Fixed Chamber Round Balers

FB SERIES

www.kuhn.com

be strong, be KUHN

FB series

CAPACITY. CONSISTENCY. RELIABILITY.

Our goal is to develop balers that boost the profitability of your company. KUHN fixed chamber round balers feature several unique techniques that deliver capacity, consistency and reliability.

INNOVATION THROUGH EXPERIENCE

The driving force behind KUHN is to supply the best quality in all aspects of baling. Employees here often come from farming backgrounds, creating a great sense of personal involvement and drawing on a wealth of knowledge and skills.

THE BALER SPECIALIST

Many years of experience has given us valuable knowledge and expertise in producing baling equipment. Our aim is to create simple, yet efficient techniques to improve the quality of work for our customers.

MODEL	Ø 125
FB 119	X
FB 2130	X
FB 3130	X
FB 3135	X

FB series

DESIGNED BY KUHN, MADE BY KUHN

INTRODUCING THE FB SERIES

KUHN fixed chamber round balers take high-density baling to the next level. The FB series offers a wide range of fixed chamber round balers to match your individual preferences. KUHN fixed chamber round balers are developed with the latest product innovations to ensure farmers and contractors worldwide get the maximum benefit.

The FB 119 is designed for baling dry materials such as hay and straw.

The FB 2130 premium all-round baler, is designed for baling a wide range of forage materials, including silage.

At the top of the league we offer the FB 3130 and FB 3135. These balers are designed to work in the toughest conditions across the world.

FB 119

FB 2130

FB 3130

FB 3135

KUHN FIXED CHAMBER ROUND BALERS TAKE HIGH-DENSITY BALING TO THE NEXT LEVEL

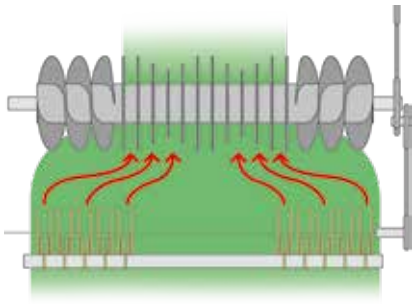
CROP FLOW CONTROL

KUHN FB balers guarantee optimal crop intake. The wide cam-track pick-up unit on models with rotor intake provides maximum ground adaption when combined with its pendulum capabilities enabling it to work in the toughest conditions.

INTEGRAL ROTOR

Available across the entire FB 2100 and 3100 range, our INTEGRAL ROTOR technology can be found on OPTIFEED and OPTICUT models. This simple, maintenance-free, intake system guarantees enormous throughput capacity at all times. The short distance between rotor and pick-up tines maintains consistent crop flow. The design of this force-fed intake makes higher forward speeds possible for increased productivity and reduced crop damage. The INTEGRAL ROTOR has rotor tines made out of Hardox® wear plates*. Hardox® combines extreme hardness and toughness to reduce rotor tine wear.

* Except FB 2130.



HARDOX®
WEAR PLATE

INTEGRAL ROTOR TYPE

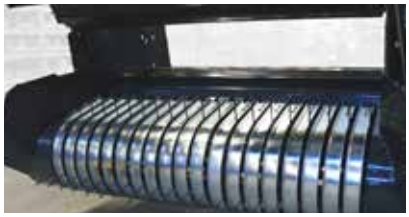
	FB 119	FB 2130	FB 3130	FB 3135
OPEN THROAT - Without cutting device	◆			
OPTIFEED - Without cutting device		◆	◆ (DROPFLOOR)	
OPTICUT 14 - 70 mm cutting length		◆ (DROPFLOOR)	◆ (DROPFLOOR)	◆ (DROPFLOOR, GROUP SELECTION)
OPTICUT 23 - 45 mm cutting length				◆ (DROPFLOOR, GROUP SELECTION)

GROUP SELECTION

INTAKE PERFORMANCE

NON-CUTTING VERSIONS

When cutting the crop is not required, the OPEN THROAT and OPTIFEED intake systems ensure a controlled and consistent crop flow to the bale chamber.



OPEN THROAT

The OPEN THROAT design offers an unrestricted intake. There are no fingers or rotor tines which can disturb the flow and therefore limit the intake capacity. The cam-steered pick-up directly pushes the crop into the bale chamber.

OPTIFEED ROTOR

The OPTIFEED rotor design, with single feeding tines and integrated augers, helps even out the swath by spreading the crop evenly for consistent bales every time. The FB 3100 series OPTIFEED rotors are equipped with double feeding tines, for optimal grip on the crop.

