Price
4020	No Rear Pan	-768.00

TIRES

3002	Standard 425 X 22.5 Tires	In Base Price
3003	High Flotation 600/50 X 22.5 Tires in lieu of Standard 425 X 22.5 Tires	8,871.00

OPERATOR'S MANUAL AND DECALS

9200	French Operators Manual and Decals	No Charge
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ATTACHMENTS FOR FIELD CONVERSION

Miscellaneous:		
5HP608FK1256	French Operators Manual and Decals (MS1256)	47.21
5HPMSO3G	Rear Pan	796.54

FRONTIER PRODUCTS
Livestock & Equine Management

MS1256 - 560 Bushel Chain Unloading Manure Spreader
Continued

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FRONTIER PRODUCTS
Livestock & Equine Management

MS1266 - 660 Bushel Chain Unloading Manure Spreader
Equipment for Base Machine

Minimum Tractor Weight: 26,687 lbs.

Top of Flare Width: 89.5 In.

Inside Width: 82 In., 2083 mm

Inside Length: 17 Ft. 5 In.

Inside Depth: 49 In.

Overall Width with Standard Tires:

135-1/2 In.

Spindle Size: 3 In.

Overall Length: 25 Ft. 11 In., 7.9 mm

Overall Loading Height -

Top of Flare: 73 In.

Overall Height with Hydraulic Endgate: 96 In.

Diameter of Beater: 25-1/2 In., 648 mm

Upper Beater: Standard

Weight with Tires: 11,128 lbs.

Capacity - Old Rating: 660

Capacity Cubic Foot Struck Level: 442

Rear Hydraulic End Gate: Standard

Semi Liquid Rear Pan: Optional

PTO Speed: 1000 RPM Optional

Swing Away Jack: Standard

Drive: Variable Speed Hydraulic Drive

Variable Speed Hydraulic Drive: Standard

Front Splash Panel: Standard

Hydraulic Cylinder on Hydraulic Endgate: 2

Warranty: 1st Year Parts and Labor

Lifetime Warranty:

Bonded Polyethylene Floor and Sides

10-Year Warranty: Plywood (Against Rot) with normal agricultural manure

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

0827XF	MS1266 - 660 Bushel Chain Unloading Manure Spreader <i>Top Beater, Hydraulic Endgate, and Rear Pan are standard. Includes 1 3/8" 1000 RPM PTO</i>	47,667.00
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REAR PAN

4000	Rear Pan	In Base Price
4020	No Rear Pan	-768.00

TIRES

3002	Standard 425 X 22.5 Tires	In Base Price
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OPERATOR'S MANUAL AND DECALS

9200	French Operators Manual and Decals	No Charge
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ATTACHMENTS FOR FIELD CONVERSION

Miscellaneous:		
5HP608FK1266	French Operators Manual and Decals (MS1266)	68.08
5HPMSO3G	Rear Pan	796.54

FRONTIER PRODUCTS
Livestock & Equine Management

MS1266 - 660 Bushel Chain Unloading Manure Spreader
Continued

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FRONTIER PRODUCTS
Livestock & Equine Management

MS1442 - 425 Bushel Hydraulic Push Manure Spreader
Equipment for Base Machine

Capacity Bushels Heaped: 425
 Capacity Cubic Foot Struck Level: 270
 Inside Width: 7 Ft. 2 In.
 Inside Depth: 34 In.
 Inside Length: 16 Ft.
 Overall Width: 10 Ft. 2 In.
 Overall Length:
 Horizontal Beaters - 26 Ft. 5 In.
 Vertical Beaters - 27 Ft. 5 In.
 Overall Height:
 Horizontal Beaters - 74-3/4 In.
 Vertical Beaters - N/A
 Loading Height: 61-1/4 In.
 Height - Top of End Gate: 65 In.
 Axle Type: Tandem
 Spindle Size: 3 In.
 Tire Size:
 425 x 22.5 Used Truck Tires
 Hub Type: 8 Bolt Greaseable
 Standard PTO: Choice
 Push Gate Cylinders:
 (2) Piggy Back - 3-1/2 In. x 90 In.
 Cylinders on Hydraulic End Gate:
 (2) - 2 In. x 20 In.
 Vertical Beater Diameter: (2) 34 In.
 Lower Beater Diameter: 29 In.

