

# FC

Mower conditioners  
FC 302 - FC 352



GRASS HARVESTING AT ITS BEST!



# KUHN

## Trailed Mower Conditioners

KUHN is leader in the field of disc Mower Conditioners, and gives you solid, efficient machines for hay making.

Choose the Mower-Conditioner that's best adapted to your forage system. With the FC 302 and FC 352 trailed Mower Conditioners, select the equipment you need:

- Conditioning system, either with metal finger/comb, or with rubber rollers,
- with a working width of 3 to 3.5 m.

Robust – high quality mowing – conditioning adaptability: the FC 302 and FC 352 are winners, on all fronts.



**COST REDUCTIONS**



**GOOD PRACTICES**

**KUHN offers solutions for mowing while meeting your requirements in terms of:**



COMFORT - QUALITY OF LIFE



PROXIMITY - ADVICES



PEACE OF MIND - SERVICES

# Mowers conditioners

FC 302 - FC 302 R - FC 352 - 352 R



## To adapt to your type of forage “Made-to-measure” conditioning, with fingers...

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For grass, FC 302 and FC 352 are fitted with a rotor with metal fingers and an adjustable comb. The round, smooth fingers are used so that the forage is not damaged the way it sometimes is with sharp-edged tools.



### Reversible comb

The reversible comb has two sides:

- A** one (rounded) for conditioning delicate crops
- B** the other for gramineous crops, it reversible in just a few seconds.

### Conditioning adjustment

- The conditioning intensity changes with the degree of overlap between comb teeth and rotor fingers. Conditioning is increased or reduced by means of a lever. Comb in raised position: little conditioning effect.
- Rotor speed adjusted by inverting the pulleys: 1000 min<sup>-1</sup> for intensive conditioning and 810 min<sup>-1</sup> for lighter conditioning.

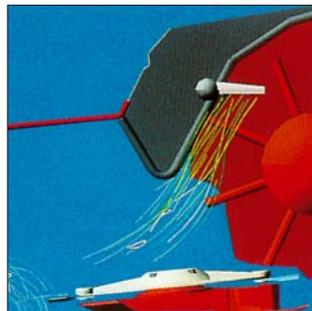
### Safety

Should a foreign object enter the machine, the spring loaded comb swings back and is automatically repositioned.

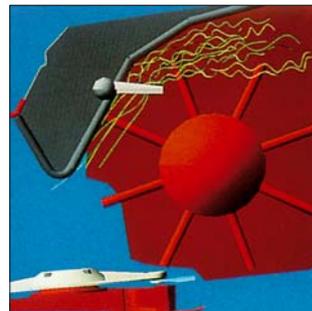
## Four stages of conditioning



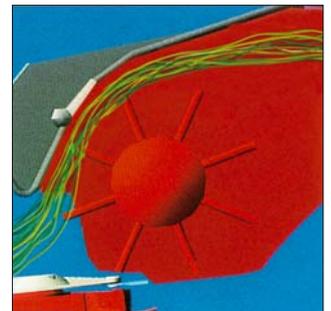
The base of the crop stem enters the machine first, allowing rotor fingers to make initial contact with the crop's thickest part (longest to dry).



The natural wax coating on both stem and leaf is broken down due to friction of plant against shield.



As crop flows between the comb teeth, the natural wax coating is opened along the length of the stem, allowing maximum moisture content to evaporate.



With the comb completely raised, there is little conditioning effect.

## ...rollers, for legumes

For clover and alfalfa: roller conditioner. Don't let the rich proteins and sugars in your forage waste away in the field. FC 302/R/RG and FC 352 RG: the specialists in conditioning clover, alfalfa and all leguminous crops with fragile leaves.



### Conditioning intensity

Homogeneous conditioning: roller pressure is controlled by two centrally adjustable torsion bars. Conditioning intensity is selected quickly and easily.

