

Hay Mergers | Twin and Triple



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MERGE MAXX[®]

MM 700 / 890 / 1100 / 1300



Invest in Quality[®]

MERGE MAXX® MM 700 / 890 / 1100 / 1300

MAXIMUM PRODUCTIVITY AND PERFORMANCE

EXCEL IN MERGING ALL CROP TYPES

KUHN Merge Maxx® hay mergers are the widest and most efficient mergers on the market today, creating the fluffiest and easiest to harvest windrows. They are unique in the industry and unmatched in simplicity of operation, durability and merging capabilities. They excel with merging all different types of forages.

QUICK AND EASY TO USE

KUHN hay mergers are designed so you can easily make adjustments without having to leave the comfort of the tractor cab. This helps with your crop harvesting and results in higher quality forage.

MULTIPLE WINDROW OPTIONS

From narrow windrows to wide swaths, these models offer the broadest range of merging options to best match different harvesting practices and field conditions.

MERGE MAXX®

Twin and Triple Hay Mergers
in brief

Models	Individual Pickup Width			Continuous Pickup Width	Transport Width	Horsepower Requirement
MM 700	12' (3.7 m)			24' (7.3 m)	10' (3 m)	100 hp (75 kW)
MM 890	15' (4.6 m)			30' (9 m)	10'3" (3.1 m)	120 hp (90 kW)
MM 1100	12' (3.7 m)			36' (11 m)	12'1" (3.7 m)	140 hp (104 kW)
MM 1300	Left: 15' (4.6 m)	Center: 12' (3.7 m)	Right: 15' (4.6 m)	42' (13 m)	12'1" (3.7 m)	140 hp (104 kW)

IT ALL STARTS WITH THE PICKUP

Cutting-Edge Merge Maxx® Hay Mergers

When it comes to merging crop, a tough, durable pickup that operates in varying conditions is the first and most critical step. Merge Maxx pickups are designed to be the most dependable whether merging fine, delicate legumes, thick, heavy grass or anything in between. Outstanding flotation characteristics and an optimized design makes merging a simple and low-maintenance job.



SPLIT BEARING DESIGN

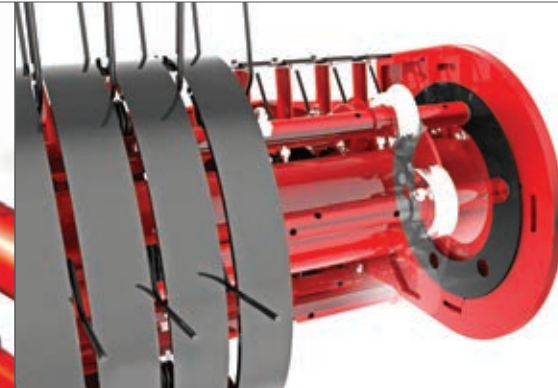
The two-piece, poly tine-bar bearing greatly simplifies periodic maintenance. Its design allows you to replace the bearing in under one minute, unlike competitive machines which require you to remove tine bars and tines to replace worn bearings. Additionally, a specially formulated bearing material maximizes bearing life and minimizes friction.



BEARING WEAR SLEEVES

Exclusive in the industry, standard bearing wear sleeves maximize tine bar life by providing an easily replaceable, split mounting surface. If you're merging in abrasive soils, you'll especially appreciate this feature as a wear sleeve set can be replaced, with the tine bar installed, in under one minute.

Wear sleeves shown in black.



ANTI-WRAPPING DISCS

To minimize wrapping in long crops, such as oats or long grasses, patented HDPE anti-wrapping discs are installed at the ends of the pickups and rotate with the tine bars. This small improvement reduces the dead space, where long crop likes to wrap, as seen with all pickup style mergers.



HIGH-CAPACITY PICKUPS WITH INTEGRATED FRAMES

Commercially designed pickups treat crop gently, yet are built and tested for extreme use. A high-strength, steel alloy greatly improves wearing characteristics. The dual-cam design, with heavy-duty, sealed cam followers, provides extra-long life even in the toughest conditions. KUHN high-capacity pickups are designed and built with integrated frames to improve the strength and durability. The pickups keep the machine looking clean since there is no place for crop to catch and build up.