CUTTING VERSIONS

KUHN OPTICUT (OC) cutting rotors are designed for unlimited intake capacity and excellent cutting quality. OC cutting rotors, with elliptical-shaped rotor tines, are acknowledged by users as one of the best cutting systems on the market. The silage is guided and drawn down to the knives from an early stage which improves flow and cutting performance while requiring minimal force - this also prevents unwanted blockages.

OPTICUT 14

The INTEGRAL ROTOR, with the 14-knife OPTICUT system, is designed to even out the swath and force-feed the crop into the baler for maximum throughput. 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. With GROUP SELECTION (FB 3135), the operator can choose to have 0, 4, 7, 7 or 14 knives in operation.

OPTICUT 23

The INTEGRAL ROTOR, with the 23-knife OPTICUT system, has the benefits of intensive cutting and mechanical protection. The 23-knife OPTICUT system provides a theoretical cutting length of 45 mm. Each single knife is spring-protected against damage from foreign objects. With GROUP SELECTION (FB 3135), the operator can choose to have 0, 7, 11, 12 or 23 knives in operation.

CROP INTAKE

FOR YOUR CONVENIENCE

DROPFLOOR

The floor and knives can be hydraulically lowered from the comfort of the tractor cab in the case of a rotor blockage. After the blockage is cleared, they can easily be brought back into work position.

ROTOR DISENGAGEMENT

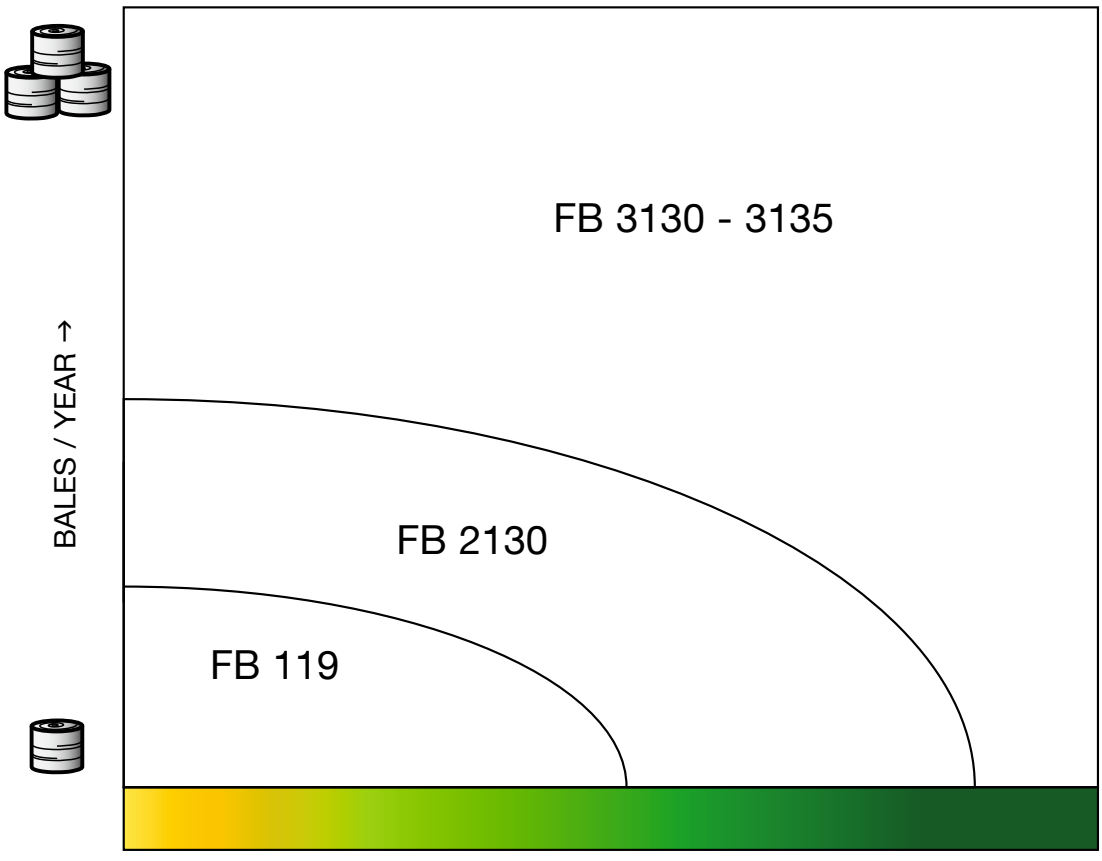
In extreme circumstances, double security is provided by a standard* rotor disengagement clutch. This will enable the operator to bind and eject the bale from the chamber before continuing.

Both the rotor disengagement and DROPFLOOR technology ensure fast clearance in the case of a blockage and enables you to quickly continue your baling operation.

* Additional option for FB 2130, standard for FB 3100 series.

