

Art's Way

Since 1956

MILLER PRO



5300 Series Forage Boxes

Front, Rear & Front/Rear Unload
Receiver Boxes • Truck Mount • Running Gear

www.artsway-mfg.com

meeting your needs in the field and farmyard

5300 Series...improving forage quality with high capacity harvesting

Today's high capacity forage harvesting requires bigger forage boxes and faster ways of getting the job done. Miller Pro by Art's Way offers receiver boxes for both truck and trailer mount to meet those needs. They can be side loaded with Miller Pro high lift dump boxes, or can run behind or along side self-propelled forage harvesters. The Miller Pro brand offers an extensive line of forage handling equipment to help you bring in higher quality forage, and get it into your silos, bunkers or bags quickly.

Numerous model choices...

You'll find several models to choose from, to add convenience to your work. The entire line is available either with roofs or as open top models. Truck mount and trailer models add more options to fill every need.

Higher capacity

The entire line is available in box lengths up to 20 feet. Optional 4" higher roof or side extensions add even more capacity. Heavyweight constructed running gear is available in either single or tandem axle wagons or tandem axle trailers.

Receiver boxes

Receiver boxes are ideal for top filling because there are no obstructions such as rafters or supports in the center of the box. The sides are reinforced with a heavy "Z" shaped side sill plus a massive structural beam going full length on the top edge of both sides. There's also a cross support at the front and rear of the box. The side stakes are the largest in the industry measuring an impressive 5" x 2-1/2" in size.

Side extensions and 4th beater

Receiver boxes can be fitted with side extensions to increase load capacity. With the side extensions it is recommended that an optional fourth beater be added to ensure a smooth flow of material to the blower.



Trailer Mounted Receiver Boxes

Receiver boxes mounted on tandem axle trailers are ideal for filling bags, upright silos and bunker silos. This design offers a smooth ride with good trailing and maneuverability, often able to travel one or two gears faster in field conditions compared with a conventional steerable wagon.

PTO drive lines can remain attached to the tractor. You can start the PTO before leaving the tractor saving two trips in and out of the cab not having to attach and detach the PTO drive line at the blower or bagger. For bunker use, you won't need to leave the tractor at all.



5300 Series Highlights

Miller Pro forage boxes are recognized for their exceptional performance, reliability and long-lasting durability.

- Excellence in design, state-of-the-art manufacturing, highest quality materials plus exceptional fit and finish
- Longest forage handling line in the industry including front unload, front/rear combination models, rear unload, receiver boxes, forage blowers and high lift dump boxes
- Ease of control, designed for safer operation
- Unitized high strength steel box with Field Flex™ design
- 4 speed shift-under-load enclosed gear transmission
- Independent feathering clutches for optimum control
- Smooth feeding metering augers
- Crop Clear™ rafterless roof

Superior strength EX-TEN® steel is 67% stronger than conventional steel, more capable of handling the stress of heavy loads and long years of service.



Fold down cross conveyor extension

An optional 18" (30" overall) fold down cross conveyor extension makes it easy to approach the blower, especially with larger tractors. The fold down extension can also be used for bunk feeding. Spring assist makes it quick and easy to fold. When folded, the extension closes off the cross conveyor opening.

Truck mount forage boxes

All Miller Pro forage boxes are available in truck mount versions. Drive systems can be either hydraulic or mechanical. These boxes can be front unload, rear unload or front/rear unload, with or without roofs, side extensions or fourth beater.

A solid foundation to carry the load.

Unitized Construction



FLEXIBLE ENGINEERED CONSTRUCTION

Field Flex™ design provides integral strength, with dynamic tolerance to flex as terrain and load varies. Steel unibody design provides an excellent strength-to-weight ratio and a lower center of gravity. Proven in the roughest, wettest conditions to withstand stresses caused by changing loads and field conditions.

UNITIZED UNDERSTRUCTURE

Foundation of the 5300 forage box. Four side and center stringers run full length...and combine with other formed high strength steel frame members to make a durable integrated assembly. This design distributes loads evenly over the box's full length, and provides a balance of rigidity and flexibility that assures long life under tough field conditions.

UNITIZED STEEL BOX

Exclusive design incorporates the latest in engineering and manufacturing methods to break the technology barrier and to revolutionize forage box design.

FULL LENGTH SIDE SHEETS

Made of tough corrugated 20 gauge aluminized steel. Contributes to the integral strength of the box assembly.

