

Fixed Chamber Round Balers

FB 3130 - FB 3135 - FBP 3135



www.kuhn.com



be strong, be **KUHN**



KUHN FIXED CHAMBER ROUND BALERS UNRIVALLED CAPACITY



OUR CORE VALUES: CAPACITY

Our goal is to develop machines that will give a boost to the profitability of your company. High output is a key success factor for every baler. KUHN round balers feature several unique points that will deliver this capacity to your company.



CONSISTENCY

Perfect shaped, consistent round bales are the end-result which every customer is looking for. With over 30 years of experience in baling, our machines can produce exceptional high bale densities even in the most demanding conditions.

RELIABILITY

To achieve maximum efficiency of your machine, an unmatched reliability is a must. KUHN offers the most efficient and versatile range of balers available on the market designed with simple, but efficient techniques. This results in a minimum in down time and a machine that you can trust.

Type	1		2	3	4
Crop	Straw	Hay	Haylage	Silage	Wet Silage
Dry matter	95 to 80%	95 to 82%	82 to 65%	65 to 30%	30 to 20%

								
Type	1	2	3	4	1	2	3	4
FB 119	●	●						
FB 2130 OPTIFEED	●	●	●					
FB 2130 OPTICUT 14	●	●	●	●				
FB 3130 OPTIFEED	●	●	●	●	●	●	●	●
FB 3130 OPTICUT 14	●	●	●	●	●	●	●	●
FB 3135 OPTICUT 14	●	●	●	●	●	●	●	●
FB 3135 OPTICUT 23	●	●	●	●	●	●	●	●
FBP 3135 OPTICUT 14	●	●	●	●	●	●	●	●
FBP 3135 OPTICUT 23	●	●	●	●	●	●	●	●

CROP INTAKE

DIFFERENT INTAKE SYSTEMS



CONSISTENT BALE SHAPE

THE IMPORTANCE OF BALE SHAPE

Consistent shaped bales bring more than just aesthetic appeal. A consistent filled bale represents quality in every form. Perfect firm round bales have less air in the bale, resulting in high quality feed!

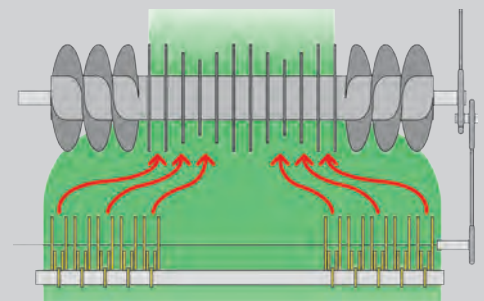


OPTIMAL INTAKE PERFORMANCE

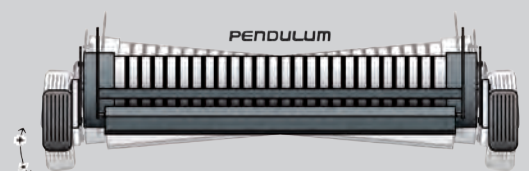
Both OptiFeed and OptiCut models feature a cam-track pick-up unit. The cam-track pick-up unit is designed to match the full capacity of the machine. The 230 cm wide pick-up delivers maximum ground adaption by its pendulum capabilities for optimal crop intake. The machine is capable of working in all swaths and will not let you down, even in the harshest conditions. The 5 tine rows and short crop roller ensure a fluent and clean raking job, even at high forward speed. To adapt the machine to your purposes, you have the choice between fixed and pivoting pick-up wheels.

INTEGRAL ROTOR - CROP CUTTING QUALITY

The balers are equipped with the patented* Integral Rotor Technology with double tines made out of HARDOX® wear plates. HARDOX® combines extreme hardness and toughness with minimum wear of the rotor tines. The simple, maintenance free, short distance intake system guarantees an enormous throughput capacity at all times regardless of the various (crop) conditions. The short distance between rotor and pick-up tines gives an outstanding crop flow. This force-fed intake makes higher forward speeds possible for outstanding productivity and reduced crop damage.