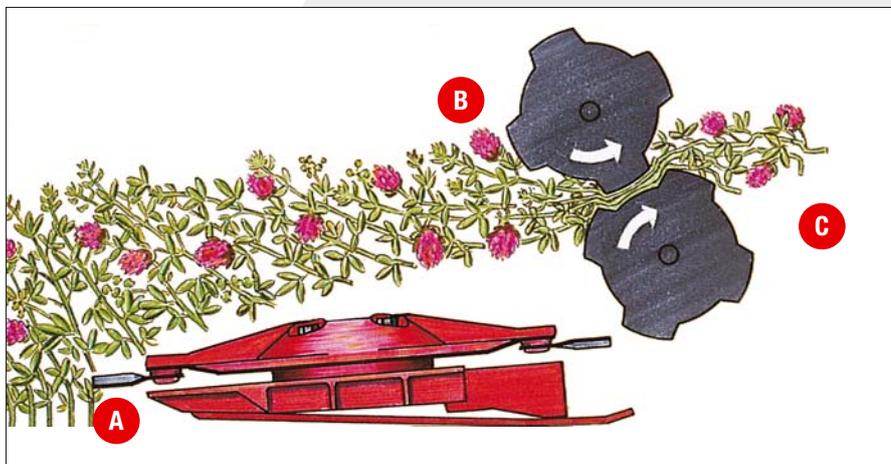
### Chevron-form: efficient and gentle conditioning

- The converging spiral movement of the ribs from outside to centre conditions crops both axially and transversally.
- "Double action" conditioning: Stems are burst open and their natural wax coating is fragmented.

#### Results:

- The stems and leaves dry at the same time, for better storage of the forage.
- The ridges mesh regularly and evenly.

## Conditioning with rubber rollers



- The base of the crop stem passes through the rollers first.
- Rollers burst open the stems while preserving the leaves: crop is handled uniformly and delicately.
- Projected against the rear shield, crop flows out of the machine, forming a light fluffy swath of perfect structure.



### For reliable long-term operation

- Both rolls are power driven and synchronized
- They can open sufficiently for most foreign objects to pass



# Mowers conditioners FC 302 - FC 352

## For a lighter swath...

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Over 30 years' experience and hundreds of thousands of Mower Conditioners and GYROTEDDERS sold: this is the best guarantee you can get!

KUHN works with reliable techniques to supply machines made by stringent production processes. The floatation system and robust transmission are specialities of these Mower Conditioners... They are designed specifically to meet direct requirements of users from all over the world.



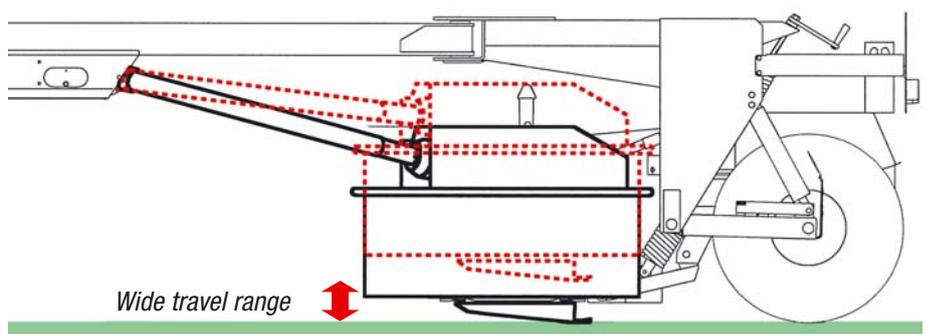
### Easily adjustable floatation

Varying ground conditions? High groundspeed? You can adjust the ground pressure with a crank handle. The floatation springs are very easy to adjust. No tools are needed.



### High ground clearance

When the cutting/conditioning head is fully raised there is sufficient clearance to pass over most swaths and obstacles.



### A cutting and conditioning head that offers a full range of floatation

The strong 4-point system used to attach the header to the frame offers added strength and reduces stress on the frame.

With free movement, it has an excellent ground following capability, and provides a high quality cut, reduces dirt in the windrow, and minimises scalping and damage to the stubble.