FULL LENGTH STEEL STRINGERS

Formed from EX-TEN® heavy duty alloy, 67% stronger than conventional steel.

MASSIVE STEEL UPRIGHTS

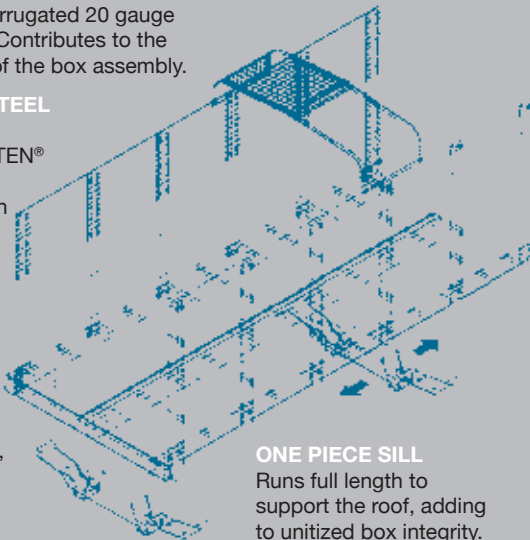
Multiple 90° bends create 4-sided uprights with twice the strength of others, and present a smoother, cleaner appearance.

MOUNTING SADDLES

Provide attachment to running gear or truck frame. The rear saddle can be moved to insure correct weight distribution for single or tandem axle. Reinforced rubber pads are positioned between bottom of saddle and wagon or trailer frame.

CLUTTER FREE DESIGN

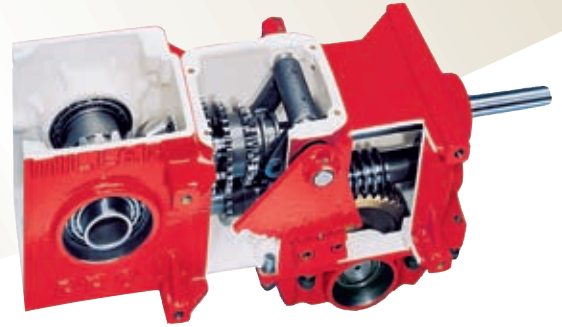
Removes bulky wood and steel structures for a clean and open appearance...and a lower center of gravity.



ONE PIECE SILL

Runs full length to support the roof, adding to unitized box integrity.

Unique dual feathering clutches.
Maximum control. Easy operation.



4-speed shift-under-load synchronized gear transmission

Exclusive. Provides a simple and positive gear-to-gear drive for smooth unloading under all crop conditions. Massive bronze worm gear and rugged gear train operate inside a sealed oil bath. Beefy design includes heavy drive collar, large output shaft and heavy detent springs.

Consistency of speeds is a major advantage of our 4-speed positive gear transmission. Control is smooth and predictable. Cleanout is faster with speeds up to 12.1 ft/min. Variable speed drives on other boxes cause the apron speed to fluctuate as a result of the ever-changing load.



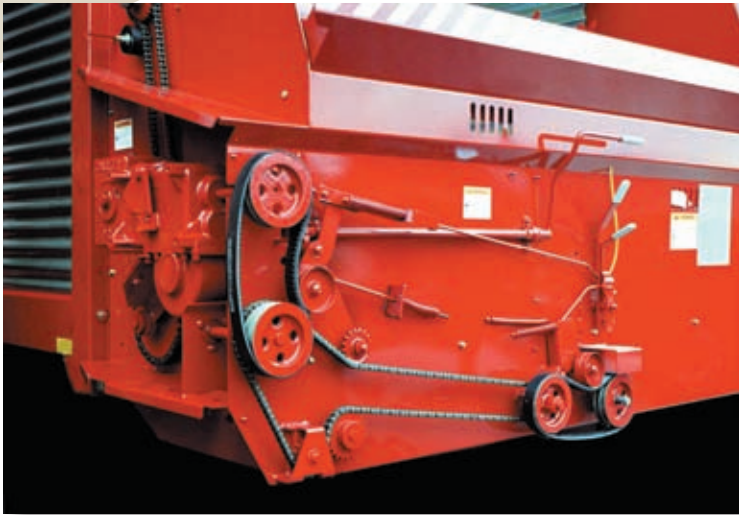
Crop Clear™ rafterless roof

Allows unobstructed rafter-free crop loading and unloading. Corrugated and formed heavy gauge aluminized steel has superior strength, appearance and corrosion resistance. Heavy duty roof edge protector. Removable in sections for loading combined corn.



