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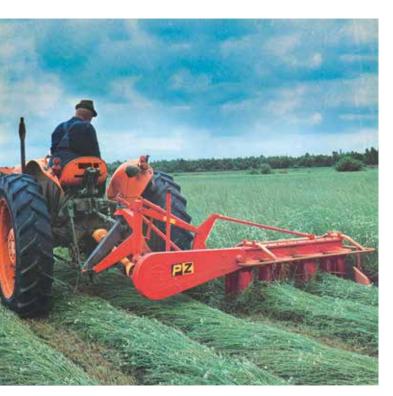
### PZ SERIES

**Drum Mowers** 

### **GRASS HARVESTING AT ITS BEST**

MOWING IS THE FIRST AND VERY IMPORTANT STEP IN THE PROCESS OF PRODUCING HAY OR SILAGE.

A CLEAN CUT AND A PERFECT SWATH ARE YOUR MAIN CONCERNS. THE PROVEN DESIGN OF THE KUHN
PZ DRUM MOWERS IS COMBINED WITH NEW, INNOVATIVE SOLUTIONS. OFFERING YOU EXCELLENT
MOWING PERFORMANCES AND OPTIMAL FORAGE QUALITY.



#### OVER 55 YEARS OF EXPERIENCE

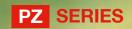
PZ mowers build on a legacy that goes back over 55 years to the introduction of the world's first drum mowers. The new generation of KUHN PZ drum mowers has been developed using a combination of experience and the most up-to-date mowing quality, technology and design engineering.

#### INNOVATIVE SOLUTIONS

The well-known features of the KUHN PZ drum mowers have been complimented by new solutions like the LIFT-CONTROL suspension system and the FLEXPROTECT protective side covers. The result is a complete range of front, rear and triple drum mower units delivering you high performance, every day.

#### HIGH-QUALITY FORAGE

When harvesting forage, it is important to minimise impurities in the feed. The proven knife plate design of the PZ mowers offer you a clean swath formation and a cleaner product. Resulting in better feed quality, higher milk and meat production and thus higher profitability for your farm.



### **FOR A CLEAN CUT**

Delivering a clean cut and creating a neat and fluffy swath, that is number one priority when mowing your grass or other crops for hay or silage. KUHN PZ drum mowers are uncompromising in performance and output. The proven design with its uneven or large sized diameter knife plates guarantees a clean swath formation, a cleaner product, perfect ground adaptation and high throughput with little PTO power requirement.

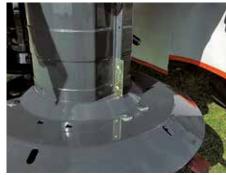


Model	Working width (m)	No. of drums	
PZ 170	1.65	2	
PZ 190	1.85	2	
PZ 220	2.10	2	
PZ 270	2.65	4	
PZ 300	2.95	4	
PZ 320	3.10	4	
PZ 8831	8.30/8.54/8.84	8	
PZ 270 F	2.65	4	
PZ 300 F	2.95	4	
PZ 2721 F	2.69	4	
PZ 3021 F	3.04	4	
PZ 3221 F	3.19	4	
TC 320	1.80	-	



#### Height adjustment

The cutting height can be adjusted easily and infinitely by adding or removing the optional spacers. The PZ front mower range features a continuous cutting height adjustment on top of the mower so the operator can set the optimum cutting height in changing conditions in an easy and safe way. For example, you can mow a little higher in the autumn in order to reduce soil contamination in your forage.



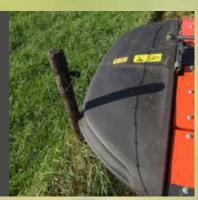
#### EXCLUSIVE

#### Flat sided drums

Round drums do not transport well. That is why KUHN uses drums with two flat sides for optimal crop transport without the risk of blockage. Movement of the crop has an impact on the mowing quality. The exchangeable transport strips enable you to adjust the amount of strips to the conditions and protect the drums from wear.

### **Optimal protection with FLEXPROTECT**

Damage to the side covers is now a thing of the past. The KUHN FLEXPROTECT side covers are adding a new dimension to mowing with their design made of polythene. On encountering any obstacles, the material of the side cover bends, without breaking or damaging the mower. The material then returns back to its original shape. The FLEXPROTECT side covers are integrated on all PZ mowers, except for the PZ 170, 190 and 220.







#### **Rotating saucers**

The freely rotating saucers have a major advantage. In uneven ground conditions, the saucer 'rotates' over the ground rather than sliding, thus protecting the stubble and reducing PTO power requirement. The positive effects of reduced crop contamination will be particularly noticeable on sensitive soils such as boggy land.