FB SERIES

CHOOSE YOUR BALER



NOTE

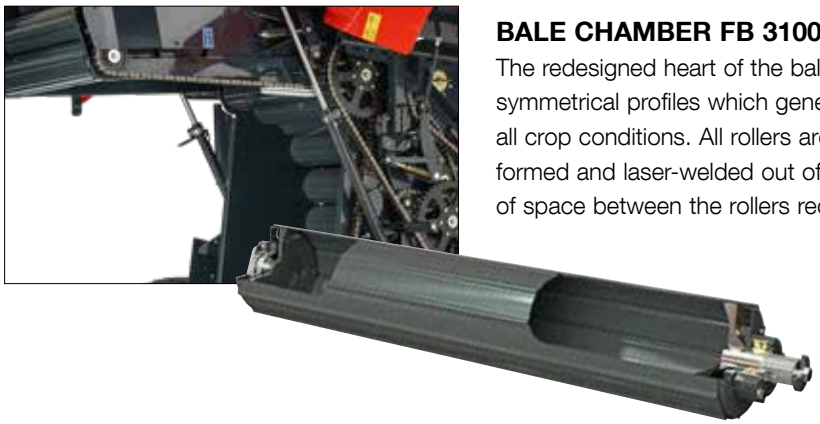
This is for reference only, actual choice may vary because of personal preferences or local conditions.
Please contact your KUHN specialist for further information.

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. The POWERTRACK rollers start to rotate the core of the bale as fast as possible to ensure maximum compression.

BALE CHAMBER FB 119 - 2130

The 14 steel rollers with an asymmetrical profile ensure a reliable bale rotation without the risk of stopping. The high-grade steel rollers are constructed from two overlapped, pressed sections which are then fully seam-welded for maximum rigidity. Radial support rings located inside each roller create additional strength, while the end plate and roller stub shafts are forged in one piece.

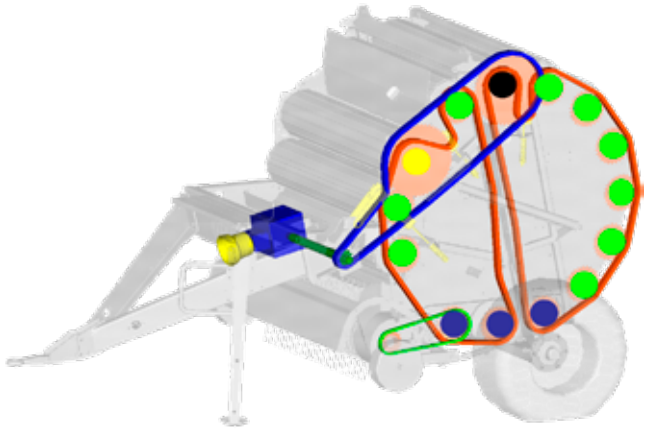


BALE CHAMBER FB 3100 SERIES

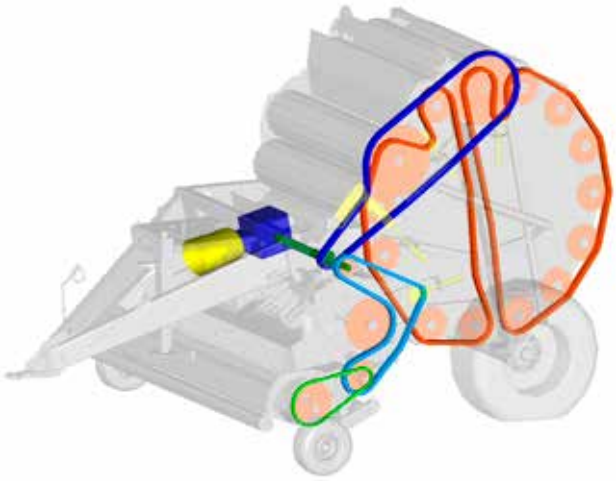
The redesigned heart of the balers consists of 18 POWERTRACK rollers. The rollers have symmetrical profiles which generate exceptionally high density and reliable bale rotation in all crop conditions. All rollers are made of 3,2 mm thick high-strength steel which are roll-formed and laser-welded out of 1 metal sheet for optimal durability. In addition, a minimum of space between the rollers reduces crop loss.