Number of Paddles on Lower Beater: 12
 Lower Beater Speed: 360 RPM
 Lower Beater Drive Chain: #80
 Top Beater Diameter: 20 In.
 Number of Paddles on Top Beater: 16
 Top Beater Speed: 300 RPM
 Top Beater Drive Chain: #60
 Replaceable Beaters: Yes
 Clean out Trip
 Horizontal Beaters - Optional
 Vertical Beaters - Standard
 Approximate Loaded Weight:
 24,800 lbs.
 Approximate Tongue Weight Loaded:
 2,802 lbs.
 Minimal Tractor Weight:
 16,534 lbs.
 Weight: 7,700 lbs.
 Side Rail Protection: Wood
 Set-Up Time: 45 Minutes

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

0841XF	MS1442 - 425 Bushel Hydraulic Push Manure Spreader <i>Includes standard transport lights.</i>	33,836.00
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POWER TAKE-OFF (PTO)

5012	540 RPM PTO Overrunning/Torque Limiting Clutch	1,413.00
5011	1000 RPM PTO 1 3/8" Shearbolt	770.00
5017	1000 RPM PTO 1 3/8" Overrunning/Torque Limiting Clutch	1,624.00
5015	1000 RPM PTO 1 3/4" Shearbolt	770.00
5016	1000 RPM PTO 1 3/4" Overrunning/Torque Limiting Clutch	1,624.00

TIRES

3020	19L x 16.1 Flotation Tire	1,947.00
3002	Standard 425 X 22.5 Tires	In Base Price

BEATER TYPE

1100	Horizontal Beaters	In Base Price
1120	Vertical Beaters <i>Must be ordered with option 4095, Less Rear Pan.</i>	9,829.00

FRONTIER PRODUCTS
Livestock & Equine Management

MS1442 - 425 Bushel Hydraulic Push Manure Spreader

Continued

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
BEATER TYPE ...Continued...			
REAR PAN			
4020		Horizontal Beater Rear Pan <i>NOT compatible with vertical beaters.</i>	880.00
4095		Less Rear Pan <i>Must be ordered with option 1120, Vertical Beaters.</i>	In Base Price
OPERATOR'S MANUAL AND DECALS			
9201		French Operators Manual and Decals (MS14 Series with Horizontal Beaters)	No Charge
9200		French Operators Manual and Decals (MS14 Series with Vertical Beaters)	No Charge
ATTACHMENTS FOR FIELD CONVERSION			
Miscellaneous:			
5HP608FK1442		French Operators Manual and Decals (MS1442 with Horizontal Beaters)	51.39
HP608FK1442V		French Operators Manual and Decals (MS1442 with Vertical Beaters)	39.52
5HPMSHPOPAN		Horizontal Beater Rear Pan <i>NOT compatible with vertical beaters.</i>	1,013.33