#### EXCLUSIVE

#### Quick knife exchange

The unique knife changing system enables quick knife exchanges with minimal force and maximal security. Using the special tool, you can push the knife holder down and simply replace the knifes. In addition, the system is insensitive to pollution and wear.



#### Easy access to the drums

The front cover can be folded away, allowing easy access to the blades. This is perfect for daily inspection and mower maintenance.

# AS RELIABLE AND ECONOMICAL AS THE BIG MOWERS

With the three models of drum mowers PZ 170, PZ 190 and PZ 220, KUHN provides high-quality technology at working widths of up to 2.10 m. These KUHN drum mowers are suitable for small and medium-sized farms. Their long-life and easy and safe operation are the key attributes of these machines. The PZ 220 can be retrofitted with a conditioner which can be removed without any tools thanks to a special centre section and practical quick-locking mechanisms.



#### Safety break back system

On hitting an obstacle, the mower unit pivots back, thus absorbing the impact. Reversing the tractor re-engages the safety system, and the mower unit is set back into the work position.



#### Working-transport position

Without leaving the tractor seat, the PZ mower units can be put easily into the transport position behind the tractor. An optional hydraulic folding cylinder is available for improved weight distribution during transport mode.





**Compensation springs**Compensation springs are fitted as standard to transfer the weight from the mower unit to the tractor in order to keep ground pressure as low as possible.



Easy hitching
The PZ 170, 190 and 220 can be hitched easily to every tractor with Cat. 1 or 2 linkage pins. KUHN can provide a special adapter to fit wider tractors.







#### Easy access to the drums

The front cover can be folded away, allowing easy access to the blades. This is perfect for daily inspection and mower maintenance.



#### Headland cylinder

The optional headland cylinder offers comfort in a large extend and gives the PZ 270 and 300 sufficient ground clearance in any condition.



#### 3-Point linkage

The adjustable 3-point linkage enables you to shift the machine to the left or right. When using the front and rear mower units in combination, this ensures that overlap is always at its optimum even when cornering.



#### **Working-transport position**

Without leaving the tractor seat, the PZ mower units can be put easily into the transport position behind the tractor. This function can be upgraded with a hydraulic cylinder. Furthermore, an optional hydraulic folding cylinder is available for improved weight distribution during transport.

### PZ 270 F | 300 F

### PERFORMANCE IN EVERY CONDITION

With the PZ 270 F and 300 F models, KUHN sets the standard in this range. The drum arrangement, FLEXPROTECT side protection and accessibility have yet to meet their match. The mower unit attachment with two larger outer drums and two smaller inner drums ensures maximum forage throughput. In this way, you can deposit a double swath that can be easily picked up by any following machine. Using the generously dimensioned swath discs, the finest of adjustments can be made: a narrow swath (90 cm) for day-to-day gathering of forage from sloping terrain, or a wide swath for hay.





#### Optimal ground adaptation in hilly conditions

The PENDELFLEX oscilliating headstock enables ground contour following in lateral and longitudinal direction and ensures reduced wear, a lower power requirement and a preserved grass stubble. The fixed headstock is an economical solution for slightly hilly grounds. The flexible top link FLEXTOP or telescopic top link FRONTFLEX are optional.



#### Foldable front and side covers

The foldable front and side protective covers can be folded upwards, convenient for daily inspection and blade changes.





#### **Cutting height adjustment**

The continuous cutting height adjustment on top of the mower allows you to set the optimum cutting height in changing conditions in an easy and safe way. This allows you for example to mow a little higher in the autumn in order to reduce soil contamination in your forage.



#### Perfect swath formation

The proven design with its uneven sized diameter knife plates has great benefits: a narrow swath formation, a cleaner product, perfect ground adaptation and high throughput with low PTO power requirement.



### A CONDITIONER FOR SILAGE OR HAY HARVESTING

The KUHN TC 320 3-point mounted conditioner offers you extreme flexibility and high performance for all crop types and in all conditions. Hay or silage, flat or steep slopes, this independent conditioner guarantees you high quality products.

The TC 320 has a low horsepower requirement. The pick-up rotor collection system guarantees optimal preservation of the nutritional value of your crop and offers high versatility in terms of crop types. The well-thought design makes the conditioner suitable for all terrain and weather conditions whilst ensuring a long service life.





#### Adjustable spreading width

The adjustable hood enables you to create a narrow swath of 1.00 m or opt for wide spreading up to 3.10 m instead.