*Patent or patent pending in one or more countries



CROP INTAKE

NON-CUTTING VERSION



When cutting the crop is not required, the OPTIFEED intake system ensures a controlled and consistent crop flow to the bale chamber. (availability dependent on FB model):

OPTIFEED ROTOR

The OPTIFEED rotor with double feeding tines, made out of HARDOX® wear plates, and integrated augers, provide a consistent flow of crop into the bale chamber. This rotor design helps even out windrows by moving them where needed for consistent bales every time. The OPTIFEED rotor can optionally be equipped with a retrofit kit with knife banks providing a cutting intake system.

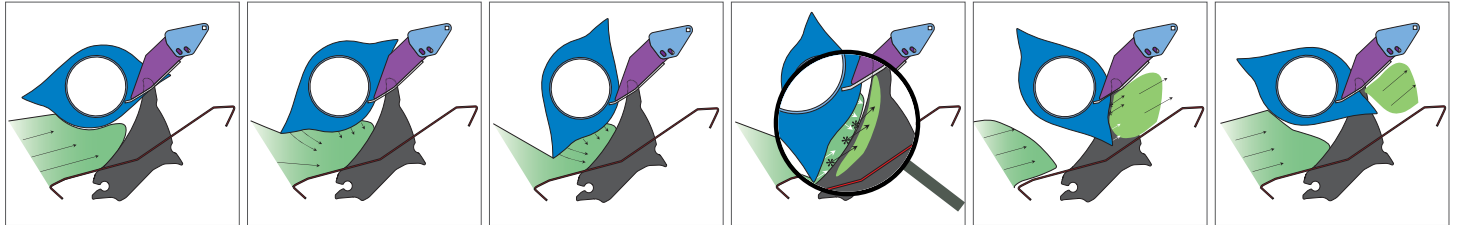


CROP INTAKE

CUTTING VERSIONS



The KUHN OC cutting systems, with ellipse shaped tines, are designed for unlimited intake capacity and excellent cutting quality. They are acknowledged by users as one of the best cutting systems on the market. The silage is guided and drawn to the knives in an early stage which improves flow and cutting performance and also prevents unwanted blockage. There are two different types of KUHN OC cutting systems. (availability dependent on FB model).



OPTICUT 14

The 14-knife OPTICUT cutting system provides a theoretical cutting length of 70 mm. Each single knife is spring protected against damage from foreign objects. The FB-FBP 3135 offers group selection on the OptiCut 14, with the choice between 0, 4, 7, 7, or 14 knives in operation.



OPTICUT 23 (available for FB 3135 & FBP 3135)

The Integral Rotor with the 23-knife OPTICUT system from KUHN has the benefits of intensive cutting with a theoretical cutting length of 45 mm. Each single knife is spring protected against damage from foreign objects. With group selection the operator can choose to have 0, 7, 11, 12, or 23 knives in operation.



GROUP SELECTION (OPTICUT 14)



DOUBLE SECURITY SYSTEM

DROPFLOOR

The intake unit is protected by the main PTO clutch. In case of a rotor blockage, the floor and knives can be lowered hydraulically from the tractor cab. After the blockage is cleared, they can easily be brought back into work position.



ROTOR DISENGAGEMENT

In extreme circumstances double security is provided by a standard hydraulic rotor disengagement clutch. The rotor drive can be hydraulically disengaged from the bale chamber drive, enabling the binding and discharge of the bale from the chamber.



Hydraulic Rotor Disengagement

INTEGRAL ROTOR type	FB 3130	FB 3135	FBP 3135
OPTIFEED - Without cutting device	• (DROPFLOOR)		
OPTICUT 14 - 70 mm cutting length	• (DROPFLOOR)	• (DROPFLOOR & GROUP SELECTION)	• (DROPFLOOR & GROUP SELECTION)
OPTICUT 23 - 45 mm cutting length		• (DROPFLOOR & GROUP SELECTION)	• (DROPFLOOR & GROUP SELECTION)



PERFECT BALE FORMATION

Producing many silage, hay and straw bales each season requires expert engineering of the machine. To compress the crop into bales with a consistent size and density, the baling process has to be as effective as possible while being gentle on the crop.



