

Rotary Rakes



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GA SINGLE-ROTOR RAKES

Trailed and Mounted



Invest in Quality[®]

ROTARY RAKES SINGLE ROTOR

HIGH-QUALITY ROTARY RAKES FROM THE WORLD LEADER

GENTLE, HIGH-QUALITY RAKING

Long, flexible tines touch the crop just once, lifting and placing it neatly into the windrow. This raking action allows the hay to be raked damp and dry down completely in the windrow. For crops such as alfalfa, this gentle handling is especially important as it ensures the leaves will remain intact. This superior windrow formation allows for more efficient harvesting since the crop is not roped as compared to other rakes.

EXCEPTIONAL PERFORMANCE AND LOW MAINTENANCE

The exclusive Masterdrive® gearbox sets the bar for reliability and long life. The patented double reduction design provides the versatility to handle a wide range of crops and high volumes. The result is outstanding performance even in the most challenging conditions.

SAVE TIME AND MONEY

Saving time means reduced production costs. Kuhn rotary rakes provide fast, efficient operation while maintaining high-quality raking to maximize the nutrient value of your forage.

ROTARY RAKES

Single-Rotor Rakes
in brief

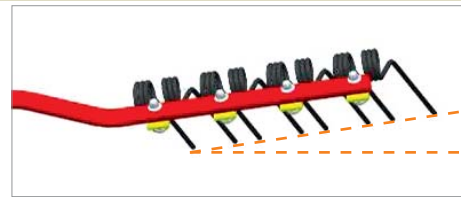
Models	Working Width	Horsepower Requirement	Windrow Delivery
GA 300 GM	10'6"	20	Left
GA 3201 GM	10'6"	20	Left
GA 3200 GT	10'6"	20	Left
GA 4220 TH	13'5"	30	Right
GA 4221 GTH	13'5"	30	Right
GA 4121 GM	13'5"	30	Right
GA 4321 GM	13'9"	30	Right
GA 4521 GM	14'9"	35	Right
GA 4521 GTH	14'9"	35	Right

UNIFORM AND FLUFFY WINDROWS

Uniform and fluffy windrows greatly contribute to quick drying and uniform crop pickup. Kuhn rotary rakes achieve this by following two basic principles for ideal crop placement.

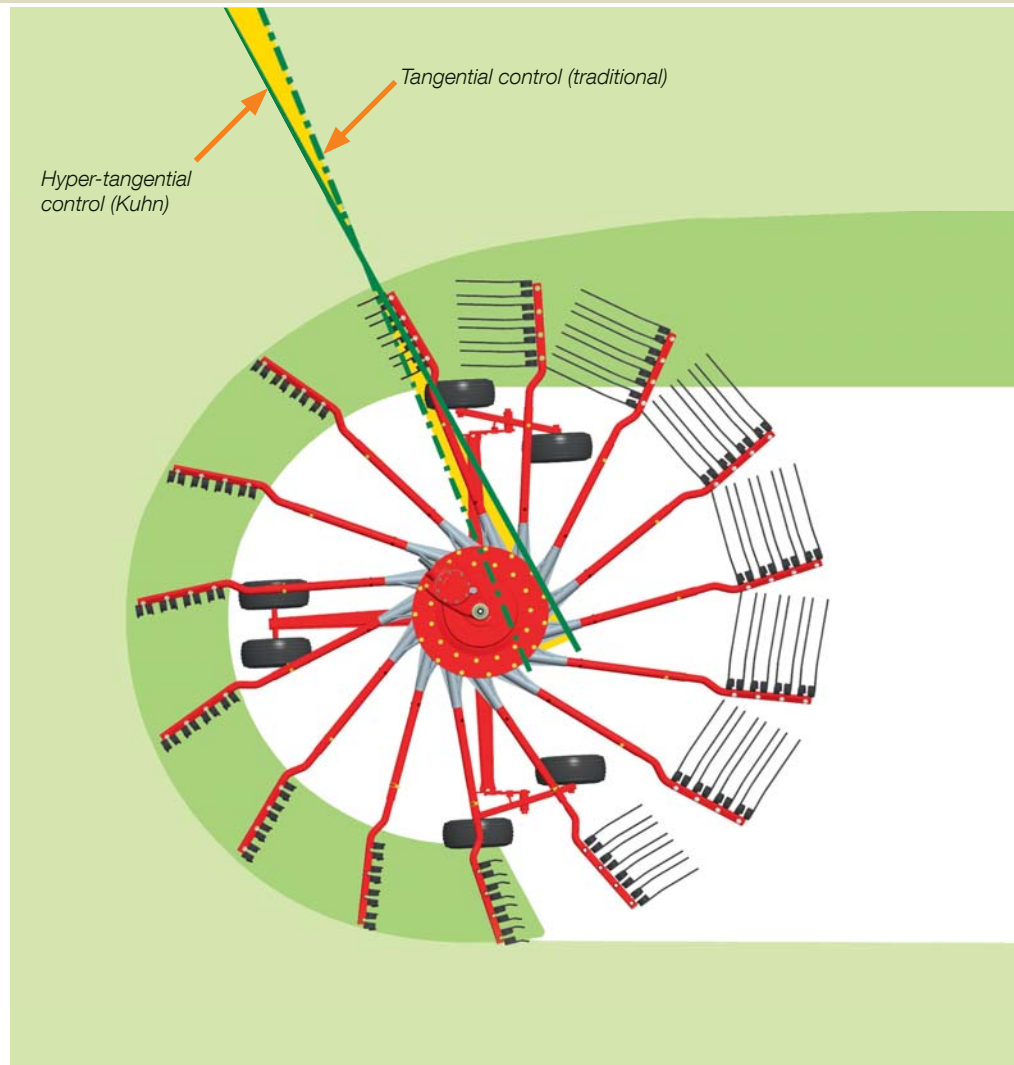
- Tine arms maintain a positive forward angle right up to the point where the forage is delivered to the windrow.
- The tines are raised quickly and at the very last moment before going over the top of the windrow.