#### Conditioner intensity adjustment

The conditioning effect and intensity can be easily adjusted by moving the lever which brings the plate closer or further away from the rotor. The conditioning rotor speed can be matched to the actual weather and field conditions by selecting 815 or 650 rpm. It is just a matter of changing the sprockets.



#### **Excellent ground following**

The fixed headstock with oscillating lower link pins allows the machine to follow the ground contours whilst the machine stays in line with the tractor, even on steep slopes. Large pivoting wheels are situated close (16 cm) to the conditioner for perfect ground adaption. They are independent from the conditioner and fixed onto the headstock frame. This eliminates additional stress on the conditioner and results in an extended service life.

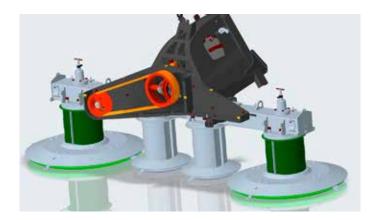




### PZ 2721 F | 3021 F | 3221 F

### SUCCESS THROUGH EXPERIENCE

The KUHN PZ 1021 F series front drum mowers stand for optimal mowing performance in the most challenging conditions. The proven features of PZ mowers are complimented by new solutions to meet today's and tomorrow's demands. The stable and rigid mainframe together with a robust driveline make this mower suitable for both regular and larger tractors.



#### A smooth start-up

The reliable V-belt driveline protection ensures an easy start-up of the machine. The V-belt drive with large bearings and axle can transfer 30 % more power than previous models. This makes the mowers suitable for both regular and larger tractors.



#### PATENTED

#### Modern design with FLEXPROTECT flexible side covers

On hitting an object, the redesigned patented\* KUHN FLEXPROTECT side covers bend to prevent damage to the mower. The material then returns back to its original shape. Very useful when mowing around poles or along around the edges of a field! The mower features standard integrated warning signs and road lights.

\*Patent or patent pending in one or more countries.

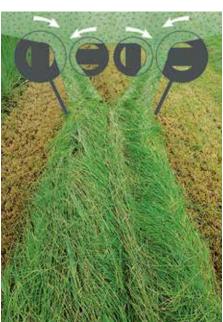






#### **User comfort**

All operator handlings are easy to perform. The unique knife changing system enables quick knife exchanges with minimal force. The continuous height adjustment allows you to set the optimum cutting height in changing conditions in an easy and safe way. Robust drive units with spiral-toothed gears give maximum power transfer at a comfortable sound level, benefit for both the driver and the environment.



#### Creating a narrow swath

The typical PZ 'big & small' knife plate layout provides a narrow swath, secured via the standard swath discs. Another advantage of this typical layout is the very low power requirement thanks to the large throughput opening between the drums. This narrow swath fits within the tractors tyres and prevents damage and contamination of the cut crop.





#### **Headstock choice**

You have two choices of headstock to fit your working conditions. The fixed headstock enables ground adjustment in the driving direction via the optional telescopic top link. The pendulum headstock enables ground adjustment in the driving direction via an integrated telescopic top link and 8.5° adjustment perpendicular to the driving direction via the linkage arms.

### PZ 2721 F | 3021 F | 3221 F





1. V-belt drive with large 40 mm bearings & strong mainframe



2. Redesigned FLEXPROTECT flexible side covers



3. Continuous height adjustment



**4.** Knife changing system with special tool and knife holder

6. Fixed headstock



**5**. Standard swath discs securing a narrow swath



6. Pendulum headstock

### **OPTIONS**



FLEXTOP flexible top link connection (only in combination with a fixed headstock)



FRONTFLEX telescope top link (only in combination with a fixed headstock)



Mirror set







#### **KUHN LIFT-CONTROL system: smart kinetics**

Improve the quality of your forage and reduce downtime by using LIFT-CONTROL. This active and dynamic hydro-pneumatic suspension system offers constant ground pressure, excellent terrain following, non-stop safety breakaway, less soil in the crops and minimal torn up ground. It is when mowing on slopes that the LIFT-CONTROL system shows all its advantages and is reflected in a distinct reduction of fuel consumption and a higher working rate.



#### Adjust pressure easily and accurately

Through the accumulators, the ground pressure can be adjusted with great precision to the harvesting conditions, easily from the tractor seat. On wet land minimal pressure on the ground prevents the fodder from becoming clogged and soiled. Lateral force, wear on the drums and tensile strength will be significantly reduced. As the force on the mower unit increases, the LIFT-CONTROL system automatically will lighten and raise the unit.