BALE CHAMBER

The redesigned heart of the balers consists of 18 POWER TRACK rollers. The 18 renewed POWER TRACK rollers have symmetrical profiles which generate exceptionally high density and reliable bale rotation in all crop conditions. All rollers are made of 3,2 mm thick high-strength steel which are roll-formed and laser-welded on only one side for optimal durability. In addition, a minimum of space between the rollers reduces crop loss.



FAST TAILGATE DETECTION

The tailgate opens and closes in $\geq 4,5$ seconds (60 l/min oil flow) thanks to its stable design with torsion pipes. Strong hydraulic tailgate cylinders keep the tailgate closed and ensure a consistent bale size with maximum bale density. These cylinders act as a hydraulic lock and prevent the baler from overloading (POWER LOCK). Highly accurate tailgate sensors monitor the bale growth as from 80%. You are notified about the baling process through the bale growth indicator. In addition, the FB 3135 & FBP 3135 allow you to guide the baler according to the left-right bale chamber filling indication displayed on the terminal for extra driver comfort. This results in optimum bale shape and density.



AUTOMATE

FULLY AUTOMATIC OPERATION

A new unique feature on the FB 3135 is the AUTOMATE function. The FB 3135 AUTOMATE is a fully automatic round baler. The AUTOMATE function benefits operators as it offers a high level of comfort by means of ergonomics and stress-free working.



WHAT DOES AUTOMATE INCLUDE?

- Fully automatic tailgate operation: tailgate opens and closes without interference from the operator
- Fully automatic rotor DEBLOCK system: DROPFLOOR opens and closes without interference from the operator when a blockage occurs.
- Fully automatic knife cleaning: OPTICUT knives are cleaned after the predefined number of bales has been reached.
- Bale kicker: controls the tailgate not to open any further than necessary during kicking out the bale (maximum bale output)
- Quick switch between Open Center and Load Sensing functionality (LS connection hose field installed option)



FULLY AUTOMATIC TAILGATE OPERATION

The FB 3135 with AUTOMATE function offers the operator a high level of comfort by means of ergonomics and stress-free working. The tailgate opens automatically* as soon as the net is applied, without interference from the driver. The bale kicker notices when the bale is out of reach and the tailgate is not opened any further than necessary for maximum bale output! The operator can concentrate fully on the driving process.

The highly detailed process overview on the terminal informs the operator about the ongoing activity. Visual and acoustic signals on the baler before and during the automatic tailgate process warn spectators and improve safety of operation.



Automatic tailgate process overview

*Depending on driving mode



Net binding is being applied, visual and acoustic signals on the baler are activated.



Tailgate opens automatically.



Bale kicker notices when bale is out of reach. The tailgate is not opened any further than necessary. The tailgate closes automatically.

AUTOMATE

FULLY AUTOMATIC ROTOR DEBLOCK SYSTEM - (standard on FB 3135 AUTOMATE & FBP 3135)

The balers overload protection clutch activates whenever the balers intake gets obstructed by the amount of crop to be fed in. The DROPFLOOR automatically* lowers and the knives are retracted. The operator is informed about the ongoing process via the terminal. After the PTO is re-engaged, the rotor restarts and the crop is guided unobstructed in the bale chamber, the DROPFLOOR and knives automatically return to their position.



Automatic DEBLOCK process overview



FULLY AUTOMATIC KNIFE CLEANING

The OPTICUT knives are automatically cleaned after the predefined number of bales has been reached in the program. This will keep the knife slots clean for easier removal of the knives at the end of the working day.