18" Metering Augers

Provide the most uniform feed flow in the industry. Large diameter prevents undercutting. Welded chipper tines start easily in tightly packed loads. Top auger setback practically eliminates carryover and enhances unloading performance by creating a smooth flowing waterfall of crop.



Front drive system

The front drive chain is spring loaded to ensure the proper tension and eliminates chain whip.

Independent drives for auger and outfeed — unequalled crop unloading control

Exclusive feathering clutch system coupled with a shift-under-load 4-speed gear box lets the operator start extra full loads smoothly, and provide positive, direct unloading speeds.

Outfeed feathering clutch

Allows the operator to feather the outfeed apron to help start heavy loads slowly, without producing clumps that can block your forage blower. This clutch is also the quick-release safety clutch. The PTO turns freely for easy hookup.

Metering auger feathering clutch

Allows the operator to feather the augers to clean them, without bringing the load forward. Single handle allows operator to stop and/or feather the augers to ease a big clump into the outfeed. No other forage box has this user-friendly system...some have no beater clutch at all.

Centralized operator controls

- Provides easy access to unloading controls from either side
- Low sight holes for good visibility
- Neutral gear placed between all speeds
- Safety clutches easy to reset



Cross Conveyor Chain Restraints

Reduces potential residue buildup over full length of cross conveyor.

Removable Cleanout Panel

Bottom of unit pan has access panel for easy seasonal cleanout of material.

Drive Line Safety Shields Swing Open

Shielding on gearbox and belt drive systems is smaller, more secure and provides easier access. Front hinge prevents panels from catching the wind during transport if accidentally left unlatched.

Heavy duty needle bearing PTO driveline



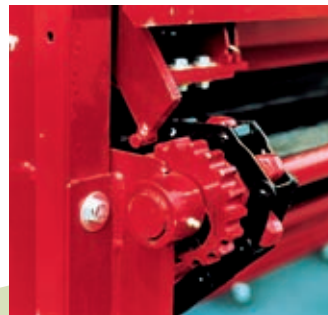
**Convenient high volume
PTO or hydraulic drive
rear unloading**

PTO or hydraulic drive

PTO drive unloads in as little as 30 seconds. Hydraulic drive unloading time varies with tractor hydraulics.

Box floor

5/8" pressure treated marine grade plywood. Front/rear unload boxes have super slippery poly clad floor to reduce friction and stress in either direction.



Automatic rear door

Opens automatically when unloading apron is engaged. Closes and relocks when box is empty without having operator leave the tractor.

Unobstructed unloading

Rear door hinge point is as high as the roof so tops of loads aren't shaved off.



Front/rear unload • 2 direction drive

Unloading direction is easy to change and requires no tools. Simply move a drive coupler from the front shaft to the rear shaft, or vice versa. No need for time-consuming changing of drive chains.



Transport safety

All Miller Pro forage boxes have as standard equipment 2 amber flashing and 2 red tail lamps, along with a slow moving vehicle sign and amber and red reflective tape marking the sides and rear of the forage box.

Running Gear Wagons and trailers, single and tandem axles

Superior stability and tracking

Dynamic flexibility of the open-bottomed steel C-section center reach eliminates the need for a sloppy collar, used in round tube designs. Reaches are made of EX-TEN® steel, 67% stronger than conventional steel to insure high strength along with flexibility. Combine this with 80" wide stance and ball joint automotive type steering, and the result is the farming industry's most steady-towing running gear. Tandem rear axle models increase stability on rough terrain.

Easy setup and maintenance

The adjustable wheelbase and the optional bolster width kit allow you to adapt the gear for most farm transport needs. The telepole extends a full 24" for easy tractor hookup.



Tapered ball joint automotive type steering and replaceable bronze bushings at all pivot areas have grease fittings at all pivot points. Tapered heat treated sleeves welded to the steering arms minimize loosening wear.



C-section center reach fits snugly into formed steel channels of bolster weldments for length.