These two simple principles allow Kuhn rotary rakes to create superb windrows that let air and sunlight in for faster drying.



IMPROVED WINDROW FORMATION

On GA rotary rakes, tine arms are not only positioned tangentially, but hypertangentially (except GA 300 GM and GA 3201 GM), meaning that they reach a 90° angle towards the windrow very late in their rotation. This, combined with the tine arms riding on a steep cam track, allows the tines to be raised very quickly when depositing into a windrow. This is ideal for forming fluffy and straight windrows for superior raking quality at high speeds. Fluffy windrows allow more air movement through the crop promoting faster drying!



MORE ADVANTAGES OF DOUBLE-CURVED TINE ARMS

1. They reduce the distance between tine arm passes. This decreases the risk of missed crop, allowing you to harvest the most crop possible even at high working speeds.
2. The weight of the tine arms is perfectly balanced at the center of the arms. Because there is no leverage on the arms during their rotation, the cam followers experience minimal stress resulting in a longer service life.



TINES WITH BENEFITS

Kuhn tines rake the crop gently, yet thoroughly, even in dense, heavy crop. Their heat-treated steel construction helps assure a longer service life and maximum resistance to fatigue. The floating tine attachment features large-diameter coils that reduce the risk of wear.

The tine height is easily and accurately controlled to collect all of the crop and not damage the stubble. As with all rotary rakes, proper tine height adjustment is essential to maximize service life.