CROP NETTING

Standard crop netting limits leaf loss during transition to the belt and ultimately improves leaf incorporation in the windrow. Users can adjust the netting from fully extended to halfway or fully retracted to match their needs.



FLOATING WINDGUARD

The floating windguard eliminates the need to make routine adjustments when merging different crops or cuttings. The simple geometry of the floating linkage means the windguard is automatically optimized for differing volumes of crop. The long, curved guiding fingers provide excellent crop guidance onto the belt for fluffy, even windrow creation, increasing harvest speed.

MERGE MAXX® MM 700 / 890 / 1100 / 1300

VERSATILE & ADAPTABLE TO MEET YOUR NEEDS



MULTIPLE DELIVERY OPTIONS

The MM 700, 890, 1100 and 1300 can merge crop to the left, right, split or with either wing in the raised position. Having the ability to raise the wings independently is particularly useful for opening up fields, merging around obstacles or cleaning up point rows in irregularly shaped fields.



NARROW AND SIMPLE TRANSPORT

The simple folding design allows quick transition from field to road. Transport is a narrow 10' (3 m) wide on the MM 700, 10'3" (3.1 m) wide on the MM 890 and 12'1" (3.7 m) on the MM 1100 and MM 1300. Balanced tongue weight during transport and in the field helps you maintain control at all times.



HEAVY-DUTY CONVEYORS

Commercial-grade belt conveyors allow the crop to effectively transition into the windrow, regardless of discharge side. The conveyor belt is self-cleaning and requires no tracking adjustments. Each conveyor has an easy-to-access splice for fast removal or replacement if necessary due to maintenance and normal wear.



2-POINT HITCH

The specially designed 2-point hitch makes hookup quick and easy. The swiveling headstock eliminates driveline chatter and allows up to 90-degree turns. The hitches on all KUHNN MM hay merger models are quick hitch compatible. An integrated stand on each merger provides a large footprint and swings and locks easily when attached to the tractor.



CONSTANT FLOAT® SUSPENSION

A simple and effective mechanical suspension system is utilized for superior flotation. This unique design, inspired by the proven KUHNN trailed disc mowers, eliminates complicated hydraulic requirements and the need for tractor float valve engagement, unlike other mergers in the industry.



BELT TENSION ADJUSTMENT

The quick-release belt tensioning system simplifies storage and routine adjustment. Easy adjustment from one side maintains uniform pressure over the width of the belt. It is recommended to take the tension off of the belts in between cuttings and during the off season.



NO STEERING AXLE NEEDED

Merge Maxx® twin and triple mergers do not require a steering axle, even on steep hillsides. This is a result of the short wheelbase and is an advantage over competitive mergers. This simplification reduces routine maintenance and improves overall reliability. An added benefit of the short wheelbase is reduced tongue weight, so the tractor does not get "pushed around" by the merger.



HYDRAULIC ON/OFF BELT CONTROL

When raising the pickups at the headlands, the belts and pickups automatically turn off to keep crop from being sent into the headland at the end rows. Operators can lower the pickups to the working position when coming back into the windrows to make the pickups automatically turn back on and deposit the remaining crop into the windrow. A single button control allows for only the belt to be disengaged in the working position to gather any extra or missed crop and then place it in the windrow.

Standard on the MM 700 Deluxe, MM 890, MM 1100 and MM 1300 models.





LOW MAINTENANCE COSTS

The MM 700 requires very little maintenance for its size. Following factory recommended intervals, the machine requires less than one tube of grease per year.



MANUAL PICKUP HEIGHT ADJUSTMENT

Quickly adjust pickup height for each head in between crops or when field conditions dictate. Turnbuckles can be adjusted and locked with little effort. The turnbuckles are replaced by hydraulic cylinders when ordering the hydraulic pickup height control option.

MERGE MAXX® MM 700

DOUBLE DOWN ON YOUR PRODUCTIVITY

With 24' (7.3 m) of pickup in a single pass, the MM 700 merger has 90% of the capabilities of a 30' (9 m) merger at a substantially lower price point. It is unique in the industry and unmatched in its simplicity of operation, durability and merging capabilities. There are two models available.