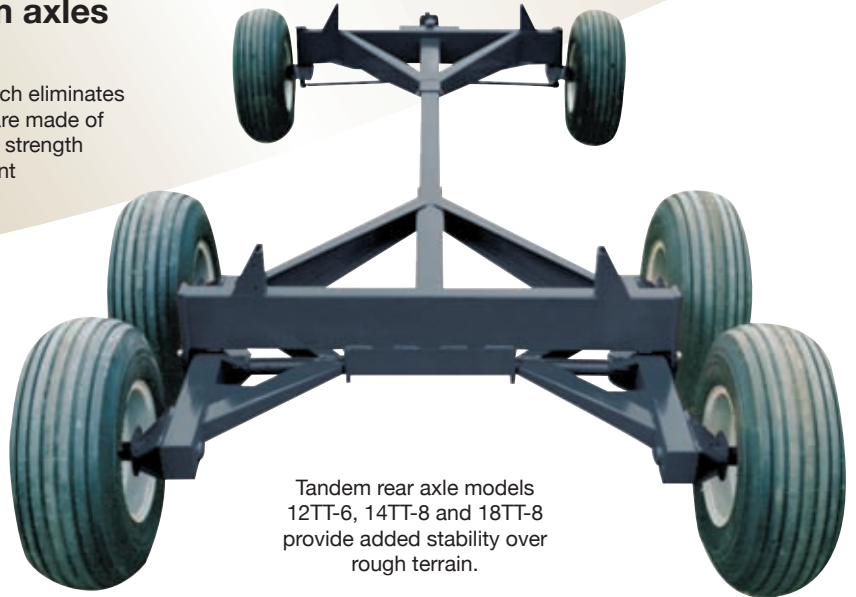
Easy-lift spring counterbalances telepole for reduced effort when hitching to tractor.



Extendable telepole has a convenient handle at the hitch. 96" standard length. Extends 24" for easy hookup.



Machined pivot pins versus bolts insure continued close tolerances. All pivot pins are set in replaceable bronze bushings with grease fittings for longer life.



Tandem rear axle models 12TT-6, 14TT-8 and 18TT-8 provide added stability over rough terrain.

Rugged engineered design

Heavy duty tubular and formed steel components and weldments put strength and flexibility at critical points. Electrostatically applied, oven dried paint finishes resist corrosion. Wheel hubs and spindles are configured to meet load capacity requirements.

Hub and spindle

configuration, along with wheel and tire ratings determine capacity. 6-bolt hubs fit the 2" spindles, and heavier duty 8-bolt hubs fit 2-1/4", 2-3/4" and 3" spindles.



Single rear axle models 12T-8, 15T-8 and 17T-8 are rugged, yet economical.



All models have a **short turning radius**



Trunion steering for 17 ton model



17 ton wagon

The 17 ton wagon was designed specifically for use with forage boxes. Miller Pro has designed this wagon to accept large tires such as 4.45 x 22.5 super single truck tires while still keeping the majority of the tire under the forage box and maintaining an impressive 56 degree turning radius. Riser kits are not needed with this wagon!



Trailer Specifications

Trailer Type	Standard length	XL length
Rated capacity	30,000 lbs.	30,000 lbs.
Approx height w/ 16.5 x 22.5 tires	33"	33"
Overall length	270"	293"
Length from pin hole to oscillation	213"	231"
Tread width	81-3/4"	81-3/4"
Spindle diameter	2-3/4"	2-3/4"
Hubs	8-bolt	8-bolt
Bolster stake width	42"	42"
Bolster stake adjustment fore & aft Bolster stakes adjust at 3-3/4" intervals	113.5" to 154.5"	135.5" to 184.5"

15 ton receiver box trailer

Miller Pro has designed a tandem axle trailer to be used with receiver boxes. This system is a great way to transport forage quickly and smoothly through fields while placing no twisting strain at all on the forage box while going through waterways and field approaches. In normal field conditions it is possible to go a gear or two faster than with a conventional steerable wagon!