FAST TAILGATE DETECTION ON FB 3100 SERIES

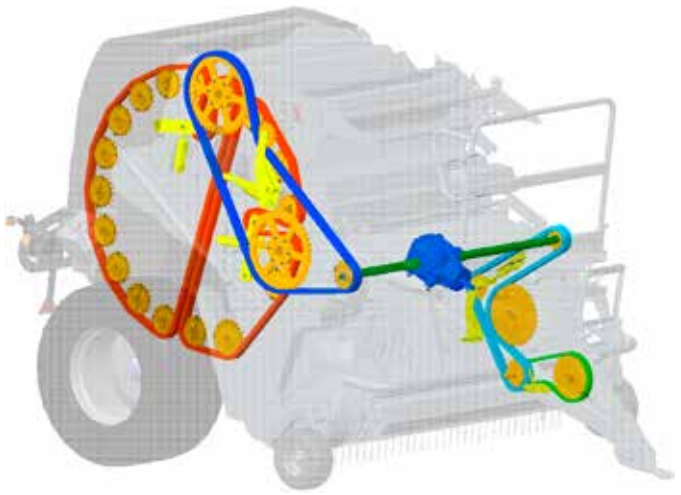
The tailgate opens and closes in ≥ 4,5 seconds (60 l/min oil flow) thanks to its stable design with torsion pipes. Strong hydraulic tailgate cylinders keep the tailgate closed and ensure a consistent bale size with maximum bale density. These cylinders act as a hydraulic lock and prevent the baler from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



FB 119	
BALE FORMATION	14 POWERTRACK ROLLERS
DRIVELINE	SINGLE SIDE 1¼" CHAIN
MAXIMUM BALING PRESSURE	160 BAR
PRESSURE SETTING	MANUAL
CHAIN OILER	OPTIONAL PULSE LUBRIFICATION SYSTEM



FB 2130	
BALE FORMATION	14 POWERTRACK ROLLERS
DRIVELINE	SINGLE SIDE 1¼" CHAIN
MAXIMUM BALING PRESSURE	170 BAR
PRESSURE SETTING	MANUAL
CHAIN OILER	PULSE LUBRIFICATION SYSTEM



FB 3100	
BALE FORMATION	18 POWERTRACK ROLLERS
DRIVELINE	SPLITTED DRIVELINE 1 ½" IWIS CHAIN
MAXIMUM BALING PRESSURE	170 BAR
PRESSURE SETTING	FB 3130 - MANUAL FB 3135 - IN-CAB
CHAIN OILER	CONTINUOUS OILING SYSTEM

FB 119 - 2130

EASY AND RELIABLE

The FB 119 and FB 2130 are balers which have proven themselves as easy to operate and maintain, combined with an outstanding reliablity. Thanks to the proven design of the machines, both balers offer a perfect crop transport and bale shape in all circumstances.

DRIVELINE

Each roller has heavy duty bearings and is bolted onto the side walls of the bale chamber for easy access and maintenance. The FB 2130 has an automatic cam clutch protection on the PTO drive shaft.

The FB 2130 is equipped as standard with central greasing banks for the roller bearings.

To ensure a long lifetime of the chains, the KUHN FB balers can be equipped with a chain oiling system, which is activated at every binding cycle.

The chain oiling system is a standard feature on the FB 2130, and is optionally available on the FB 119.

FB 3100 SERIES

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 the rotor plus pick-up drive on the other, ensures a smooth operation and an even power transfer. The main drive and bale roller chains are high-strength 20B (1¼) with a standard BEKA-MAX continuous chain oiling system, which contributes to an improved lifetime.

Thanks 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 an 8L oil reservoir and 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

SECURE BINDING SOLUTIONS

FIRM BALE SHAPE

One of the final steps in creating the perfect bale is the binding. It is one of the most crucial steps! The less time required to bind the bale, the higher the baling operation output. KUHN binding solutions guarantee reliable and secure binding.

FB 119 AND FB 2130 - MAXIMUM VERSATILITY

The binding cycle is crucial during baling. Less time needed for binding means a higher output. To optimise this process, main adjustments can be done via the AT 10 control box. The number of wraps can be pre-set. On the KUHN FB balers the binding is placed at the front of the machine, resulting in a perfect view of the binding process from the tractor seat. Changing the net roll can be done easily standing safely on the ground next to the machine.

FB 3100 SERIES - ACTIVE STRETCH TECHNOLOGY

The net binder with active stretch technology ensures a firm bale shape with constant net tension throughout the entire binding cycle. The net is fed into the front of the bale chamber to ensure it is taken by the bale immediately. A second net roll storage enables the operator to carry a sufficient net supply for a long working days. Changing the net roll can be done easily whilst standing safely on the ground.

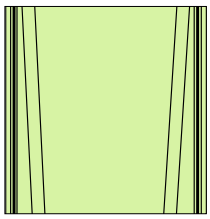
KUHN's innovative design maintains constant net tension during the binding process. The net wrap system runs at 93% of the bale's rotational speed to be able to stretch the net without breaking it. The pre-stretched net results in a bale that will hold its density. The net binding system spreads the net to the corners of the bale to prevent air pockets once the bale is wrapped, which will preserve the forage quality for longer.

