Front mounted disc mower conditioners

FC 280 F – FC 313 F / DF / RF LIFT-CONTROL





be strong, be **KUHN**



UNMATCHED GROUND ADAPTATION



YOU WANT TO MAXIMIZE YOUR OUTPUT

Harvesting quality crop on farms of ever increasing size inevitably requires higher output machines. The FC 280 F and FC 313 F/DF/RF enable tractors to reach its full potential, thanks to the possibility of working in combination with rear mounted machines. Associate a FC 313 F with a rear mounted FC 883 and the cutting width will be 8.80 m!

UNSOILED FEED FOR YOUR LIVESTOCK IS YOUR PRIORITY

Maximizing the nutritional value of the crop means minimizing the share of impurities in the feed. KUHN LIFT-CONTROL suspension system stands for unmatched ground adaptation and constant cutting height.

MACHINE RELIABILITY IS IMPORTANT FOR YOU

Like all KUHN machines, also the front mounted mower conditioners are known for their high quality. The cutterbar will meet your demands concerning the durability and reliability as the whole machine does.

KUHN front mounted mower conditioners range in brief:

	Working width (m)	Conditioning	Suspension
FC 280 F	2.80	flexible fingers + conditioning hood	by springs
FC 313 F	3.11	flexible fingers + conditioning hood	by LIFT- CONTROL
FC 313 DF	3.11	steel fingers + conditioning hood	by LIFT- CONTROL
FC 313 RF	3.11	rubber roller	by LIFT- CONTROL

CLEAN FORAGE FOR HIGHER REVENUES

The main aim as professional cattle farmer is simple: produce as much meat or milk as possible from the forage. Therefore the palatability of the feed has to be maximized through reducing the amount of impurities.

This means, a constant cutting height, reduced ground pressure and an easy passage over obstacles are your main demands. The solutions: LIFT-CONTROL and pull trapezium suspension systems.



LIFT-CONTROL: EXCLUSIVE KINETICS

KUHN engineers have succeeded in making a dynamic, hydro-pneumatic suspension system as opposed to the passive system commonly in use. The kinematics of KUHN front mower conditioners are based on a pull trapezium providing a dynamic suspension. This means: If the force on the mowing unit increases during forward motion, the suspension automatically rises as well.

ADJUST PRESSURE EASILY

Through the accumulators the ground pressure can be easily adjusted with great precision from the cab according to harvesting conditions.

- Follow the general rule:
- less ground pressure on wet and uneven soil,
- increase pressure on dry soil at high working speeds.



LIFT-CONTROL BENEFITS



Improved mowing - excellent terrain following - less crop contamination - nutritional value preserved - stubble protection



Reduced costs - less fuel consumption - less wear and side forces - less concentrates needed - increased working speed

Take a picture of this QR-code with your Smartphone to see first-hand how LIFT-CONTROL suspension works.



Easier work - adjustments from the cab - pressure gauge for accurate adjustments - easy passage of obstacles



PULL TRAPEZIUM: UNEVEN CONTOURS...NO ISSUE

The machine has to be as flexible as the terrains are different. The pull trapezium suspension system of KUHN front mounted mower conditioners provides this adaptability.



DESIGNED FOR CONSTANT GROUND PRESSURE

The pull trapezium suspension system with trailing arms and ball joints links the mowing conditioning unit to the chassis. All anchor points and linkages are designed to ensure a constant ground pressure.



The unit is «pulled» rather than pushed which provides exceptional adaptation to ground contours. The mower unit has the ability to pivot +/- 15.5° left to right as well as having a vertical travel range of 750 mm (560 mm on FC 280 F). The ground pressure is easily adjustable.

Should an obstacle be encountered, the system retracts and lifts the unit upwards. Afterwards, it will automatically resume its working position.

RELIABILITY RECOGNIZED

The cutter bar is the heart of each mower. KUHN has developed a well-proven solution, which you can rely on.



- **1** No distortion: high capacity bearings in a one-piece sealed housing
- 2 PROTECTADRIVE system: protects the cutterbar gear train in case an obstacle is hit
- 3 Long operational life: large diameter, reinforced gearwheels
- Perfect, leak-free sealing: O-rings used on cutterbar bearing housings
- **6** Increased service life: Disc pinion is fitted with double-axial ball bearings to endure axial and radial forces.
- 6 Minimum wear or distortion risks: Idler gears are mounted in heat treated steel cups.
- Highly wear resistant: Knife attachment hardware is fully protected (steel cups welded to the disc).
- B Excellent mowing performance: oval discs for improved forage transfer to the conditioner and more precise and clean mowing.





MINIMIZE DOWN TIME

- Fast removal and installation of the disc bearing station.
- The stations, which include the housing, bearing and pinion shaft are factory-assembled.

HIGH QUALITY KNIVES

The high-inertia reinforced knives are made of high quality steel. Knives on KUHN disc mower conditioners have a helical shape for cleaner mowing and match the strictest standards.

EXCLUSIVE

100 % SAFE KNIFE ATTACHMENT

FC front mounted mower conditioners can be equipped with FAST-FIT quick release blade mount system, depending on the country.

EASY AND EFFICIENT OPERATIONS

280 F

FC

Positioned directly in the users' field of vision, the FC 280 F is a pleasure to operate and easy to monitor. Mounted to the front of the tractor, the machine follows the input from the steering wheels exactly. Field corners will have an immaculate finish. With the FC 280 F it is possible to mow right up to hedges, fences and other obstacles, which can be more difficult to reach with a rear mounted machine.