# Designed for top manoeuvrability and easy operation



## GYRODINE™ swivel hitch

More comfortable, and quicker to hitch!

- Thanks to the exceptional turning ability of the GYRODINE™ swivel hitch, you increase your productivity, particularly in plots where isolated trees, hedges or contours make for tricky work.

Turn even the tightest corners!

- Safety first: the PTO shaft is always perfectly in line with the tractor, even around the tightest corners.

2 input shaft as standard, for running at 540 or 1000 min<sup>-1</sup>.



## A closer look at the tractor/Mower Conditioner PTO shaft drive

An adjustable friction slip clutch protects drive components from overloading. The overrunning clutch protects the mower conditioner and the tractor PTO brake when the PTO is shut off.



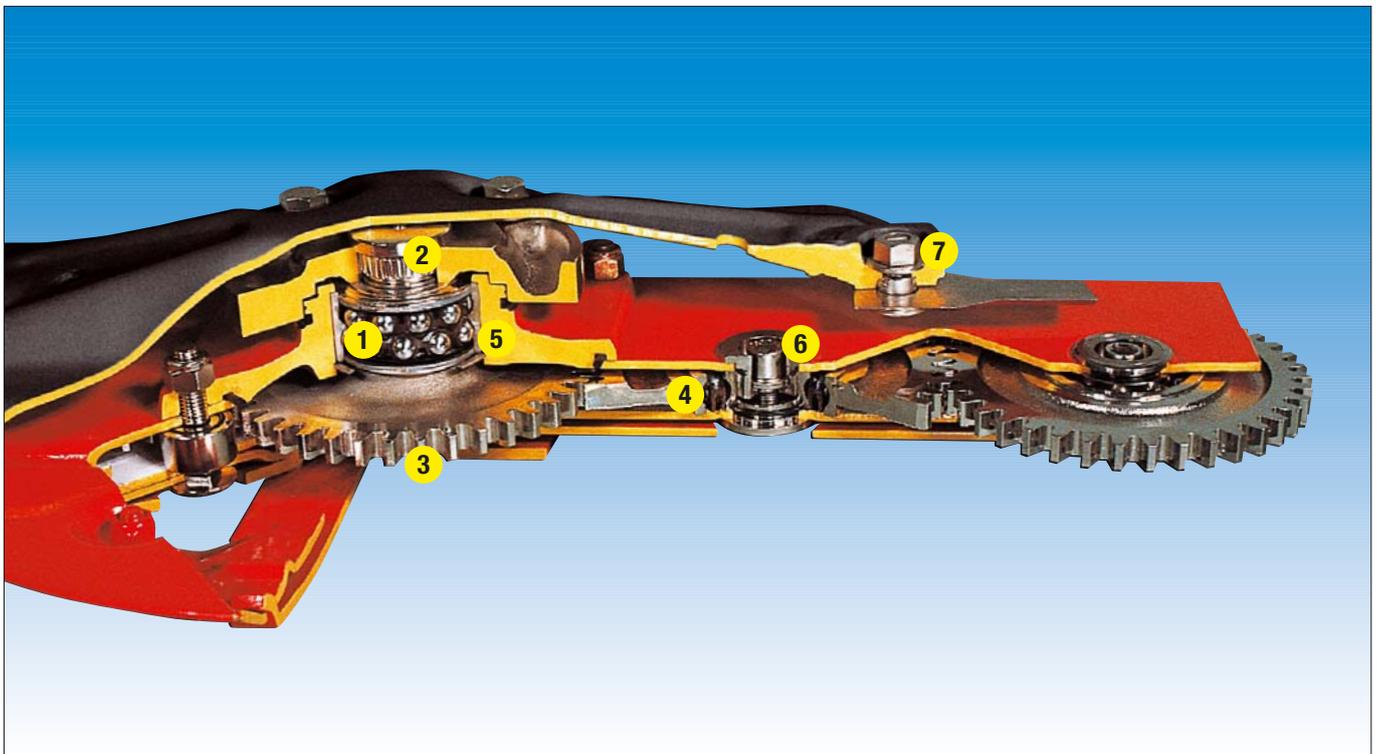
*Free wheel to protect the machine*

## The importance of a close inside look

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**Some mower conditioners may look like a Kuhn machine from the outside! However, close inspection will show distinctions that will make all the difference in the long run. With a KUHN mower conditioner, careful design and quality construction materials and techniques leave nothing to chance.**

