#### **Fixed Chamber Round Balers**

### FB SERIES



www.kuhn.com





### **CAPACITY. CONSISTENCY. RELIABILITY.**



#### **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**

Perfectly 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 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 minimum in down time and a machine that you can trust.



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



## DESIGNED BY KUHN, MADE BY KUHN

#### **INTRODUCING THE FB SERIES**

The 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 the baling of 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 heaviest conditions across the world.



FB 119



FB 2130





FB 3130



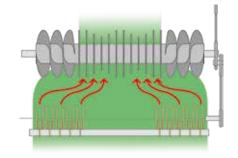
FB 3135



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**

The entire FB 2100 and 3100 range is equipped with our INTEGRAL ROTOR Technology. This simple, maintenance free, intake system guarantees an 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 reduces crop damage. The INTEGRAL ROTOR units are provided with tines made out of HARDOX® wear plates\*. HARDOX® combines extreme hardness and toughness to reduce rotor tine wear. Longer wearing life of the rotor tines will help to provide time and money savings for the operator.





\* Except FB 2130.

INTECDAL	<b>ROTOR TYPE</b>
INTEGRAL	RUIUR IYPE

INTEGRAL RUTUR TIPE				
	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 intake has an unrestricted intake. There are no fingers or rotor tines which can hinder the flow and therefore limit the intake capacity.

#### **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 OPTIFEED rotors are equipped with double rotor tines, whereas the FB 2100 series have single rotor tine design.





#### **CUTTING VERSIONS**

The KUHN OC cutting systems, 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 and also prevents unnecessary blockages.













#### **OPTICUT 14**

The 14-knife OPTICUT system is designed to even out the swath and force-feed the crop into the baler. The 14-knife OPTICUT cutting system provides a theoretical cutting length of 70 mm and each single knife is spring protected against damage from foreign objects. GROUP SELECTION offers a choice of 0, 4, 7, 7, or 14 knives in operation.

#### **OPTICUT 23**

The 23-knife OPTICUT system has the benefits of intensive cutting and mechanical protection. This cutting system provides a theoretical cutting length of 45 mm and each single knife is spring protected. The 23-knife OPTICUT GROUP SELECTION offers a choice of 0, 7, 11, 12, or 23 knives in operation.





#### **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 the work position.

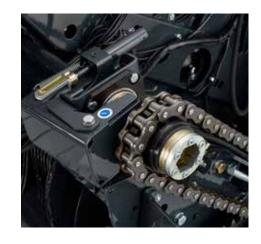


#### **ROTOR DISENGAGEMENT**

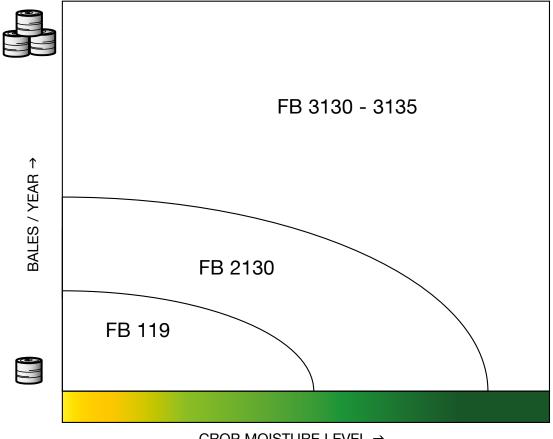
In extreme circumstances double security is provided by a standard rotor disengagement clutch. The rotor drive can be hydraulically\* disengaged from the bale chamber drive, enabling the binding and discharge of the bale from the chamber.

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

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



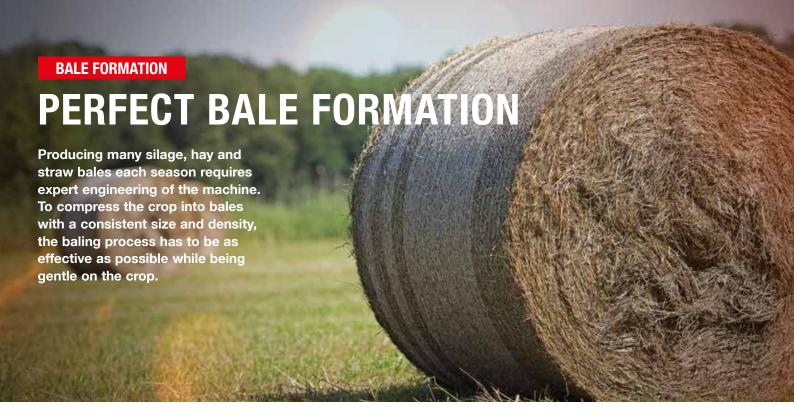




CROP MOISTURE LEVEL →

#### **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.





#### **BALE CHAMBER FB 119 - 2130**

The 14 steel rollers with an asymmetrical profile ensure a reliable bale rotation without stoppages. The PowerTrack rollers start to rotate the core of the bale as fast as possible to ensure maximum compression. 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.