CLEANER WINDROWS

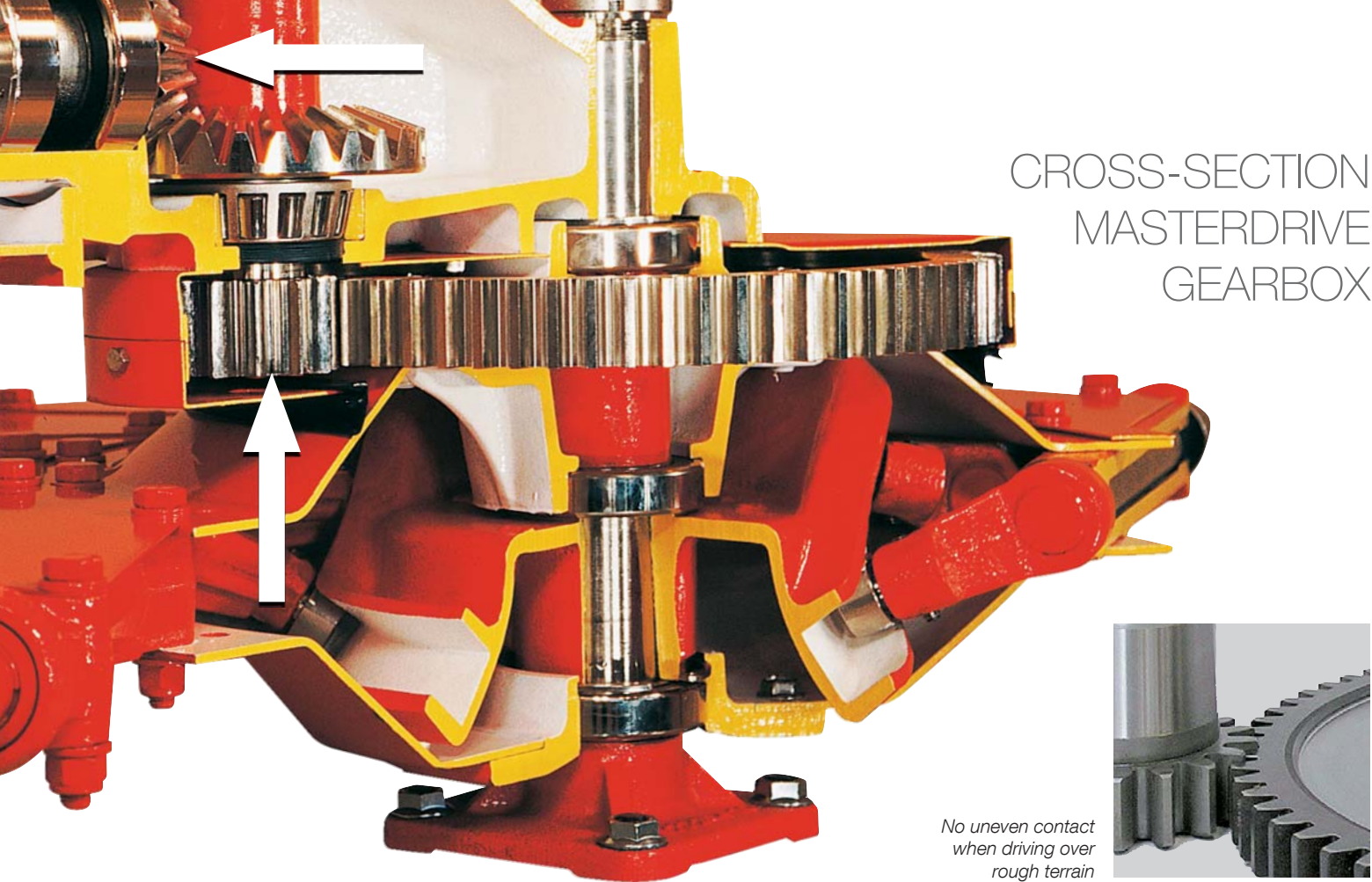
The traveling wheels on Kuhn rotary rakes are positioned extremely close to the rotor. This allows the tines to closely follow ground contours to avoid impurities and produce cleaner windrows.

KUHN PATENT

AN INTELLIGENT, ADJUSTABLE WINDROWING SYSTEM

The windrow curtain arm is mounted on a parallelogram frame for single-rotor models, including GA 3201 GM and GA 4220 TH on up. To adjust it, you simply turn a handle or set it from the tractor cab with an optional hydraulic cylinder. When extended outward, the curtain automatically moves to the rear; when retracted, it moves forward. This improves windrow formation and placement by ensuring that the curtain is always in the proper position for the crop.





CROSS-SECTION
MASTERDRIVE
GEARBOX

No uneven contact
when driving over
rough terrain

MAXIMUM STABILITY IN ALL CONDITIONS

The nutritional quality of forage is the most important factor in achieving higher feed performance. Faster harvesting, without reducing forage quality, is the key to lower costs and increased milk production or a higher rate of gain. Kuhn rotary rakes are built with key features to help you make these goals a reality.



THE MASTERDRIVE GEARBOX: MASTER TOUGH CONDITIONS

Today's agricultural machines need to withstand more stress as working widths increase and there is greater demand for maximum service life. For rotary rakes this is particularly true for the heart of the machine – the rotor drive. Kuhn has developed fully enclosed gearboxes for total protection of the drive parts and less wear. The Masterdrive gearbox has an over-built design that provides exceptional reliability and durability during intensive operation.

KUHN PATENT

The Masterdrive gearbox has an exclusive two-stage reduction drive with bevel and bull gears. Tolerances in the bevel reduction are tightly controlled for exceptional reliability and increased life of the entire assembly in difficult conditions.

With this system, wear on the gears is reduced to a minimum and almost no maintenance is required. The two stages also make it possible to include bigger bull gears with more teeth for better power transmission.