FRONTIER PRODUCTS
Livestock & Equine Management

MS1455 - 550 Bushel Hydraulic Push Manure Spreader
Equipment for Base Machine

Capacity Bushels Heaped: 550
 Capacity Cubic Foot Struck Level: 430
 Inside Width: 72 In.
 Inside Depth: 53 In.
 Inside Length: 16 Ft.
 Overall Width: 10 Ft. 2 In.
 Overall Length:
 Horizontal Beaters - 26 Ft. 5 In.
 Vertical Beaters - 27 Ft. 5 In.
 Overall Height:
 Horizontal Beaters - 86-3/4 In.
 Vertical Beaters - 121-1/2 In.
 Loading Height: 81 In.
 Height - Top of End Gate: 85-1/2 In.
 Axle Type: Tandem
 Spindle Size: 3 In.
 Tire Size:
 425 x 22.5 Used Truck Tires
 Hub Type: 10 Bolt Greaseable
 Standard PTO: Choice
 Push Gate Cylinders:
 (2) Piggy Back - 4-1/2 In. x 90 In.
 Cylinders on Hydraulic End Gate:
 (2) - 2 In. x 20 In.
 Vertical Beater Diameter: (2) 34 In.
 Lower Beater Diameter: 29 In.

Number of Paddles on Lower Beater: 12
 Lower Beater Speed: 360 RPM
 Lower Beater Drive Chain: #80
 Top Beater Diameter: 29 In.
 Number of Paddles on Top Beater: 12
 Top Beater Speed: 360 RPM
 Top Beater Drive Chain: #80
 Replaceable Beaters: Yes
 Clean out Trip
 Horizontal Beaters - Optional
 Vertical Beaters - Standard
 Approximate Loaded Weight:
 32,429 lbs.
 Approximate Tongue Weight Loaded:
 4,160 lbs.
 Minimal Tractor Weight:
 21,620 lbs.
 Weight: 9,680 lbs.
 Side Rail Protection: Wood
 Set-Up Time: 45 Minutes

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

0842XF	MS1455 - 550 Bushel Hydraulic Push Manure Spreader <i>Includes standard transport lights.</i>	44,583.00
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POWER TAKE-OFF (PTO)

5011	1000 RPM PTO 1 3/8" Shearbolt	770.00
5017	1000 RPM PTO 1 3/8" Overrunning/Torque Limiting Clutch	1,624.00
5015	1000 RPM PTO 1 3/4" Shearbolt	770.00
5016	1000 RPM PTO 1 3/4" Overrunning/Torque Limiting Clutch	1,624.00

TIRES

3002	Standard 425 X 22.5 Tires	In Base Price
3003	High Flotation 600/50 X 22.5 Tires in lieu of Standard 425 X 22.5 Tires	8,397.00

BEATER TYPE

1100	Horizontal Beaters	In Base Price
1120	Vertical Beaters <i>Must be ordered with option 4095, Less Rear Pan.</i>	10,954.00

FRONTIER PRODUCTS
Livestock & Equine Management

MS1455 - 550 Bushel Hydraulic Push Manure Spreader
Continued

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
REAR PAN			
4020		Horizontal Beater Rear Pan <i>NOT compatible with vertical beaters.</i>	880.00
4095		Less Rear Pan <i>Must be ordered with option 1120, Vertical Beaters.</i>	In Base Price
OPERATOR'S MANUAL AND DECALS			
9201		French Operators Manual and Decals (MS14 Series with Horizontal Beaters)	No Charge
9200		French Operators Manual and Decals (MS14 Series with Vertical Beaters)	No Charge
ATTACHMENTS FOR FIELD CONVERSION			
Miscellaneous:			
5HP608FK1455		French Operators Manual and Decals (MS1455 with Horizontal Beaters)	53.45
HP608FK1455V		French Operators Manual and Decals (MS1455 with Vertical Beaters)	40.99
5HPMSHPOPAN		Horizontal Beater Rear Pan <i>NOT compatible with vertical beaters.</i>	1,013.33

FRONTIER PRODUCTS

MS2320 -2000 Gallon Side Discharge Manure Spreader Equipment for Base Machine

Minimum Tractor Weight: 15,693 lbs.
 Top of Flare Width: 76 In.
 Inside Width: 76 In.
 Inside Length: 16 Ft. 0 In.
 Inside Depth: 50.5 In.
 Overall Width with Standard Tires: 85 In.
 Spindle Size: 2.5 In.
 Overall Length: 22 Ft. 8 In.
 Overall Loading Height
 - Top of Flare: 69 In.
 Overall Height @ Front Splash: 76 In.
 Diameter of Expeller: 18.5 In.
 Upper Beater: N/A
 Weight with Tires: 6860 lbs.
 Capacity - Old Rating: N/A
 Capacity Cubic Foot Struck Level: 269
 Rear Hydraulic End Gate: N/A