NET BINDING

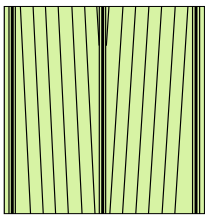
The optional net binding provides the bale with a clean and tidy net wrap from edge to edge. The net is fed into the front of the bale chamber to secure an even and direct start. A second net roll storage guarantees enough net supply for a long working day.

FILM BINDING

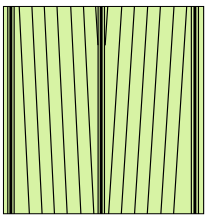
The FB 3135 baler is now available with the patented* TWIN-reel film binding system. This unique KUHN solution optimises silage quality at the lowest costs. The awarded system provides specific advantages in terms of bale protection during the transport from baler to wrapper.



Twin tubes feed twine simultaneously



Centre twines overlap



No loose ends at edge of bale

TWINE BINDING

When using 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 before moving to the centre of the bale. In the centre of the bale, they overlap again. This ensures the twines are fixed and that there are no loose ends.

* Patent or patent pending in one or more countries.

ELECTRONICS

INTUITIVE USER INTERFACES

The key to achieving the productivity you expect from your KUHN machine, is the user interface. We listened carefully to the users of our machines to develop our new user interfaces and terminals. The objective is to have a clear view of what your machine is doing at anytime, and to have all important settings at your fingertips. This ensures that you have full control of your machine.

AT 10

The in-cab control box provides clear and easy to read information and gives full command of the baling process. An audible and visual alarm signals when the bale is ready. A choice in automatic or manual start of the tying process can be preselected. With the integral magnet and hook on the backside, the control box easily can be installed in each tractor cab without any tools.

VT 30

The VT 30 terminal controls the baling and binding process all from the tractor cab. The 3.5" colour screen provides the same user interface as the other KUHN balers, making it an easy-to-understand control box for all drivers. The VT 30 is equipped with both a touchscreen and soft keys for an intuitive control under all circumstances. It is connected to the tractor using a 3-pin connector.

CCI 800

The CCI 800 sets new standards in the operation of modern ISOBUS machines. The touchscreen in conjunction with the operating concept of CCI.OS is easy to operate. With its 8" widescreen display, the CCI 800 offers the optimal size to focus on one application. For additional user-friendliness, the CCI 800 can work in split screen mode to display two additional applications without overlapping the main application.

CCI 1200

The CCI 1200 is our state of the art ISOBUS terminal. The 12.1" colour touchscreen has a programmable view. For example, you can see both the camera and the machine user 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 so you can stow it away securely when not in use.

ELECTRONICS	FB 119	FB 2130	FB 3130	FB 3135
AT 10 - NON ISOBUS	◆	◆		
VT 30 - NON ISOBUS			◆	
CCI 800 - ISOBUS COMPATIBLE				◆
CCI 1200 - ISOBUS COMPATIBLE				◆

FULL VISIBILITY

The FB range can be equipped with a KUHN camera system to provide optimal visibility and safety around the machine. There are 2 kits available: one kit is compatible with the CCI terminal, the other one consists of a separate monitor and a camera.

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: restricts the tailgate from opening any further than necessary during kicking out the bale (maximum bale output).
- Switch quickly between Open Centre and Load Sensing functionality.

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. If AUTOMATE function is selected, 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

The film binding option is only available in combination with AUTOMATE.