	Fully enclosed single-stage gearbox	Double-stage Masterdrive
GA 300 GM	●	-
GA 3201 GM	●	-
GA 3200 GT	●	-
GA 4220 TH	-	●
GA 4221 GTH	-	●
GA 4121 GM	-	●
GA 4321 GM	-	●
GA 4521 GM	-	●
GA 4521 GTH	-	●



TRAILED MACHINES FOR FAST HOOKUP

The simple clevis hitch offered on GT, TH and GTH models allows you to quickly hookup and go. The design of the tongue keeps the clevis connecting point square with the drawbar on hydraulic lift models.



MOUNTED FLEXIBILITY WITH TRAILED PERFORMANCE

Most of Kuhn's mounted rotary rakes feature a pivoting headstock (GM models) and perform in the same way as a trailed machine when raking. Working while turning does not alter the raking quality or windrow shape. This allows you to make faster turns with complete safety and helps ensure faster, easier harvesting even in tight field corners.



CUSHIONED SUSPENSION

The headstock suspension is standard on GA 4321 and 4521 models and optional on 4121 models. This suspension system acts as a cushion while maneuvering in the field and improves stability when working on slopes. When raising the rake, the dampener smoothly and automatically centers itself behind the tractor. For the GA 4321 and 4521 models, a second dampener can be added for working in very hilly areas.



ROTARY RAKES GA 3201 GM / GA 3200 GT

FULLY EQUIPPED FOR LOW AND MEDIUM HORSEPOWER TRACTORS

The GA 3201 GM and GA 3200 GT are the right machines for farms with smaller acreage and low or medium horsepower tractors. Equipped with nine tine arms, these rakes feature a 10'6" working width.



CV PTO

For maximum maneuverability without PTO chatter the GA 3200 GT is fitted with a CV PTO as standard equipment. This allows the tightest turns in field corners without the worry of driveline chatter and wear.

ROTARY RAKES GA 300 GM

DECADES OF PROVEN RELIABILITY

As the pioneer of rotary rakes with guided tine arms, Kuhn rotary rakes have always been considered the premier rotary rakes available on the market. The 3-point mounted GA 300 GM is no exception to this rule. With these machines you can obtain superior raking performance, while keeping the leaves of your crop intact and allowing you to harvest at its peak nutritional value.



NO MAINTENANCE REQUIRED

The tine arm drive components are housed in a fully enclosed gear case and do not require any special maintenance. For additional durability, the tine arm holders are fixed on both the upper and lower gear case covers.



GEARBOX
fully enclosed,
single-stage
bevel gear

NO COMPROMISES IN RAKING QUALITY

The nine tine arms of the GA 300 GM follow a cam profile that provides high clearance over the windrow. The pivoting headstock allows increased maneuverability and improved terrain following.



ADJUSTABLE WINDROW CURTAIN

The windrow width can be varied to match your crop conditions by moving the curtain in and out. The curtain height and the front to rear positioning can also be adjusted to meet your specific needs.

GA 3201 GM – parallelogram adjustment
GA 3200 GT – straight horizontal adjustment (shown above)



SIMPLE HEIGHT ADJUSTMENT

For optimum raking the tines should be set as low as needed to cleanly rake the crop without touching the ground. As stubble height varies, the height of the tines can also be adjusted.

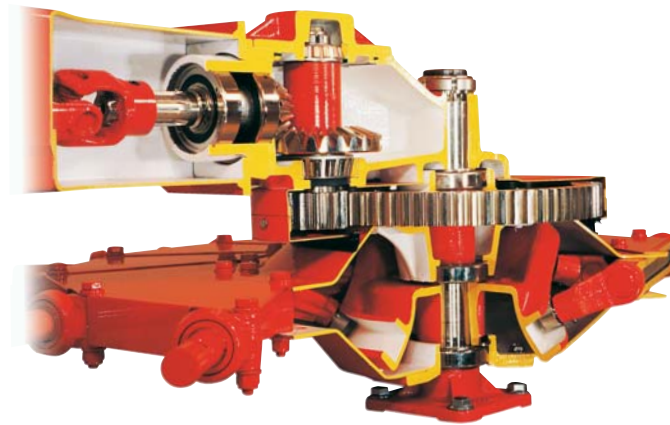
(GA 3200 GT only)

MEETING THE CHALLENGE OF VARYING FIELD CONDITIONS

When your operation requires a larger raking width, a heavy-duty design is critical for reliable performance and long service life. Kuhn rotary rakes meet this challenge with the exclusive Masterdrive gearbox for all single-rotor models above a 13' working width.