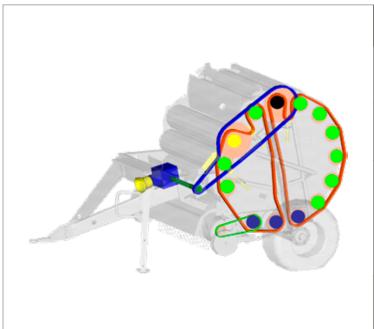


The redesigned heart of the balers consists of 18 PowerTrack rollers. The 18 powertrack rollers have symmetrical profiles which generate exceptionally high density and reliable bale rotation in all crop conditions. All rollers are made of 3,2 mm thick high-strength steel which are roll-formed and laser-welded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

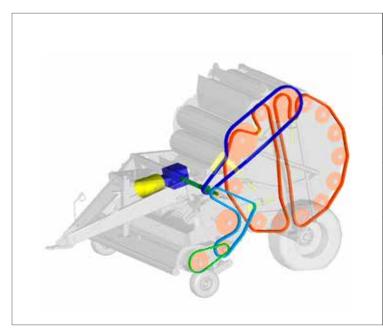
#### **FAST TAILGATE DETECTION ON FB 3100 SERIES**

The tailgate opens and closes in  $\geq$  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 allows 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.

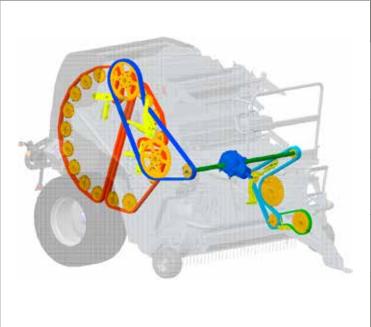




FB 119				
BALE FORMATION	14 POWERTRACK ROLLERS			
DRIVELINE	SINGLE SIDE 11⁄4" CHAIN			
MAXIMUM BALING PRESSURE	160 BAR			
PRESSURE SETTING	MANUAL			
CHAIN OILER	OPTIONAL PULSE LUBRIFICATION SYSTEM			



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			



The FB 119 and FB 2130 are balers which haven proven themself 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 on the fixed chamber balers, the KUHN FB balers can be equipped with a chain oiling system, which is activated every binding cycle.

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



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 (11/4) 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.

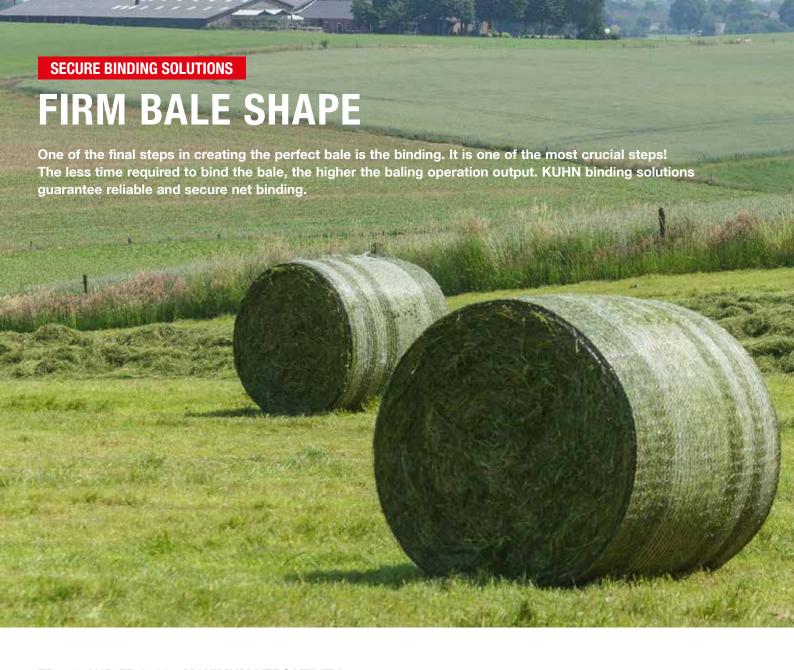


Built in scrapers

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.