Semi Liquid Rear Pan: N/A
 PTO Speed: 540 RPM
 Optional Speed: 1000 RPM (1-3/8")
 Swing Away Jack: Standard
 Drive: N/A
 Variable Speed Hydraulic Drive: N/A
 Front Splash Panel: Standard
 Hydraulic Cylinder on
 Hydraulic Endgate: N/A
 Warranty: 1st Year Parts and Labor

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

0810XF	MS2320 -2000 Gallon Side Discharge Manure Spreader	36,042.00
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AXLES

1040	STANDARD AXLE	In Base Price
1041	STRAIGHT AXLE (MS2320) <i>INCREASES GROUND CLEARANCE AND LOADING HEIGHT</i>	Same Price
1042	DROP AXLE (MS2320) <i>DECREASES GROUND CLEARANCE AND LOADING HEIGHT</i>	Same Price

TIRES

3060	295R X 22.5 RECAP TIRE - TUBELESS (MS2320)	1,849.00
300S	16.5 X 16.1-10 PLY TIRE (MS2320, MS2326)	3,430.00

POWER TAKE-OFF (PTO)

5012	540 RPM PTO	In Base Price
5017	1000 RPM PTO 1 3/8"	915.00

MONITOR

8191	DIGI-STAR 5-POINT SCALE <i>MONITOR SOLD SEPARATELY.</i>	3,241.00
8193	DIGI-STAR GT400 MONITOR	955.00
8194	DIGI-STAR NT460 MONITOR/GPS	2,624.00
8195	DIGI-STAR AUTO START/STOP	2,964.00

FRONTIER PRODUCTS

MS2320 -2000 Gallon Side Discharge Manure Spreader

Continued

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
		MONITOR ...Continued... <i>COMPATIBLE WITH NT460 MONITOR ONLY.</i>	
		OPERATOR'S MANUAL AND DECALS	
903S		French Operators Manual and Decal Kit	No Charge
		ATTACHMENTS FOR FIELD CONVERSION	
		Miscellaneous:	
	5HP2320FKMS	French Operators Manual and Decals (MS2320)	52.27

FRONTIER PRODUCTS

MS2326 -2600 Gallon Side Discharge Manure Spreader Equipment for Base Machine

Minimum Tractor Weight: 19,709 lbs.
Top of Flare Width: 87 In.
Inside Width: 87 In.
Inside Length: 16 Ft. 0 In.
Inside Depth: 58.5 In.
Overall Width with Standard Tires: 103 In.
Spindle Size: 3.0 In.
Overall Length: 22 Ft. 8 In.
Overall Loading Height
- Top of Flare: 81 In.
Overall Height @ Front Splash: 88 In.
Diameter of Expeller: 18.5 In.
Upper Beater: N/A
Weight with Tires: 7880 lbs.
Capacity - Old Rating: N/A
Capacity Cubic Foot Struck Level: 347

Rear Hydraulic End Gate: N/A
Semi Liquid Rear Pan: N/A
PTO Speed: 540 RPM
Swing Away Jack: Standard
Drive: N/A
Variable Speed Hydraulic Drive: N/A
Front Splash Panel: Standard
Hydraulic Cylinder on
Hydraulic Endgate: N/A
Warranty: 1st Year Parts and Labor