Wagon Specifications

Models	12TT - 6	12T - 8	14TT - 8	15T-8	17T-8	18TT-8
ASAE rated cap. (tons)	12	12	14	15	17	18
Approx. weight w/o tires	1,262 lbs	938 lbs	1,324 lbs	1,230 lbs	1,490 lbs	1,822 lbs
Approx. weight w/ tires	1,484 lbs	1,086 lbs	1,546 lbs	1,520 lbs	2,553 lbs**	2,380 lbs
Height	26" from bolster to ground with 12.5Lx15" tires			32" w/14Lx16.1"	37 1/2" w/425x22.5"	32" w/14Lx16.1"
Tread width	80"	80"	80"	80"	81"	80"
Spindle diameter	2"	2 1/4"	2 1/4"	2 3/4"	3"	2 3/4"
Hubs	6-bolt	8-bolt	8-bolt	8-bolt	8-bolt	8-bolt
Bolster stake spacing	42" is standard — Kit to reduce spacing to 38" is optional					
Adjustable extending hitch for telepole	96" extra long telepole for forage boxes 77" is available for bale racks and gravity boxes					
Easy-lift telepole	Adjustable spring assist is standard					
Wheelbase, adjustable with C-section reach	Standard — 105" to 150" Options include: 90" to 120" or 150" to 180"				147" to 177"	same as 15 ton
Turning radius	60°	60°*	60°	57°	56°**	57°
Tandem	Yes	No	Yes	No	No	Yes
Inertia hydraulic brakes	N/A	Opt.	Opt.	Opt.	Opt.	Opt.
Rear hitch point	No	Yes	No	Yes	No	No
Options	Standard wheel is 15" x 10". Multiple sizes and ratings of wheels and tires are available. 38" Bolster Kit: see Bolster stake spacing above. Safety Chain: recommended for highway towing.					
* 55° w/16.5 x 16.1 tires						
** W/425 x22.5 tires						

All running gear are designed for farm use at tractor speeds to a maximum of 20 mph. Capacities apply only when equipped with properly rated tires.

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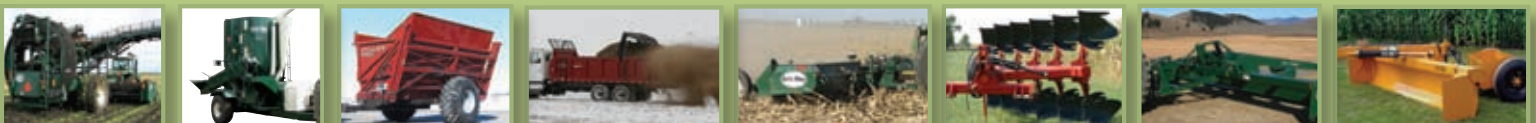
5300 Series Specifications

Unloading Configuration	Front Unload			Front/Rear		Rear Unload	
MODEL No.	5300 -16F	5300 - 18F	5300 - 20F	5300 - 18F/R	5300 - 20F/R	5300 - 18R	5300 - 20R
Box size floor length	16 ft	18 ft	20 ft	18 ft	20 ft	18 ft	20 ft
Capacity w/roof ASAE std	866 cu ft	977 cu ft	1085 cu ft	981 cu ft	1090 cu ft	1002 cu ft	1113 cu ft
Capacity less roof ASAE std	713 cu ft	805 cu ft	894 cu ft	810 cu ft	900 cu ft	822 cu ft	913 cu ft
Capacity less roof with side extensions struck ASAE std	866 cu ft	977 cu ft	1085 cu ft	981 cu ft	1090 cu ft	1002 cu ft	1113 cu ft
Inside width	88"						
Inside height w/std roof	93"						
Inside height w/4" higher roof	97"						
Overall width	109"	109"	109"	109"	109"	104"	104"
Overall height w/std roof	115"						
Overall height w/side extension	112-1/2"						
Overall length	232"	256"	280"	271"	295"	243"	264"
Weight w/roof	4100 lbs	4310 lbs	4720 lbs	5050 lbs.	5460 lbs	3690 lbs	4070 lbs
Main apron pintle chain	#667H 4 per box @ 10,000 lb min. pull each						
Optional apron pintle chain	#667X 4 per box @ 15,000 lb min. pull each						
Crossfeed delivery	Left or right			Left only			
Crossfeed apron width	22"			22"			
Crossfeed conveyor apron	CA 550 roller chain with welded slats						
Crossfeed clean-out door	Yes			Yes			
Crossfeed conveyor ext. - std	12" stationary			12" stationary			
Crossfeed conveyor ext. - optional	18" fold up with spring assist (30" overall)						
Unloading metering augers	Three 18" diameter drum style with 2" tines						
Safety clutch	Quick release push bar at front Cable on outfeed side — quick re-engage						
Power source - front unload	540 RPM PTO drive - optional hyd. motor drive						
Power source - rear unload	PTO or hyd. drive						
Box hold down kit	Std						
Transport lights	Std						
Rear door latch	Positive spring loaded - pins in notch						
4" higher roof	Optional on all models						
Side extension kit	Optional on all models						
Fourth beater	Optional on all models with side extensions						



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