#### 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 on the binding process from the tractor seat. Changing the net roll can easily be done standing safely on the ground next to the machine.



#### **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.

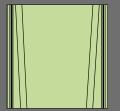
When required, the FB series also can be equipped with a combination of twine and net binding.



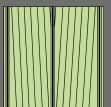
#### FB 3100 SERIES - ACTIVE STRETCH TECHNOLOGY

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 longer working day. Changing of 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. After leaving the bale chamber the bale will not expand and therefore it 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.



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.



### **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" inch 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 touchscreen and soft keys for an intuitive control under all circumstances. It is connected to the tractor using a 3-pin connector.



#### **CCI 50**

The Premium FB models are fully ISOBUS compatible and optional non-isobus with our VT 30 terminal. This means the intuitive user interface can be displayed on all CCi terminals. The CCI 50 is a full ISOBUS terminal with a 5.6" inch colour screen. It can be controlled using the touch screen and/or the soft keys. A selection of CCI Apps can be used on the CCI 50 to utilise your terminal all year round.



#### **CCI 1200**

The CCI 1200 is our state of the art ISOBUS terminal. The 8.3" 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 for it to be stowed away securely when not in use.



	FB 119	FB 2130	FB 3130	FB 3135
AT 10 - NON ISOBUS	•	•		
VT 30 - NON ISOBUS			•	
CCI 50 - 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.





### **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.



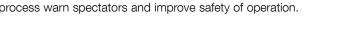
#### WHAT DOES AUTOMATE INCLUDE?

- 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.

## **OVERVIEW FB 119**

### **MACHINE HIGHLIGHTS**









POWER LOCK density control

AT 10 control box

## OPTIONS







Balekicker



Fixed PU wheels



Twine and net binding system



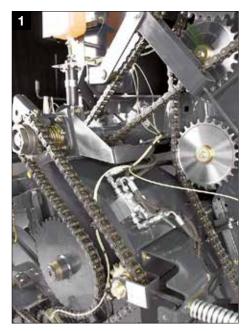




Greasable roller bearings

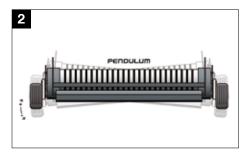
## **OVERVIEW FB 2130**

### **MACHINE HIGHLIGHTS**

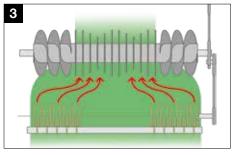


Simple drive line, cam clutch protected

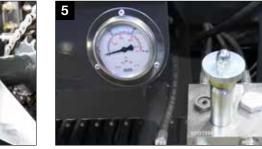




Pendulum pick-up



4



Mechanical rotor disengagement POWER LOCK density control

## OPTIONS

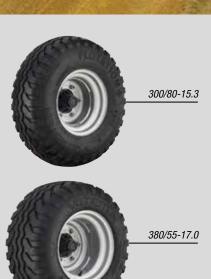




Automatic chain lubrication and centrally located grease banks for roller bearings



AT 10 control box







Balekicker



Twine and net binding system



Hydraulic rotor disengagement

## **OVERVIEW FB 3130**

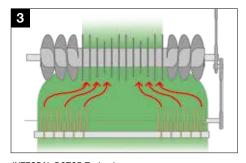
### **MACHINE HIGHLIGHTS**



Robust driveline with high quality IWIS chains



Pendulum pick-up



INTEGRAL ROTOR Technology



POWER LOCK density control



Centralized grease banks for roller bearings

## OPTIONS









Balekicker



Automatic greasing system for roller bearings



BEKA-MAX continuous chain oiling system



VT 30 control box

## **OVERVIEW FB 3135**

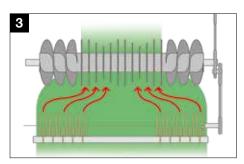
### **MACHINE HIGHLIGHTS**



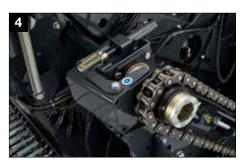
Robust driveline with high quality IWIS chains