When hitting an obstacle the complete mower unit will pivot hydropneumatically back- and upwards by the use of LIFT-CONTROL. The hinge point of the mower is on the left side of the tractor instead of in the middle, so all drums are optimally protected (also the ones closest to the hinge point, because of added space between hinge point and first drum).



#### Comfortable and safe transport

For stable and safe transport the machine has a vertical transport position of 120°. The redesigned frame enables a low transport height: 3.6 m headway - ground clearance of 40 cm. And in the working position a normal ground distance - ground clearance of 50 cm. The between frame always has the optimum height in both the transport and working/headland position.





## Optimal user comfort and versatility

PZ mowing units are known for their high performance in challenging crop and soil conditions. The renewed design features a heavy-duty driveline with spiral-toothed gears to maintain a comfortable sound level and integrated freewheel clutches for minimal maintenance.



## Compact design for best weight transfer

The PZ 8831 has a weight of 2000 kg. With one front mounted mower and two mowers attached to the rear of the tractor, this mower combination ensures an excellent weight transfer for the best maneuverability in sloping terrain. The compact design of the headstock makes the PZ 8831 a perfect fit for middle class tractors. Thanks to the robust design of the driveline, it is also suitable for larger horsepower class tractors.



#### **EXCLUSIVE**

#### LIFT-CONTROL

The PZ 8831 is fitted as standard with a hydraulic safety break back system. On hitting an obstacle, the mower units move upwards and backwards, independently of each other. This hydraulic break-back system also controls the ground pressure hydro-pneumatically. For more information about the LIFT-CONTROL system please consult page 18-19.





## Adjustable working width and overlap

The working width of the mower can be adjusted to 3 different sizes: 8.30 m, 8.54 m and 8.84 m. This enables you to work with front mowers of different working widths and allows you to choose the right overlap when working on slopes.



#### Single-side mowing

The two rear units of the mower combination can be lifted independently, allowing you to cut only the remaining crop. The functional hydraulic valve comes as standard.



#### EXCLUSIVE

#### **Detachment in folded-up position**

The PZ 8831 mower can be detached and stored in folded-up position on the integrated supports. This saves considerable space in your shed or yard when storing the mower.

#### **Technical Specifications**

	PZ 170	PZ 190	PZ 220	PZ 270	PZ 300	
Working width (m)	1.65	1.85	2.10	2.65	2.95	
Transport width (m)	1.40	1.50	1.60	1.80	2.00	
Linkage	Cat.	1 - 2			Cat. 2	
Number of drums	2				4	
Number of knifes	6 8			10	12	
Cutting height adjustment	spacers					
Quick knife exchange						
Swath discs	(1x) <>				(1x) <> / (2x) <>	
Hydraulic folding of the side guards	-			-	-	
PTO speed (min-1)	540			540 ◆ / 1000 ◇		
Tyres						
Weight min - max (kg)	335 - 385	415 - 465	500 - 550	675 - 725	732 - 782	
Minimum required tractor hydraulic connections			-			
Minimum PTO power requirement kW(hp)	20(27)	25(34)	30(41)	40(54)	47(64)	

<sup>◆</sup> as standard <> optional - unavailable



#### **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.

PZ 320	PZ 8831	PZ 270 F	PZ 300 F	PZ 2721 F	PZ 3021 F	PZ 3221 F	TC 320
3.10	8.30 - 8.54 - 8.84	2.65	2.95	2.69	3.04	3.19	1.80
2.30	3.00	2.55	2.85	2.60	2.95	3.10	2.55
				Cat. 2 A-frame			Cat. 2
	8			4			-
	24	10	12	10	12		-
continuously	spacers			continuously			-
•	•						-
				(2x) <> / (2x) <>			-
-	•	-	-		<		-
	1000	1000 ◆	/ 740 <>		1000 ◆ /740 <>		540 ◆ / 1000 ⇔
	-						6.00-9 6PR
750 - 800	2000 - 2100	495 - 545	595 - 645	660 - 730	710 - 780	740 - 810	425 - 475
1x DA	+ 1x SA				-		
55(75)	85(116)	37(50)	44(60)	40(54)	45(60)	48(65)	18(24)

#### **KUHN SERVICES**\*

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KUHN protect+ - The choice of professionals!
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#### Check out KUHN's disc mower range as well:



1. Front-mounted disc mower conditioners - 2. Trailed disc mowers - 3. Rear-mounted disc mowers - 4. Rear-mounted disc mower-conditioners - 5. Triple gang combinations - 6. Trailed mower-conditioners

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