CONTROL SYSTEMS

The FB 3135 AUTOMATE can be controlled in 3 different ways:

- Manual (press and hold buttons to activate the process)
- Semi-automatic (press button to start cycle)
- Fully automatic mode

AUTOMATE

BRINGS YOUR BALING OPERATION
TO THE NEXT LEVEL



BUILT TO LAST

HIGHEST DENSITY AND IMPROVED LIFETIME

The rugged driveline with new gearbox design consists of a split driveline. The bale chamber drive on one side and rotor plus pick-up drive on the other ensuring a smooth operation and an even power transfer. The main drive and bale roller chains are made up of high-strength 100H (1¼) chains which contribute to an improved life time.



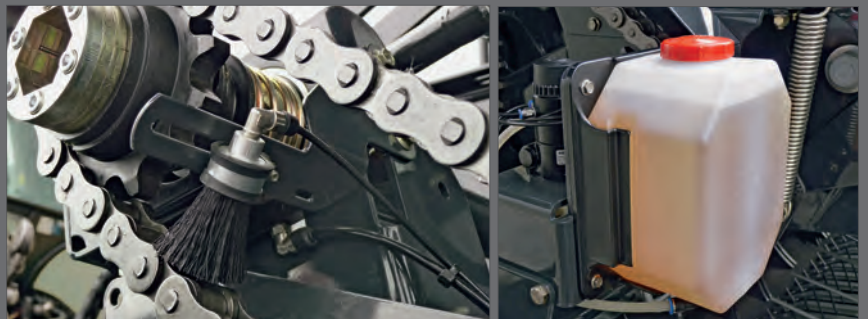
In addition to the 50 mm double raced bearings on the drive side main load points, trouble free baling in heavy conditions is guaranteed. All bearings have central greasing, a Beka Max automatic bearing greasing system is optional.

The rollers have built in scrapers to push the material out and away from the bearings.



Built in scrapers

All models are equipped as standard with a BEKA-MAX continuous chain oiling system with sturdy and wide oil brushes on the chains to ensure perfect lubrication.



Sturdy and wide oil brushes

FIRM BALE SHAPE

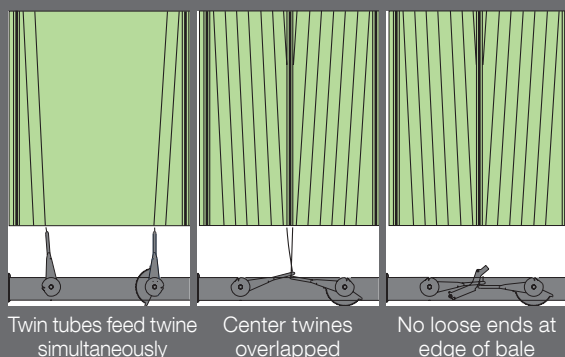


The binding cycle is crucial during baling. Less time required for binding means a higher output. On the KUHN Balers the binding is placed at the front of the machine, resulting in a perfect view on the binding process from the tractor seat. To optimize this process, main adjustments can be done via the terminal.

EXCELLENT NET SPREADING

The net binder with active stretch technology assures a firm bale shape with constant high net tension throughout the entire binding cycle. The net is fed into the front of the bale chamber to secure an even and direct start. A second net roll storage guarantees sufficient net supply for a long working day. Changing the net roll can easily be done standing safely on the large platform.

KUHN's innovative design allows constant tension to the net during the binding process. The net wrap system runs at 90% of the bale's rotational speed, to be able to stretch the net instead of braking. This provides an exact net tension in all crop and weather conditions. After leaving the bale chamber the bale will not expand and therefore holds its density. The net binding system provides excellent net spreading, even beyond the bale shoulders to prevent air pockets and improve the silage quality. The net stretch can simply be adjusted via the variable pulley and the number of net wraps can be adjusted from the terminal.