The basic model is designed for an operator who desires a simple machine to operate. Adjustments of the pickup speeds and belt direction are performed manually on the machine.

The deluxe model comes with a simple and straight-forward control terminal which can adjust pickup speed, belt direction and belt shutoff from the cab.

MM 700 DELUXE MODEL ONLY



IN-CAB CONTROL TERMINAL

With this simple terminal you can rapidly make all common in-field adjustments. Quickly select and change conveyor belt direction, shut off belts at headlands and change pickup speed to match crop conditions. You are also able to hydraulically adjust the pickup height if the hydraulically adjustable skid shoe option is installed.



ELECTRONIC VARIABLE PICKUP SPEED CONTROL

With the Deluxe model, quickly and easily adjust pickup speed inside the cab on-the-go to perfectly match crop conditions. With this feature you can maximize leaf retention, especially if merging drier legumes such as alfalfa. In heavy, grass crops, the pickups can also be sped up to provide faster working speeds.





FLOATING SKID SHOES

Dual, wide skid shoes allow each head to rapidly adapt to undulating field conditions while maintaining a very low ground pressure. Floating skid shoes are a KUH N exclusive. The pivoting action allows the pickups to float over pivot tracks and rough terrain. Additionally, the special shape and pivoting of the shoe allows for self-cleaning when lifted into the headland position to eliminate crop buildup. The skid shoes are reversible on their mounts for even wear and longer life.



CENTRAL LUBRICATION SYSTEM

These mergers require very little maintenance for their size. A centralized greasing system is standard on the machine where one grease point is used to grease the whole machine. Following factory recommended intervals, the machine (not including the driveline) requires less than one tube of grease per year with the optional grease pump installed and set to grease every eight hours.

MERGE MAXX® MM 890 / 1100 / 1300

TAKING EFFICIENCY...TO THE MAXX

With 30', 36' and 42' (9 m, 11 m and 13 m) of pickup in a single pass, KUH N MM 890, MM 1100 and MM 1300 Merge Maxx® hay mergers are the largest and most efficient machines on the market today. They are unique in the industry and unmatched in simplicity of operation, durability and merging capabilities.

Designed for commercial operations, the MM 890, MM 1100 and MM 1300 incorporate 6-tine bar cam pickups with exclusive tine arm wear sleeves and anti-wrapping discs. The floating windguard allows the operator to lay down smooth and even windrows to make the forage harvester more efficient. The crop netting improves leaf retention into the windrow. Simple and durable mechanical flotation on each head eliminates the need to engage float via the tractor's hydraulics. Each pickup has its own flotation slots that allow each pickup to follow the changing terrain closely to get a clean field and provide a well-formed windrow to increase harvester efficiency. All functions of the machine are controlled from the comfort of the cab using an ISOBUS terminal. ISOBUS compatibility, an industry exclusive, is standard and allows for improved operator ergonomics and reduced fatigue.



HYDRAULIC DRIVE

Belts and pickups are driven using the onboard hydraulic pumps with hydraulic oil from a 43-gallon (163 L) reservoir on the MM 890 and 67-gallon (254 L) reservoir on the MM 1100 and 1300. This large-capacity reservoir ensures that cool oil is always being circulated through the system. The massive reservoir surface area and specially designed system provides excellent cooling in even the hottest conditions, keeping the machine moving in tight weather windows. A sight gauge is provided on the side of the tongue to quickly check oil levels.



HYDRAULIC CONTROLS

The hydraulic drive pumps oil through the main hydraulic block to run all the functions of the machine including pickup speed, belt direction and pickup height. All of these functions are electronically controlled via the tractor's ISOBUS terminal, or the optional CCI 50 or CCI 1200 ISOBUS terminals. Each section of the hydraulic block controls one pickup head on either the MM 890, MM 1100 or MM 1300 and is easily accessible from the rear of the machine.