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

OVERVIEW FB 119

MACHINE HIGHLIGHTS

Simple driveline with only 3 main chains

OPEN THROAT intake unit

POWER LOCK density control

AT 10 control box

OPTIONS

300/80-15.3

380/55-17.0

480/45-17.0

Bale kicker

Fixed PU wheels

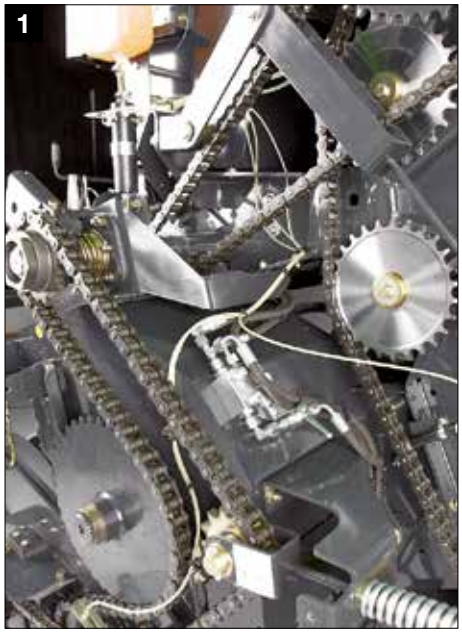
Twine and net binding system

Chain lubrication

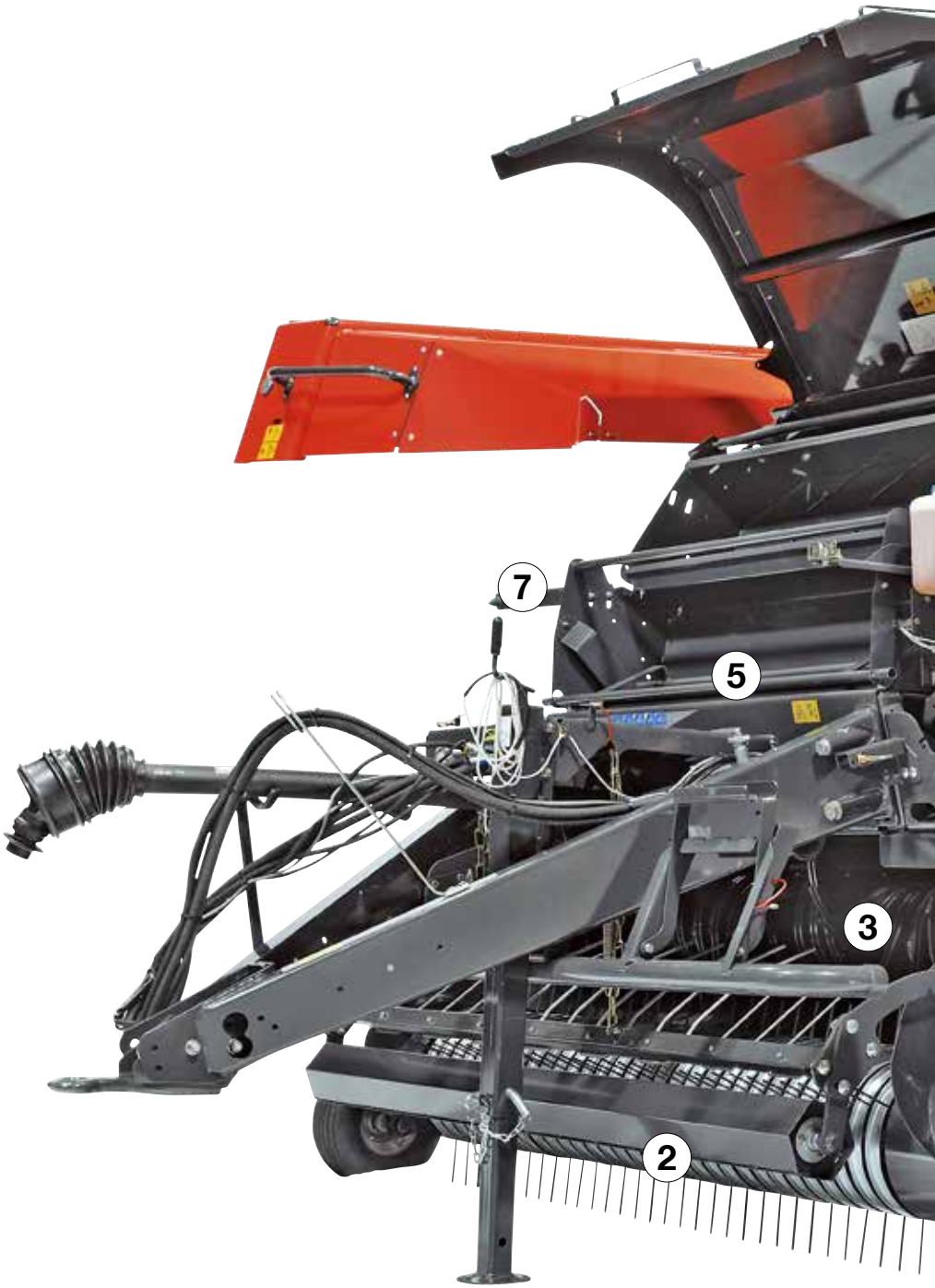
Greasable roller bearings

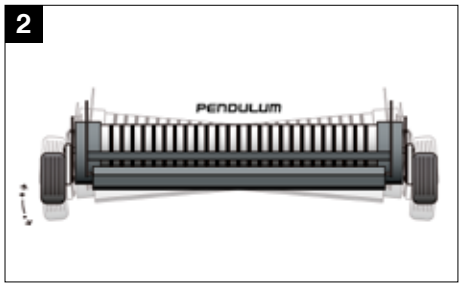
OVERVIEW FB 2130

MACHINE HIGHLIGHTS

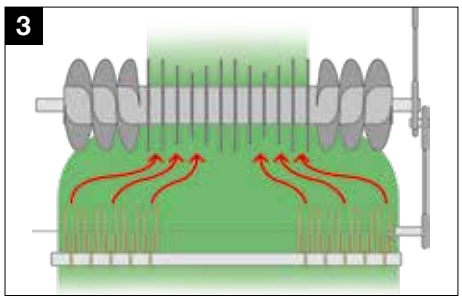


Simple driveline, cam clutch protected





Pendulum pick-up



INTEGRAL ROTOR Technology

Mechanical rotor disengagement

POWER LOCK density control

OPTIONS

Pivoting semi-pneumatic pick-up guide wheels

Bale kicker

Twine and net binding system

Hydraulic rotor disengagement

6

Automatic chain lubrication and centrally located grease banks for roller bearings