Ultimate Productivity

These mounted rotary rakes feature three important advantages — larger working widths, faster working speeds and increased maneuverability for outstanding productivity.



MASTERDRIVE

This fully enclosed gearbox incorporates a two-stage reduction drive for increased durability and reliability with a longer service life. It also provides improved power transmission for maximum efficiency.



CONSISTENT RAKING QUALITY

The left guard and windrow deflector can be easily raised and lowered with the assistance of the convenient spring design.



OUTSTANDING RAKING PERFORMANCE

The greater number of tine arms allows you to work at higher speeds while maintaining a slower rotor speed. This helps ensure that the crop is raked both cleanly and gently. The double-curved tine arm design increases capacity and enables optimum raking quality. The result is well-formed, airy windrows that decrease drying time and improve harvest efficiency.



RIGHT-HAND DELIVERY

For maximum operator efficiency and comfort, right-hand delivery is ideal. All Kuhn single-rotor rakes above a 13' working width feature right-hand delivery as standard due to the double-reduction gearbox. You can monitor raking quality and make adjustments at the same time with both the windrow and tractor controls conveniently located on your right side.



ROTARY RAKES 4521 GTH

EXCEPTIONAL LIFTING HEIGHT

The parallelogram-type drawbar and the design of the undercarriage allow horizontal lifting for transport or when crossing over windrows. You will benefit from 24 inches to clear formed windrows in the field and great stability during road transport.

ROTARY RAKES 4220 TH / 4221 GTH / 4521 GTH



TRAILED SIMPLICITY, SUPERIOR QUALITY

The GA 4220 TH, 4221 GTH and 4521 GTH rotary rakes are designed to meet the needs of hay producers who demand improved productivity while increasing the quality of their hay and forage crops. Long, flexible tines touch the crop just once, lifting and depositing it neatly into the windrow. This gentle raking action ensures that leaves remain intact. The large, well-formed windrows promote faster drying, enabling producers to harvest crops at their peak nutritional value with less reliance on the weather. Since the tines do not normally contact the soil, there is less opportunity for contaminants to enter the windrow, resulting in higher forage quality.



NARROW TRANSPORT WIDTH

Road transport can be accomplished with complete peace of mind — simply store the tine arms in the convenient rack at the front of the machine and fold up the guards vertically. Lighting and turn signals are also standard for maximum safety.

(Tine arm removal not possible on GA 4220 TH)



EXCLUSIVE SWATH CURTAIN ADJUSTMENT

A parallelogram linkage simultaneously moves the swath curtain to the rear as it is extended. This improves windrow formation and placement by ensuring that the curtain is always in the proper position relative to the crop.

PERFECT GROUND FOLLOWING

Equipped with standard bogie axles, GA trailed rotary rakes are designed to handle uneven ground. They smooth out bumps and holes keeping the distance between the ground and tines constant. The close positioning of the wheels to the tines provides smooth operation. The ultimate benefit is high-quality forage and no crop loss, while working at higher speeds without sacrificing stability.



Customized to Fit Your Operation

OPTIONAL EQUIPMENT



HYDRAULIC FOLDING

Select models (see specifications page) feature optional hydraulic control of the folding guards (1) as well as the windrow width (2) from the comfort of the tractor seat.



ADDED SUPPORT FOR SUPERIOR GROUND FOLLOWING

All mounted Kuhn rotary rakes can be fitted with an additional prop wheel at the front of the rotor. This additional wheel provides improved raking performance and enhanced following of changing ground contours.



ENHANCED STABILITY

GA 4321 GM and 4521 GM mounted models are available with an optional second dampener. This will allow these models to run more smoothly over bumpy ground and hilly fields.