TWINE BINDING

By use of the double twine binding system the binding cycle time is reduced to a minimum. In the twine binding cycle both of the twines start at the bale edge and overlap itself before moving to the centre of the bale. In the centre of the bale they overlap again, this ensures the twines are fixed and there are no loose ends.

When required, the FB and FBP can be equipped with a field installed twine binding device.



BALING AND WRAPPING

A ONE-MAN OPERATION

Two technologies from KUHN combined in one machine, the FB BalePack. This easy to use machine is capable of working on even the steepest slopes and in all crop conditions. The KUHN FB BalePack has a high capacity due to a fast and reliable bale transfer, high-speed twin-satellite wrapping unit and IntelliWrap.



FAST AND RELIABLE BALE TRANSFER

To minimize idle time and maximize output, a rapid bale transfer is required. The side guide protection plates on the FB 3135 BalePack ensure a rapid and secure bale transfer even when working in steep or sloping fields. The 4-belt wrapping table with 2 large rollers and 4 side cones provide maximum bale traction, even bale rotation and proper film overlap, regardless of the bale shape. The improved "twin loading fork" system offers faster bale transfer of up to 30%.

The first loading fork (in red) collects the bale as it leaves the bale chamber. The wrapping table is tilted forward; ready to receive the bale.

Advantage: There is no possibility for the bale to roll off the rear of the wrapping table when facing up a steep slope.

The second loading fork (in blue) transfers the bale onto the wrapping table. The tailgate shuts automatically, with the second loading fork still in raised position.

Advantage: This saves time and also prevents any chance of the bale rolling forward into the tailgate when facing downhill.

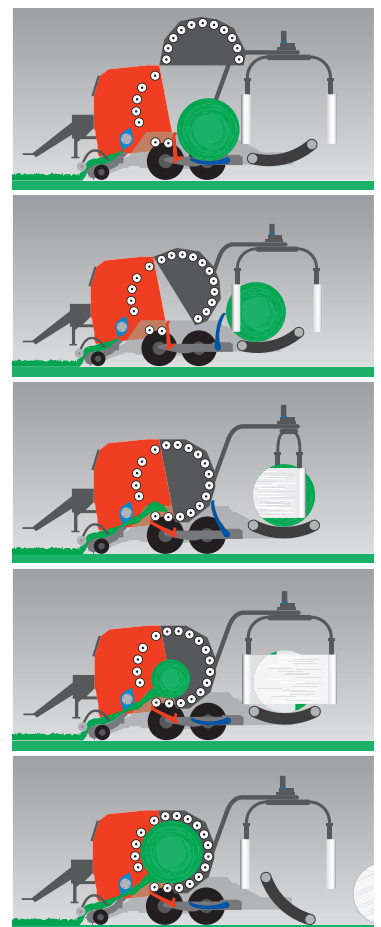
The wrapping table returns to its horizontal position and the second loading fork is lowered. The bale lies on the wrapping table supported by four wide belts and four lateral guide rollers.

Advantage: Regardless of the bale shape, the table offers good support and allows perfect wrapping.

The IntelliWrap wrapping system with closely mounted pre-stretchers rapidly wraps the bale, either in conventional or (optional) 3D mode.

Advantage: Vertically mounted pre-stretch units ensure no grass is sprinkled between the layers of film during the wrapping process. This results in effective sealing between film layers and the highest possible silage quality.

The low mounted table allows the wrapped bale to be gently discharged while driving, either automatically or manually.

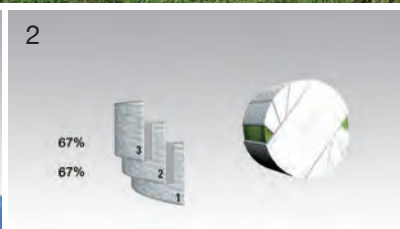


INTELLIWRAP - EXCELLENT WRAPPING

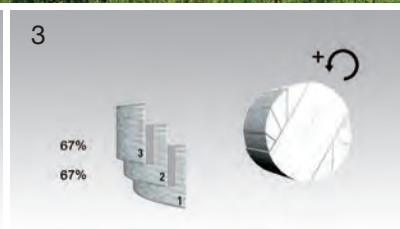
Greater management and control of the wrapping process is achieved by our unique IntelliWrap system. IntelliWrap uses sophisticated electronics and hydraulics to monitor the wrapping process and continuously controls the film overlap, allowing total flexibility. Depending on local circumstances, crop conditions and storage periods the amount of film layers (4, 5, 6, 7, 8, 9...) can simply be adjusted.