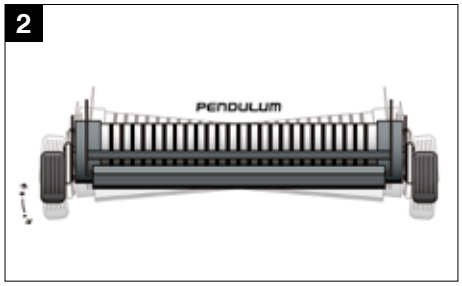
7

AT 10 control box

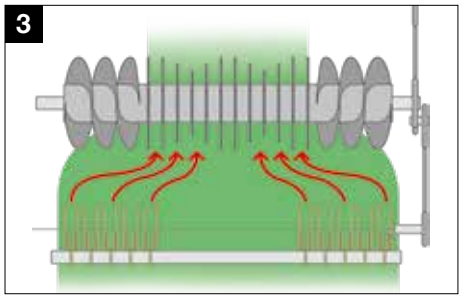
OVERVIEW FB 3130

MACHINE HIGHLIGHTS

Robust driveline with high quality IWIS chains



Pendulum pick-up



INTEGRAL ROTOR Technology

Hydraulic rotor disengagement

POWER LOCK density control

Centralized grease banks for roller bearings

OPTIONS

Pivoting semi-pneumatic pick-up guide wheels

Bale kicker

Automatic greasing system for roller bearings

Trailer hitch coupler

7

BEKA-MAX continuous chain oiling system

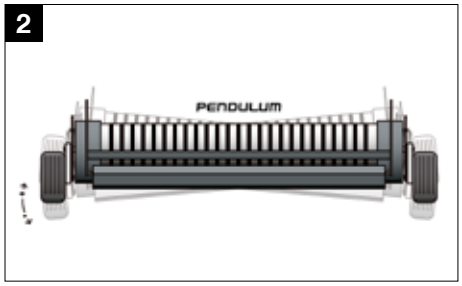
8

VT 30 control box

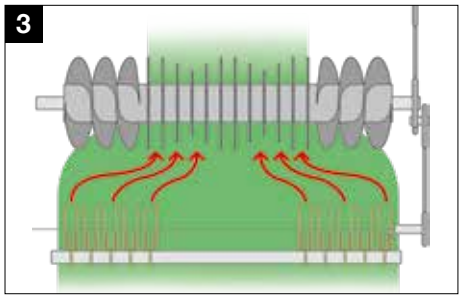
OVERVIEW FB 3135

MACHINE HIGHLIGHTS

Robust driveline with high quality IWIS chains



Pendulum pick-up



INTEGRAL ROTOR Technology

Hydraulic rotor disengagement

POWER LOCK density control

Centralized grease banks for roller bearings

OPTIONS

400/60-22.5

500/45-22.5

560/45-22.5

650/40-22.5

Pivoting semi-pneumatic pick-up guide wheels

Bale kicker

Automatic greasing system for roller bearings

CCI 800 Control box

CCI 1200 Control box

Film binding

Trailer hitch coupler

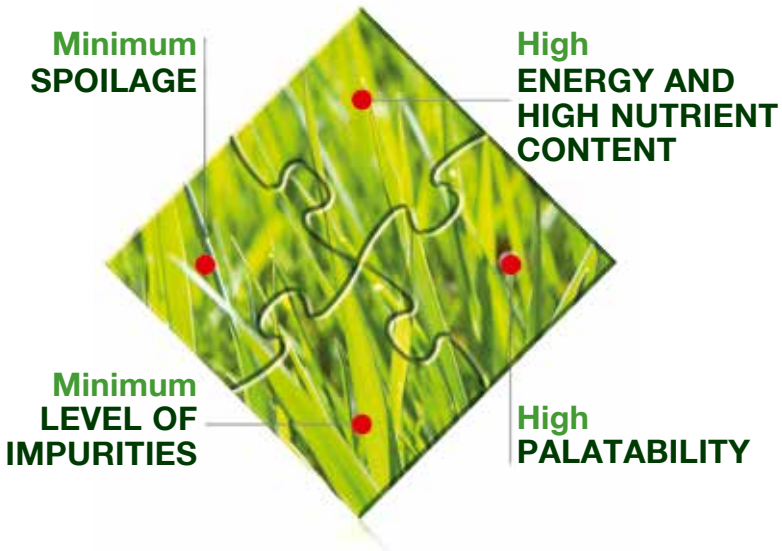
BEKA-MAX continuous chain oiling system

SIMPLY GREAT FORAGE!

Did you know that you can save concentrates worth 89 €/ha a year, just by reducing the impurities in the forage from 4 to 2 %*? We are here to help you produce top quality forage.

We would like to pass on several decades knowledge of forage production. We can provide advice for you to produce first-class animal feed and help you to understand the advantages of our machines in order for you to use them in an optimal way to preserve the quality of your forage.

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



Source: Agricultural chamber Weser-Ems, Germany.

Find all our expertise on forage. **KUHN.com/en**

KUHN PARTS

DESIGNED AND MANUFACTURED TO 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 119	FB 2130		FB 3130		FB 3135	
	OPEN THROAT	**OPTIFEED**	**OPTICUT 14**	**OPTIFEED**	**OPTICUT 14**	**OPTICUT 14**	**OPTICUT 23**
Bale dimensions							
Diameter (m)	1.25	1.25		1.25		1.25	
Width (m)	1.22	1.22		1.22		1.22	
Pick-up							