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
Select One Code From Each Required Category			
BASE MACHINE			
0811XF		MS2326 -2600 Gallon Side Discharge Manure Spreader	38,779.00
AXLES			
1040		STANDARD AXLE	In Base Price
TIRES			
300S		16.5 X 16.1-10 PLY TIRE (MS2320, MS2326)	3,430.00
3071		425L X 22.5 USED TRUCK TIRE (MS2326)	2,074.00
300T		19L X 16.1-10 PLY TIRE (MS2326)	3,807.00
POWER TAKE-OFF (PTO)			
5012		540 RPM PTO	-813.00
5017		1000 RPM PTO 1 3/8"	In Base Price
MONITOR			
8191		DIGI-STAR 5-POINT SCALE <i>MONITOR SOLD SEPARATELY.</i>	3,975.00
8193		DIGI-STAR GT400 MONITOR	955.00
8194		DIGI-STAR NT460 MONITOR/GPS	2,624.00
8195		DIGI-STAR AUTO START/STOP <i>COMPATIBLE WITH NT460 MONITOR ONLY.</i>	2,964.00
OPERATOR'S MANUAL AND DECALS			
903S		French Operators Manual and Decal Kit	No Charge

FRONTIER PRODUCTS

MS2326 -2600 Gallon Side Discharge Manure Spreader

Continued

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
		OPERATOR'S MANUAL AND DECALS ...Continued...	
		ATTACHMENTS FOR FIELD CONVERSION	
		Miscellaneous:	
5HP2326FKMS		French Operators Manual and Decals (MS2326)	52.27

FRONTIER PRODUCTS

MS2334 - 3400 Gallon Side Discharge Manure Spreader Equipment for Base Machine

Minimum Tractor Weight: 26,197 lbs.

Top of Flare Width: 97 In.

Inside Width: 97 In.

Inside Length: 16 Ft. 0 In.

Inside Depth: 65.5 In.

Overall Width with Standard Tires: 112 In.

Spindle Size: 3.375 In.

Optional Spindle Size: 4.50 In.

Overall Length: 23 Ft. 7 In.

Overall Loading Height

- Top of Flare: 93 In.

Overall Height @ Front Splash: 101 In.

Diameter of Expeller: 18.5 In.

Upper Beater: N/A

Weight with Tires: 10940 lbs.

Capacity - Old Rating: N/A

Capacity Cubic Foot Struck Level: 451

Rear Hydraulic End Gate: N/A

Semi Liquid Rear Pan: N/A

PTO Speed: 1000 RPM (1-3/8")

Swing Away Jack: Standard

Drive: N/A

Variable Speed Hydraulic Drive: N/A

Front Splash Panel: Standard

Hydraulic Cylinder on

Hydraulic Endgate: N/A

Warranty: 1st Year Parts and Labor

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
Select One Code From Each Required Category			
BASE MACHINE			
0812XF		MS2334 - 3400 Gallon Side Discharge Manure Spreader	52,027.00
AXLES			
1040		STANDARD AXLE	In Base Price
1043		HEAVY DUTY DROP STYLE TANDEM AXLE (MS2334)	3,031.00
TIRES			
3072		425L X 22.5 USED TRUCK TIRE (MS2334) <i>CAN'T BE USED WITH OPTIONAL TANDEM AXLE.</i>	2,542.00
3073		21.5L X 16.1 - 18 PLY TIRE TITAN (MS2334) <i>CAN'T BE USED WITH OPTIONAL TANDEM AXLE.</i>	6,217.00
3074		49X 19X 20 RECAPPED 30 PLY AIRCRAFT TIRE (MS2334) <i>TIRE PACKAGE FOR OPTIONAL TANDEM AXLE ONLY</i>	7,029.00
3000		700/50 X 22.5 FLOTATION IMPLEMENT TIRE (MS2334) <i>TIRE PACKAGE FOR OPTIONAL TANDEM AXLE ONLY</i>	11,717.00
POWER TAKE-OFF (PTO)			
5017		1000 RPM PTO 1 3/8"	In Base Price
5016		1000 RPM PTO 1 3/4"	Same Price
HYDRAULICS			
8190		HYDRUALIC OPENING LID MS2334	12,179.00