1 Selection of 5 film layers



2 The bale is covered with 3 layers and 67% overlap



3 Increasing of the bale rotation speed



4 Final 2 layers with 50% overlap

Another feature of INTELLIWRAP is 3D wrapping. 3D wrapping is an intelligent and innovative way of applying stretch film to round bales. Key to the 3D wrapping process is its ability to distribute the total film quantity more uniformly and efficiently across the entire surface of the bale. By wrapping the cylindrical surface of the bale first more air is excluded and the bale shape maintained, even after long storage periods.

The vulnerable bale shoulders are better protected compared to conventional wrapped bales. INTELLIWRAP provides well-shaped, tightly sealed bales and therefore higher quality silage.





VERY TIGHT WRAPPED BALES WITH 3D WRAPPING



MR. PANDER - Owner H. Pander dairy farm and contractor,
Gorredijk, The Netherlands - Dairy farm with 34 ha and 60 milk cows.

“We have used KUHN BalePacks since 2010 and are very satisfied with the results. Baling and wrapping our silage provides good quality feed and gives high yields in milk production. My customers are also very pleased with the cutting quality of the machine. We produce between 10.000 and 13.000 bales yearly. We choose to bale and wrap our silage for easy operation and storage. Besides, it prevents loss of feed and you can easily select the required feed best suited for your cattle.”

Compared to other brands in the market, the INTEGRAL ROTOR of the KUHN machine is what appealed me and has been validated since. The INTEGRAL ROTOR is a real animal when it comes to crop. A big lump in the windrow, which happens quite regularly, can be handled without difficulty thanks to the KUHN INTEGRAL ROTOR. In case of a rotor blockage you simply lower the DROPFLOOR, the lump runs through and you continue after the DROPFLOOR has been brought back up. Furthermore, the KUHN BalePack uses 3D wrapping which applies the film around the bale very tightly resulting in perfectly sealed bales with high quality silage. To the delight of my customers. The bales produced by the KUHN BalePack are perfectly shaped, rock-hard bales. We receive many positive reactions about that.”



ALWAYS IN CONTROL

The KUHN FB 3130 is controlled by the AT 10 control box which provides clear and easy to read information.

The KUHN FB 3135 and FBP 3135 offer additional comfort with ISOBUS compatibility. ISOBUS compatible tractors will not require a separate control box for these balers. Alternatively, the VT50 or CCI monitor can be used with tractors that are not ISOBUS compatible.

All balers offer clear operator settings, such as amount of net layers, automatic/manual binding start and selectable wrapping programs*. Operator information, such as fast bale growth detection (as from 80%) and bale counters (cut/uncut/meters of net used) are also provided. The ISOBUS controlled FB 3135 and FBP 3135 provide additional driver comfort such as adjusting the bale density from the comfort of the cab. The knives can independently be controlled from the DROPFLOOR.



AT 10 - FB 3130

The in-cab control box provides clear and easy to read information and gives full command of the baling and binding process.



VT 50 - FB 3135 & FBP 3135

The KUHN ISOBUS VT 50 terminal has a 14.5 cm (5.7") color screen with outstanding clarity. Adjustments can easily be done by the touch screen and the large soft-touch keys on the sides. The VT 50 terminal can be used exclusively with the KUHN ISOBUS machines.