Pick-up width (m)	1.67	2.30		2.30		2.30	
Number of tine rows	4	4		5		5	
Tine spacing (mm)	61	61		61		61	
Pick-up wind guard	Standard	Standard roller type		Standard roller type		Standard roller type	
Pneumatic gauge wheels	◇	◆		◆		◆	
Pivoting semi-pneumatic guide wheels	-	◇		◇		◇	
Intake							
Intake unit	OPEN THROAT	Rotor with single tines	Cutting Rotor with double tines	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	-	-	-	◆	◆	◆	◆
Theoretical cutting length (mm)	-	-	≥70	-	≥70	≥70	≥45
Knife protection	-	-	Individual spring	-	Individual spring	Individual spring	Individual spring
Group selection knives	-	-	-	-	-	0-4-7-7-14	0-7-11-12-23
Hydraulic rotor disengagement	-	-	◇	◆		◆	
Dropfloor	-	-	◆	◆		◆	
Automatic rotor DEBLOCK system	-	-	-	-		◇ (AUTOMATE)	
Automatic knife cleaning	-	-	-	-		◇ (AUTOMATE)	
Bale chamber							
Number of rollers	14 POWERTRACK rollers	14 POWERTRACK rollers		18 POWERTRACK rollers		18 POWERTRACK rollers	
Automatic tailgate operation	-	-		-		◇ (AUTOMATE)	
Binding system							
Film binding	-	-		-		◇ (AUTOMATE)	
Twine binding	◆	◆		-		-	
Net binding	-	◇		◆		◆	
Net + Twine binding	◇	◇		◇		◇	
Operation							
Control system	AT 10	AT 10		VT 30		ISOBUS (CCI 800 / CCI 1200)	
Bale pressure setting	Manual (on baler density valve)	Manual (on baler density valve)		Manual (on baler density valve)		Terminal	
Knife / DROPFLOOR selection	-	-		Manual (on baler valve)		Terminal	
Hydraulics							
Load Sensing	-	-		-		◆ (only for AUTOMATE)	
Tyres							
300/80-15.3	◆	◆		-		-	
380/55-17.0	◇	◇		-		-	
480/45-17.0	◇	◇		-		-	
400/60-22.5	-	-		◆		◆	
500/45-22.5	-	-		◇		◇	
560/45-22.5	-	-		◇		◇	
650/40-22.5	-	-		◇		◇	
Machine dimensions							
Length (m)	3.96	4.30		4.13		4.13	
Width (m)	2.41	2.46		2.51		2.51	
Height (m)	2.24	2.30		2.46		2.46	
Weight min - max (kg)	1900 - 2100	2750 - 3000		3200 - 3750		3200 - 3750	
Power requirements							
Minimum PTO power requirement (kW / hp)	50 / 68	55 / 75		65 / 88		65 / 88	

◆ standard ◇ option - = not available

FB series

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Check out KUHN's complete full-liner range in bale equipment

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