HYDRAULICALLY ADJUSTABLE PICKUP HEIGHT

The hydraulically adjustable pickup height allows an operator to easily make changes from the ISOBUS terminal via the skid shoe adjustment. Height change is synchronized and accomplished through a cylinder mounted on each head. Relative head height is visible via the gauge on the terminal.



THE DIFFERENCE IS CONTROL

One key to achieving the productivity you expect from your KUHN machine is the user friendly interfaces we offer. Users can tailor their machine to their field and crop conditions to maximize the efficiency. We listened carefully to the users of our machines to develop our new user interfaces and monitors. The objective is to have a clear view of what your machine is doing at any time and to have all the important settings at your fingertips. The IntelliMerge™ ISOBUS control system allows the operator to run the machine, make adjustments, receive performance feedback and carry out diagnostics. The KUHN VT 30, CCI 50 or CCI 1200 monitors can be used with other ISOBUS compatible machines.



VT 30

The VT 30 monitor controls the merging process all from the tractor cab. The 3.5" (8.9 cm) color touchscreen provides the same user interface as the other KUHN mergers, making it an easy to understand monitor for all drivers. The VT 30 is equipped with both touchscreen and soft keys for an intuitive control under all circumstances. It is connected to the tractor using a 3-pin connector. *Only available on the MM 890.*



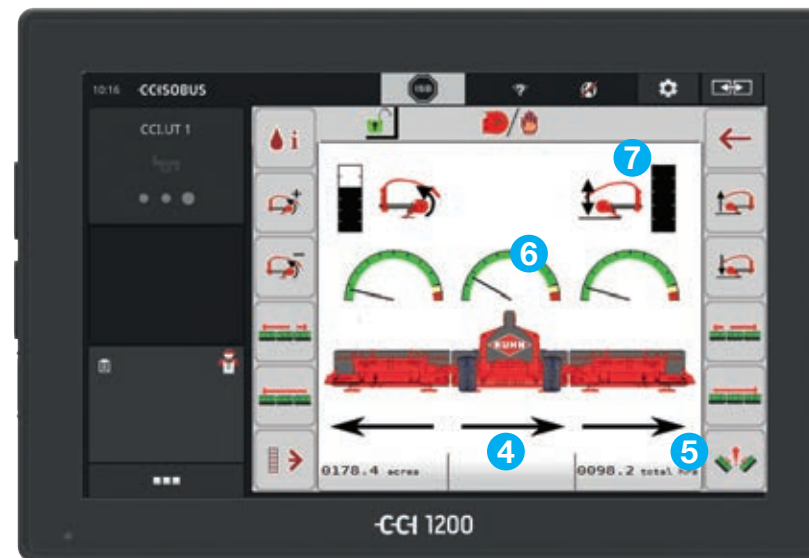
CCI 50

The MM 890, MM 1100 and MM 1300 are fully ISOBUS compatible. This means the intuitive interface can be displayed on all UT compliant monitors. The CCI 50 is a full ISOBUS monitor with a 6" (15 cm) color touchscreen. It can be controlled using the touchscreen and/or the soft keys. A selection of CCI Apps can be used on the CCI 50 to utilize your monitor year round.



CCI 1200

The CCI 1200 is KUHN's state-of-the-art ISOBUS monitor. The 12" (30 cm) color touchscreen has a programmable view. For example, you can see the map display and the machine interface on the same screen. It offers wide compatibility with CCI Apps and can be your portal to precision farming. The CCI 1200 comes in a storage box for it to be stowed away securely when not in use.



OPTISENSE™ BELT STALL INDICATOR

The OptiSense™ belt stall indicator alerts the operator when the belts start to slow down, as a result of max capacity, when approaching the capacity of the machine. This gives the operator a chance to react before the machine plugs. If the belts stop, the sensor will shut down the machine to avoid damage to the belts and further plugging of the machine. The conveyor direction arrow will be red to identify the stalled conveyor. This is done by monitoring the idler roller speed on each conveyor. This feature optimizes the merger operator performance keeping the machine moving across the field for improved efficiency.

Only available on the MM 890.

THE WORLD'S FIRST ISOBUS COMPATIBLE HAY MERGERS!