- 1 Withstands the highest loads:** high capacity bearings fitted in a one piece sealed housing not subject to distortion.
- 2 Protection should an obstacle be struck:** the PROTECTADRIVE® system protects the cutterbar gear train and minimizes down-time risks in full season.
- 3 Long-term functioning:** large diameter gearwheels in high tensile forged steel with reinforced teeth.
- 4 Perfect sealing:** o-rings used on cutterbar bearing housings for a perfect, leak-free seal.
- 5 Increased service life:** disc pinion shaft bearings endure radial forces for longest bearing life. This optimum position improves the load balance.
- 6 Minimum wear or distortion risks:** idler gear fasteners are located in heat treated steel cups. Correct alignment is ensured without the risk of distortion.
- 7 Highly wear resistant:** knife attachment hardware is fully protected. For added safety, heat treated steel cups are welded to the disc.

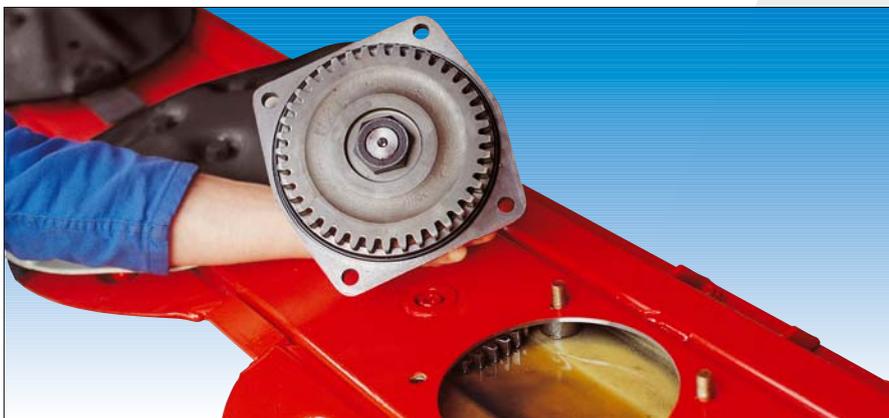


*Detailed view of Kuhn mower conditioner cutterbar components*



Before you choose your equipment, have someone explain how we have designed what you can't see inside the machine!

# For efficient mowing!



## Disc bearing stations

- Fast and easy removal and installation of the disc bearing station.
- For maximum reliability and minimum down time, the stations which include the housing, bearing and pinion shaft are factory-assembled.

## Cutterbar protection

Extra rigidity is ensured with the cutterbar gearcase mounted inside a steel cradle with a rear stiffener. One-piece disc guards and skid shoes are made of heat-treated steel to protect the discs.



*Very flat and smooth cutterbar that reduces soil or crop residues building up*

## KUHN's oval disc design offers the following advantages:

- Better evacuation of the cut forage to the conditioning rotor: no jamming
- Greater knife overlap for a cleaner cut in a greater range of crop conditions
- A bent knife cannot contact a neighbouring disc
- Reduced risk of foreign objects getting caught between two discs.

## Compact, streamlined cutterbar...

- For cleaner forage: The cutterbar is very flat and streamlined to stop earth or plant debris accumulating,
- Less need for power: excellent penetration into even the densest forage,
- Full use is made of the whole mowing width: the drive takes place at the first disc on the tractor side.



## Knives

- KUHN knives are made of high quality steel and manufactured to very strict standards!
  - For safety and long life, knives are attached with specially designed hardware, not "quick fastening" devices.
- It's easy to change or turn the discs, thanks to direct access to each skid.