CCI 200 - FB 3135 & FBP 3135

The ISOBUS compatible CCI 200 terminal has a large 21.6 cm (8.5") color screen with outstanding clarity. Baling adjustments can be easily made via the touch screen or by use of the intuitive, large, soft-touch keys. The CCI 200 terminal can also be used with other ISOBUS compatible machines on the market.



FULL VISIBILITY

To provide optimal visibility and safety around the machine, the FB / FBP can be equipped with a KUHN group camera system. There are 2 versions available, one version is compatible with the CCI terminal, the other one consist of a separate monitor and a camera.



OVERVIEW

MACHINE HIGHLIGHTS AND OPTIONS



ISOBUS gives optimum control in comfort (FB 3135 & FBP 3135)



Convenient hose storage



Practical toolbox



3D wrapping for well-shaped, tightly sealed bales (optional)



High level of comfort by fully automatic tailgate operation and rotor DEBLOCK system (AUTOMATE function optional for FB 3135)



LED work light (optional)



Your manual always within reach



Closed film roll containers for 10 rolls



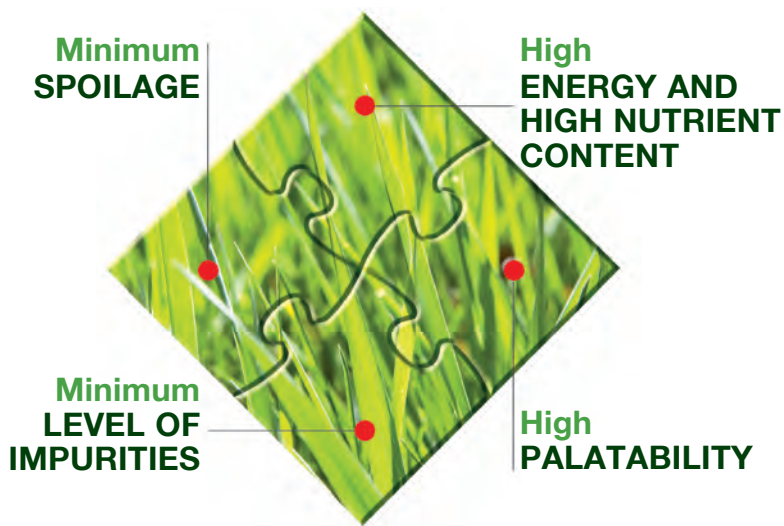
SIMPLY GREAT FORAGE!

Did you know that you can save concentrates worth 89 €/ha and year, just by reducing the impurities in the forage from 4 to 2 %*? We are at your side to help you produce forage of top quality to realize according gains.

We would like to pass on our know-how in forage production, gathered during several decades of producing hay/silage making implements. We provide advice for you to produce first-class animal feed. We help you to understand the strong points of our machines in order that you can use them in an optimal way to preserve the quality of your forage.

**Source: Agricultural chamber Weser-Ems, Germany.*

With the KUHN expertise, you will harvest forage with...



Find all our expertise on www.kuhn-grassmaster.com.



be strong, be **KUHN**

KUHN PARTS

Designed and manufactured to rival time



KUHN foundries and forge as well as a high-level manufacturing process allow the production of spare parts to defy time. You can truly rely on our know-how and our genuine parts. Farmers benefit from our client support and logistics services via any KUHN PARTS warehouse, which provide quick and reliable repair solutions in cooperation with your nearest authorized KUHN dealer.