These user interfaces get you in and out of the field faster to save you valuable time and money. Let's look a bit closer into the heart of the world's first two ISOBUS compatible hay mergers.

- 1. With the electronically controlled speed adjustment system,** an operator can quickly and easily adjust pickup speed inside the cab on-the-go to perfectly match crop conditions. With this feature you can maximize leaf retention, especially if merging drier legumes such as alfalfa. In heavy grass crops, the pickups can also be sped up to promote faster working speeds.
- 2. In automatic mode,** the merger will adjust pickup speed automatically as ground speed varies. This maximizes pickup efficiency, while minimizing damage to crop and wear of the pickup.
- 3. Acre and hour counters** can be used by reading the tractor's speed and machine width to aid in recording custom operations.
- 4. The electronic conveyor directional control** allows operators to rapidly change the direction from all left, all right or split directly from the operator's seat by simply touching the appropriate key. Operators merging in fields with varying volume throughout may find this particularly valuable.
- 5. Cleanout mode** can be activated in the instance of a plugged machine. This feature lets the operator unplug and cleanout the machine from the cab without ever having to leave the tractor.
- 6. Pickup efficiency** indicates relative capacity of the pickups giving a visual indication to the operator of machine efficiency.
- 7. The hydraulically adjustable pickup height** allows an operator to easily make changes from the ISOBUS terminal via the skid shoe adjustment. Height change is synchronized and accomplished through a cylinder mounted on each head. Relative height is visible via the gauge on the terminal.



OPTIONAL EQUIPMENT

MERGE MAXX MM 700 / 890 / 1100 / 1300



SWATHBOARD

The optional right-side swathboard mimics the windrow formation of a rotary rake. With this simple, bolt-on device, you can make a well-formed, boxy windrow, well suited for a baler. Additionally, forage harvester operators will find it improves windrow formation even further, increasing harvester efficiency. *MM 700 and MM 1100 only.*



4' BELT EXTENSION

The 4' (1.2 m) belt extension on the right side optimizes merging capability behind a 15'–18' (4.6–5.5 m) mower conditioner. It includes a bolt-on frame and belt extension, giving you the ability to merge up to 90' (27.5 m) of crop together in a 10' (3 m) or less windrow to maximize harvester efficiency. *MM 700 and MM 890 only.*



HYDRAULICALLY ADJUSTABLE SKID SHOES

The optional hydraulically adjustable skid shoes allow an operator to easily make pickup height changes from the cab. A standard reference gauge on the machine allows for the operator to easily identify the preferred pickup height. Hydraulically adjustable skid shoes are available on the MM 700 as an option and requires one extra set of dual-acting hydraulic valves. *Standard on the MM 890, MM 1100 and MM 1300.*



WIDE TIRES

The MM 700 comes standard with 16.5L x 16.1" implement tires. Wider 500/45-22.5 flotation tires can be utilized to keep field compaction low. Additionally, the bar tread design helps prevent rutting if merging in wet field conditions. The MM 890 comes standard with 500/45-22.5 flotation tires. The MM 1100 and MM 1300 both come standard with 550/45-22.5 flotation tires.

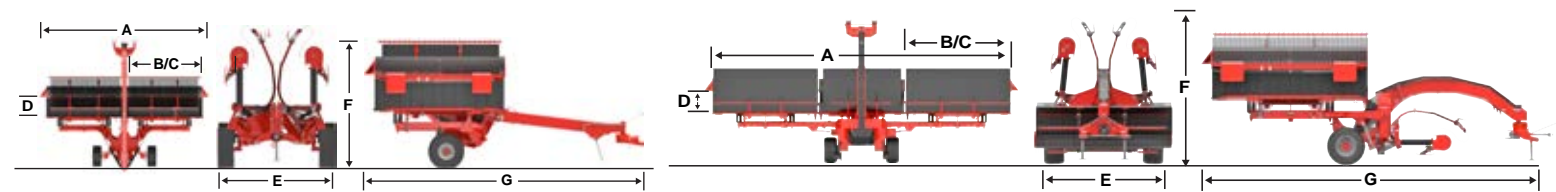


AUTO-LUBE GREASE PUMP

Take the guess work out of maintenance. When the terminal is on and there is grease in the pump, the machine is getting lubricated. This system saves the operator time every day. *Available on the MM 890, MM 1100 and MM 1300.*