Pendulum pick-up



INTEGRAL ROTOR Technology



POWER LOCK density control







Centralized grease banks for roller bearings

Hydraulic rotor disengagement

## OPTIONS





BEKA-MAX continuous chain oiling system





Balekicker



Automatic greasing system for roller bearings



CCI 50 Control box



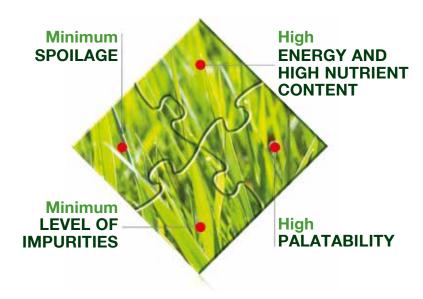
CCI 1200 Control box



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				OptiCut 14	OptiCut 23	
Machine dimensions	open unoat	Opureeu	Opticut 14	OptiFeed	Option 14	Option 14	Optioni 23	
	4.42 m	4.4	2 m	4.1	2 m	4.1	2 m	
Length	4.43 m	4.43 m 2.48 m		4.13 m			3 m	
Height	2.35 m			2.46 m		2.46 m		
Weight	≥ 2.21 m	≥ 2.28 m		≥ 2.51 m ≥ 3300 kg		≥ 2.51 m ≥ 3300 kg		
Weight	≥ 1950 kg	≥ 28	00 kg	≥ 33	оо ку	≥ 33	оо ку	
Pick-Up	1 07	0.0	10	0.0	0	0.0	0	
Pick-Up width	1.67 m		0 m	2.30 m			0 m -	
Number of tine rows	4		4			5 61 mm		
Tine spacing	61 mm		mm	61 mm				
Pick-up wind guard	Standard		roller type	Standard roller type		Standard roller type		
Pneumatic gauge wheels	Optional		andard ·	As standard			ndard	
Pivoting guide wheels	-	Opti	ional	Opti	onal	Upti	onal	
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 Roto with double tines	
Rotor tines made out of HARDOX® wear plates	-	-	-	As standard	As standard	As standard	As standard	
Theoretical cutting length	-	-	≥70 mm	-	≥70 mm	≥70 mm	≥45 mm	
Knife protection	-	-	Individual spring	-	Individual spring	Individual spring	Individual spring	
Group selection knives	-	-	-	-	-	0-4-7-7-14	0-7-11-12-2	
Hydraulic rotor disengagement	-	-	Optional	As sta	ındard	As standard		
Dropfloor	-	-	As standard	As sta	ındard	As standard		
Automatic rotor DEBLOCK system	-	-	-	-		Optional (AUTOMATE)		
Automatic knife cleaning	-	-	-		-	Optional (A	Optional (AUTOMATE)	
Bale chamber								
No. of rollers	14 Power Track rollers	14 Power 1	Track rollers	18 Power Track rollers		18 Power Track rollers		
Diameter	1.25 m	1.2	5 m	1.25 m		1.25 m		
Width	1.22 m	1.2	2 m	1.22 m		1.22 m		
Automatic tailgate operation	-		-		-	Optional (AUTOMATE)		
Operation								
Control system	AT 10	AT	10	VT 30		ISOBUS		
Bale pressure setting	Manual (on baler density valve)	Manual (on bale	er density valve)	Manual (on baler density valve)		Terminal		
Independent knife/ drop floor selection	-		-	Manual (on baler valve)		Terminal		
Hydraulics								
Load Sensing	-	-		-		Optional (only for AUTOMATE)		
Binding								
Twine binding	As standard			-		-		
Net binding	-	As standard		As standard		As standard		
Net + Twine binding	Optional	Optional		Optional		Optional		
Tyres								
300/80-15.3	•	•		-		-		
380/55-17.0		<	>	-		-		
480/45-17.0		$\Diamond$		-		-		
400/60-22.5	-		-	•		•		
	-	-						
500/45-22.5		-						
500/45-22.5 560/45-22.5	-		-	<	>	<	>	

# DESIGNED BY KUHN, MADE BY KUHN

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



1. Variable Balers - 2. 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.



Your KUHN dealer

#### KUHN S.A.

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#### KUHN NORTH AMERICA, INC.

1501 West Seventh Avenue - Brodhead, WI 53520 - USA

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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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