Model Specifications

MOUNTED ROTARY RAKES	GA 300 GM	GA 3201 GM	GA 4121 GM	GA 4321 GM	GA 4521 GM
Hitch Type	3-Point – Cat 1 and 2	3-Point – Cat 1 and 2	3-Point – Cat 1 and 2	3-Point – Cat 2	3-Point – Cat 2
Number of Tine Arms	9	9	10	12	13
Number of Tines Per Arm	3	3	4	4	4
Removable Tine Arms	N/A	Standard	Standard	Standard	Standard
Foldable Safety Guards	N/A	Standard	Standard	Standard	Standard
Transport Width (Arms Removed)	9'2"/2.8 m	5'5"/1.65 m	5'8"/1.73 m	6'4"/2 m	7'3"/2.2 m
Working Width (Including Windrow)	10'6"/3.2 m	10'6"/3.2 m	13'5"/4.1 m	13'9"/4.2 m	14'9"/4.5 m
Approximate Windrow Width	2'8"/0.8 m	3'11"/1.2 m	4'3"/1.3 m	4'7"/1.4 m	4'7"/1.4 m
Clean Swept Width	7'3"/2.2 m	7'3"/2.2 m	9'2"/2.8 m	9'2"/2.8 m	10'2"/3.1 m
Rotor Diameter	8'8"/2.6 m	8'8"/2.6 m	10'6"/3.2 m	11'4"/3.5 m	12'/3.7 m
Dampener	N/A	N/A	Optional	Optional	Optional
Hydraulic Folding	N/A	N/A	Optional	Optional	Optional
Fully Enclosed Gearbox	Standard	Standard	Standard	Standard	Standard
PTO Speed	540 RPM	540 RPM	540 RPM	540 RPM	540 RPM
Minimum PTO Power Requirement	20 hp/15 kW	20 hp/15 kW	30 hp/22 kW	30 hp/22 kW	35 hp/26 kW
Tandem Axle	Optional	Optional	Optional	Standard	Standard
Prop Wheel	Optional	Optional	Optional	Optional	Optional
Tires	15 x 6-6	15 x 6-6	16 x 6.5-8 Super-Balloon	16 x 6.5-8 PR Super-Balloon	16 x 6.5-8 PR Super-Balloon
Road Light and Signaling	Optional	Optional	Optional	Optional	Standard
Machine Net Weight	631 lbs/286 kg	820 lbs/372 kg	1,190 lbs/540 kg	1,547 lbs/702 kg	1,796 lbs/815 kg

TRAILED ROTARY RAKES	GA 3200 GT	GA 4220 TH	GA 4221 GTH	GA 4521 GTH
Hitch Type	Drawbar	Drawbar	Drawbar	Drawbar
Number of Tine Arms	9	11	11	13
Number of Tines Per Arm	3	4	4	4
Removable Tine Arms	N/A	N/A	Standard	Standard
Foldable Safety Guards	N/A	N/A	Standard	Standard
Transport Width (Arms Removed)	9'/2.7 m	11'/3.35 m	6'5"/1.96 m	7'3"/2.2 m
Working Width (Including Windrow)	10'6"/3.2 m	13'5"/4.1 m	13'5"/4.1 m	14'9"/4.5 m
Approximate Windrow Width	2'8"/0.8 m	4'3"/1.3 m	4'3"/1.3 m	4'7"/1.4 m
Clean Swept Width	7'3"/2.2 m	9'2"/2.8 m	9'2"/2.8 m	10'2"/3.1 m
Rotor Diameter	8'8"/2.6 m	10'6"/3.2 m	10'6"/3.2 m	12'/3.7m
Hydraulic Folding	N/A	N/A	Optional	Optional
Fully Enclosed Gearbox	Standard	Standard	Standard	Standard
Wide Angle PTO Shaft	Standard	Standard	Standard	Standard
PTO Speed	540 RPM	540 RPM	540 RPM	540 RPM
Minimum PTO Power Requirement	20 hp/15 kW	30 hp/22 kW	30 hp/22 kW	35 hp/25.7 kW
Safety Chains	Standard	Standard	Standard	Standard
Tandem Axle	Optional	Standard	Standard	Standard
Tires	18 x 8.5-8	18 x 8.5-8 Hyper-Balloon	18 x 8.5-8 Hyper-Balloon	18 x 8.5-8 PR Hyper-Balloon
Machine Net Weight	661 lbs/300 kg	1,290 lbs/585 kg	1,377 lbs/625 kg	2,040 lbs/925 kg



COMPLEMENTARY PRODUCTS

MORE PRODUCTS TO MEET YOUR NEEDS

With over 690 models of equipment, we have the most complete implement line in the industry. Whether you have a small or large operation, we have a broad range of models and options to help fit your diverse needs.



1. Mowers
2. Mower Conditioners
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4. Round Balers
5. Bale Processors
6. TMR Mixers

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Our machines comply with the North American safety regulations. In our leaflets, to better illustrate certain details of the machines some safety devices could have been removed. Conforming to the assembly and operator's manual, in no circumstances must machine be operated without these safety devices in place. All machines are equipped with safety devices which comply with the regulations of the countries in which they are delivered. In the interest of progress, we reserve the right to change without notice any specifications, design or materials listed. Patents filed in several countries.

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