## Create your forage and guarantee its quality

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**KUHN helps farmers who want to get the maximum profit from their fields and reduce forage production costs!**

- **Make grass a top priority in feed to save on buying concentrates.**
- **For the most balanced and cheapest basic ration, improve your hay and silage. The more energy, proteins and minerals you produce in your fields, the less supplements you need to buy.**

**Our Mower Conditioners also help maintain the highest energy value per kg of Dry Matter, and the best yield of Dry Matter per acre.**



### Produce wide, fluffy, regular swaths

Wide, fluffy, regular swaths guarantee fast and homogeneous drying of the crop and efficient tedding. Tractor wheels will never roll over the swath.

**KUHN's added extra:** On the FC 302 and FC 352 Mower Conditioners, the adjustable swath deflectors allow you to choose the ideal swath for your requirements.

**KUHN's added extra:** The Mower Conditioners are designed to produce well formed swaths.

### Swath grouping with the "RA" attachment for the FC 302 / FC 352

Ideally suited for a 3.00 m (10') harvester's pick up, the "RA" swath grouper forms twinned swaths of 2.30 m (7'6") (FC 302) or 2.70 m (8'8") (FC 352).

The conveyor belt speed is adjustable according to forward speed, the swath width required, and the crop density.

Specialists all say so: "Swath structure is just as important as the quality of the conditioning"



# Safe and simple transport



You'll appreciate the ease with which you travel between plots, and the time you save on all the trips. And on roads, safety matters most!

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## Mechanical tongue shift

The mechanical system is more economical than the hydraulic version, and is necessary for tractors equipped with a limited number of hydraulic remotes.



## Hydraulic tongue shift

For convenient operation, tongue adjustment is controlled by a double acting hydraulic cylinder.



## Change from "Work" to "Transport" position by pivoting the central drawbar

- Overall transport width is practically the same as the cutting width.
- Tongue positioning during transport centres the FC behind the tractor, for easy manoeuvring on roads and through gates.

## Lighting and signalling system

All FC 302 and FC 352 machines are equipped with lighting and signalling systems.



## Large, high profile tyres

FC mower conditioners are fitted with large diameter high floatation tyres, for exceptional grip during work and transport.

## TECHNICAL SPECIFICATIONS

	FC 302 G	FC 302 RG	FC 352 G	FC 352 RG
Conditioning	Finger rotor and adjustable/reversible comb	Chevron pattern rollers	Finger rotor and adjustable/reversible comb	Chevron pattern rollers
Attachment	by pivoting lower links to the tractor lift arms			
PTO drive (min <sup>-1</sup> )	540 and 1000			
Cutting width (m/ft)	3.00 (9'10")		3.50 (11'6")	
Conditioning width (m/ft)	2.22 (7'3")		2.70 (8'10")	
Number of discs	6		7	
Number of knives per discs	2			
Rotor speed (min <sup>-1</sup> )	1000* and 810	-	1000* and 810	-
Roller speed (min <sup>-1</sup> )	-	810* and 1000	-	810* and 1000
Swath width (min./max.) (m/ft)	0.80 to 2.20 (3'7" to 8'10")		1.10 to 2.70 (3'7" to 7'3")	
Wide swath shield	■	■	■	■
Adjustable swath deflectors	■	■	■	■
PTO transmission shaft with free wheel and friction slip clutch	■	■	■	■
PTO power requirement (as from) (kW/hp)	52/70		66/90	
Hourly work rate (approx.)	2.5 to 3 ha (5 to 6 acres)		3 to 3.5 ha (7 to 9 acres)	
Overall transport width (m/ft)	3.00 (9'10")		3.50 (11'6")	
Hydraulic connections required	1 single-acting outlet & 1 double-acting outlet			
Lighting and signalling system	Standard			
Tyres	11 L x 16 ribbed tread			
Weight with PTO shaft (kg/lbs.)	1950/4290		2050/4510	
Mechanical tongue shift	■	■	■	■
or				
Hydraulic tongue shift	■	■	■	■

## Optional equipment

Swath grouper attachment (conveyor belt type)	■	■	■	■
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\* Factory set

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