FRONTIER PRODUCTS

MS2334 - 3400 Gallon Side Discharge Manure Spreader

Continued

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
MONITOR			
8191		DIGI-STAR 5-POINT SCALE <i>MONITOR SOLD SEPARATELY.</i>	4,995.00
8192		DIGI-STAR 5-POINT SCALE FOR TANDEM AXLE (MS2334 & MS2342) <i>SCALE FOR OPTIONAL TANDEM AXLE ONLY</i>	8,318.00
8193		DIGI-STAR GT400 MONITOR	955.00
8194		DIGI-STAR NT460 MONITOR/GPS	2,624.00
8195		DIGI-STAR AUTO START/STOP <i>COMPATIBLE WITH NT460 MONITOR ONLY.</i>	2,964.00
OPERATOR'S MANUAL AND DECALS			
903S		French Operators Manual and Decal Kit	No Charge
ATTACHMENTS FOR FIELD CONVERSION			
Miscellaneous:			
	5HP2334FKMS	French Operators Manual and Decals (MS2334)	52.27

FRONTIER PRODUCTS

MS2342 - 4200 Gallon Side Discharge Manure Spreader Equipment for Base Machine

Minimum Tractor Weight: 34,352 lbs.

Top of Flare Width: 97 In.

Inside Width: 97 In.

Inside Length: 20 Ft. 0 In.

Inside Depth: 65.5 In.

Overall Width with Standard Tires: 144 In.

Spindle Size: 4.50 In.

Overall Length: 27 Ft. 7 In.

Overall Loading Height

- Top of Flare: 93 In.

Overall Height @ Front Splash: 101 In.

Diameter of Expeller: 18.5 In.

Upper Beater: N/A

Weight with Tires: 16500 lbs.

Capacity - Old Rating: N/A

Capacity Cubic Foot Struck Level: 564

Rear Hydraulic End Gate: N/A

Semi Liquid Rear Pan: N/A

PTO Speed: 1000 RPM (1-3/4")

Swing Away Jack: Standard

Drive: N/A

Variable Speed Hydraulic Drive: N/A

Front Splash Panel: Standard

Hydraulic Cylinder on

Hydraulic Endgate: N/A

Warranty: 1st Year Parts and Labor

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
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Select One Code From Each Required Category

BASE MACHINE

0813XF	MS2342 - 4200 Gallon Side Discharge Manure Spreader <i>Includes 1000 1 3/4" RPM PTO</i>	62,033.00
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AXLES

1040	STANDARD AXLE	In Base Price
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TIRES

300U	28L X 26-16 PLY BIAS TIRES (MS2342)	12,956.00
300V	28L x 26-16 PLY RADIAL TIRES (MS2342)	18,817.00

POWER TAKE-OFF (PTO)

HYDRAULICS

8190	HYDRUALIC OPENING LID <i>MS2342</i>	12,180.00
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MONITOR

8192	DIGI-STAR 5-POINT SCALE FOR TANDEM AXLE (MS2334 & MS2342) <i>SCALE FOR OPTIONAL TANDEM AXLE ONLY</i>	8,318.00
8193	DIGI-STAR GT400 MONITOR	955.00
8194	DIGI-STAR NT460 MONITOR/GPS	2,624.00
8195	DIGI-STAR AUTO START/STOP <i>COMPATIBLE WITH NT460 MONITOR ONLY.</i>	2,964.00

FRONTIER PRODUCTS

MS2342 - 4200 Gallon Side Discharge Manure Spreader

Continued

CODE	ATTACHMENT IDENTIFIER	DESCRIPTION	SUGGESTED LIST PRICE USD (\$)
OPERATOR'S MANUAL AND DECALS			
903S		French Operators Manual and Decal Kit	No Charge
ATTACHMENTS FOR FIELD CONVERSION			
Miscellaneous:			
	5HP2342FKMS	French Operators Manual and Decals (MS2342)	52.27