MM 700 / 890

MM 1100 / MM 1300



Model Specifications

	MM 700 BASIC	MM 700 DELUXE	MM 890	MM 1100	MM 1300
DIMENSIONS					
A – Working width	24' (7.3 m)		30' (9 m)	36' (11 m)	42' (13 m)
Number of pickups and conveyors	2			3	
B – Individual pickup width	12' (3.7 m)		15' (4.6 m)	12' (3.7 m)	Left pickup: 15' (4.6 m) Center pickup: 12' (3.7 m) Right pickup: 15' (4.6 m)
C – Conveyor length	11'10" (3.7 m)		14'10" (4.5 m)	11'10" (3.6 m)	Left: 14'10" (4.5 m) Center: 11'10" (3.6 m) Right: 14'10" (4.5 m)
D – Conveyor width	3' (1 m)				
Discharge capability	Right, left, or 50/50 split			Right, left, or split	
Pickup windguard	Standard				
Adjustable crop nets	Standard				
Number of tine bars	6				
Cam followers	Sealed roller bearings				
Pickup height	5/8" - 3 1/8" (16 - 80 mm)				
Adjustable skid shoes	Manual	Hydraulic option	Hydraulic		
Header flotation	Constant Float® suspension				
Header suspension travel	14" (+8", -6") 35.6 (+20.3, -15.2) cm		14" (+8", -6") 35 cm (+20 cm, -15 cm)	14" (+8", -6") 35.6 cm (+20.3 cm, -15.2 cm)	
Hitch	2-point swivel hitch, Cat. 2, 3N and 3, quick hitch compatible		2-point swivel, Cat. 2/3N/3/4N, quick hitch compatible	2-point swivel, Cat. 3/4N/4, quick hitch compatible	
Self-contained hydraulic drive	Standard				
Electronic variable pickup speed control from tractor cab	Manual	Standard in-cab with KMM 20 Control Box	via ISOBUS terminal		
Conveyor direction control from tractor cab	Manual	Standard in-cab with KMM 20 Control Box	via ISOBUS terminal		
ON/OFF conveyor control without disengaging the pickup	Manual	Standard in-cab with KMM 20 Control Box	via ISOBUS terminal		
Pickup height gauge	Standard				
E – Transport width	10' (3 m) 10'3" (3.1 m) with 500/45 - 22.5 tires		10'3" (3.1 m)	12'1" (3.7 m)	
F – Transport length	24'6" (7.5 m)		28'4" (8.7 m)	29' (8.8 m)	32' (9.8 m)
G – Transport height	12' (3.7 m)		12' (3.7 m)	12' (3.7 m)	
Tires	Standard 16.5"L X 16.1" 10 - ply imp. tires, mounted		500/45-22.5 flotation	Standard 550/45-22.5 flotation tires, mounted	
Central lube system	-		Standard	Standard	
PTO	1 3/8" - 21 spline				
PTO speed	1,000 rpm				
Minimum PTO power requirement	100 hp (75 kW)		120 hp (90 kW)	140 hp (104 kW)	
Road lights and signaling	Standard				
Required tractor electrical connections	1 SAE 7 pin light connection		1 SAE 7 pin light connection, 12V power, ISOBUS plug	1 SAE 7 pin light connection, 12V power, ISOBUS plug	
Required tractor hydraulic connections	2 DA (10 gal/min - 1,650 psi) no float valve required		2 DA; no float valve required	3 DA; no float valve required	
Kit to wire control box directly to battery	-		Standard	-	

MERGE MAXX® MM 700 / 890 / 1100 / 1300

COMPLEMENTARY PRODUCTS

MORE PRODUCTS TO MEET YOUR NEEDS

With over 700 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
3. Tedders
4. Balers
5. TMR Mixers
6. Manure Spreaders

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www.kuhn.com



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Your KUHN dealer

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