Specifications	FB 3130		FB 3135		FBP 3135	
	OPTIFEED	OPTICUT 14	OPTICUT 14	OPTICUT 23	OPTICUT 14	OPTICUT 23
Machine dimensions						
Length	4.13 m		4.13 m		6.46 m	
Height	2.46 m		2.46 m		2.73 m	
Width	≥ 2.51 m		≥ 2.51 m		≥ 2.97 m	
Weight	≥ 3300 kg		≥ 3300 kg		≥ 5600 kg	
Pick-Up						
Pick-Up width	2.30 m		2.30 m		2.30 m	
Number of tine rows	5		5		5	
Tine spacing	61 mm		61 mm		61 mm	
Short crop pick-up roller	As standard		As standard		As standard	
Pneumatic gauge wheels	As standard		As standard		As standard	
Pivoting guide wheels	Optional		Optional		Optional	
Intake						
Intake unit	Rotor with double tines	Cutting Rotor with double tines	Cutting Rotor with double tines	Cutting Rotor with double tines	Cutting Rotor with double tines	Cutting Rotor with double tines
Rotor tines made out of HARDOX wear plates	As standard	As standard	As standard	As standard	As standard	As standard
Theoretical cutting length	-	≥70 mm	≥70 mm	≥45 mm	≥70 mm	≥45 mm
Knife protection	-	Individual spring protected	Individual spring protected	Individual spring protected	Individual spring protected	Individual spring protected
GROUP SELECTION knives	-	-	0-4-7-7-14	0-7-11-12-23	0-4-7-7-14	0-7-11-12-23
Hydraulic rotor disengagement	As standard		As standard		As standard	
DROPFLOOR	As standard		As standard		As standard	
Automatic rotor DEBLOCK system	-		Optional (part of AUTOMATE)		As standard	
Automatic knife cleaning	-		Optional (part of AUTOMATE)		As standard	
Bale chamber						
No. of rollers	18 POWER TRACK rollers		18 POWER TRACK rollers		18 POWER TRACK rollers	
Diameter	1.25 m		1.25 m		1.25 m	
Width	1.22 m		1.22 m		1.22 m	
Automatic tailgate operation	-		Optional (part of AUTOMATE)		As standard	
Operation						
Control system	AT 10		ISOBUS		ISOBUS	
Bale pressure setting	Manual (on baler density valve)		Terminal		Terminal	
Independent knife/drop floor selection	Manual (on baler valve)		Terminal		Terminal	
Hydraulics						
Load Sensing connection hose	-		Optional (only for AUTOMATE)		Optional	
Binding						
Net binding	As standard		As standard		As standard	
Twine binding	Additional option		Additional option		Additional option	
Wrapping unit						
3D wrapping system	-		-		◇	◇
Film break sensor	-		-		◆	◆
Tyres						
400/60-22.5	◆		◆		◆	
500/45-22.5	◇		◇		◇	
560/45-22.5	◇		◇		-	
600/40-22.5	◇		◇		-	

◆ = standard equipment ◇ = optional equipment - = not available

FB-FBP 3100 series

FIND THE KUHN FIXED CHAMBER ROUND BALER, WHICH IS PERFECTLY ADAPTED TO YOUR NEEDS!

FB-FBP						
Models	FB 3130 OPTIFEED	FB 3130 OPTICUT 14	FB 3135 OPTICUT 14	FB 3135 OPTICUT 23	FBP 3135 OPTICUT 14	FBP 3135 OPTICUT 23
Length	4.13 m		4.13 m		6.46 m	
Height	2.46 m		2.46 m		2.73 m	
Width	≥ 2.51 m		≥ 2.51 m		≥ 2.97 m	
Weight	≥ 3300 kg		≥ 3300 kg		≥ 5600 kg	

Check out the whole kuhn baler and wrapper range




1. Variable Balers - 2. Variable BalePacks - 3. i-BIO+ - 4. Large Square Balers - 5. + 6. Round and Square Bale Wrappers.

For more information about your nearest KUHN dealer, visit our website www.kuhn.com



Visit us on our YouTube channels.



www.kuhn.com

Your KUHN dealer

KUHN NORTH AMERICA, INC.

1501 West Seventh Avenue - Brodhead, WI 53520 - USA

KUHN FARM MACHINERY PTY. LTD

313-325 Foleys Road - Deer Park, VIC, 3023 - AUSTRALIA

KUHN FARM MACHINERY (U.K.) LTD

Stafford Park 7 - GB TELFORD/ SHROPS TF3 3BQ

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