BUER



ADJUSTABLE CONDITIONING HOOD

By activating a lever it is possible to change the distance between the conditioning rotor and the hood.

A The crop is conditioned intensively, opening the natural wax coating which surrounds the stalks.

B The conditioning rotor functions essentially as a fluffer.



CUSTOM MADE CONDITIONING

The speed of the conditioning rotor (615 or 888 rpm) can be quickly adapted to the nature of the crop by simply switching the position of a PTO shaft.

PROFESSIONAL FROM ALL POINTS OF VIEW

As clean forage with a high nutrional value gets more important as well as quick return of investments, the FC 313 F/DF/RF machines meet the demands of a professional farmer. Combining the reliable cutterbar, the exlusive LIFT-CONTROL suspension and various conditioning options, these machines are designed for the most demanding livestock farms.





A DREAM ADJUSTMENT RANGE!

FC 313 F / DF

Conditioning intensity can be altered by three means:

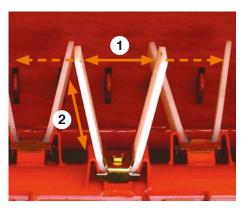
 six conditioning hood positions: distance between rotor and hood changed by a lever,

APPROPRIATE CONDITIONING



KUHN provides different conditioning systems to address the versatility of forage crops. Whether you choose V-shaped nylon fingers, steel fingers or rollers, the objective always stays the same: accelerating the drying process resulting in high-quality forage at the end.

V-SHAPED FLEXIBLE NYLON FINGERS



The V-shaped fingers scrape the plants' protective wax coating, which greatly increases evaporation from the plant.

The fingers that work the crop are made of a highly resilient material.

- **1** The fingers can bend out of the way of a foreign object.
- The fingers' are rigid in the rotational direction, therefore a fluffy and regular swath is obtained.



STEEL FINGERS FOR EXCEPTIONAL SITUATIONS



Whether there is heavy forage, long grass or late herbs to be conditioned, steel fingers constitute an effective alternative. The fingers pivot and can, where necessary, avoid an obstacle.

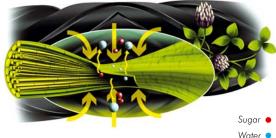


POLYURETHANE ROLLERS



Rollers provide optimum conditioning of delicate crops. Leaves and stalks are regularly crimped and compressed, thus allowing moisture to escape.

- The conditioning intensity is adjustable by simply changing the pressure between the two rolls.
- For reliable, smooth operation, both rolls are individually driven and can open sufficiently to allow the passage of most foreign bodies.





FRONT MOUNTED FC COMFORT FEATURES

MORE ADVANTAGES TO MAKE YOUR WORK EASIER







SWATH BOARD ADJUSTMENT

Adjustable swath deflectors guide the flow of forage and deposit it between the wheels of the tractor in a standing, well ventilated swath. The forage is neither soiled nor crushed by the tractor wheels.



LARGE CLEARANCE

At work, front mounted mower conditioners are kept in a fixed position by retention chains.

For manoeuvres and headland turns an integrated hydraulic lift linkage provides great driving comfort.

A very high lift height (40 cm!) makes manoeuvres possible without risking to pick up already formed swaths.



NARROW TRANSPORT WIDTH

KUHN FC 280 and 313 F/DF/RF have a narrow width for road transport. It does not exceed 3 m (10'2") when the side guards are raised. Therefore, the access to every field is secured. For increased safety, mechanical locks automatically engage after selecting the transport position.

Technical specifications	Front Mounted Disc Mower Conditioners			
	FC 280 F	FC 313 F LIFT-CONTROL	FC 313 DF LIFT-CONTROL	FC 313 RF LIFT-CONTROL
Working width	2.80 / 9′2′′	3.11 / 10'2''		
Attachment	A frame coupler - cat. 2			
PTO speed (rpm)	1000 (or 540/1000*)	1000		
Number of discs with skids	7	8		
Removable PROTECTADRIVE disc bearing stations		•		
Conditioning system	flexible V-shaped conditioning			polyurethane roller
Conditioning rotor speeds (rpm)	615 and 888	615 and 888 10		1000
Suspension	by springs	by hydro-pneumatic LIFT-CONTROL		
Min/max swath width (m/ft)	1.10-1.60 / 3′7′′-5′3′′	1.50-1.60 / 4′11′′-5′3′′		1.35-1.60 / 4′5′′-5′3′′
Transport width (m/ft)	2.96 / 9′9′′	2.99 / 9'10'' 2.9		2.99 / 9′10′′
Weight (kg/lbs)	956 / 2108	1270 / 2800	1382 / 3047	1415 / 3120
PTO power requirement (kW/hp)	59 / 80	75 / 102		
Necessary tractor hydraulic supply	1 single acting valve			
Lightning and signalling	\diamond	-	•	

 Standard Optional

Optional equipment: 540/1000 rpm gearbox kit – A frame attachment – wide spreading kit for FC 313 F.

* KUHN SERVICES MAXIMIZE THE USE AND PRODUCTIVITY OF YOUR KUHN EQUIPMENT

KUHN sos order

You urgently need spare parts ? With KUHN SOS order benefit from express delivery seven days a week, 365 days a year. Thus, you can minimize the immobilisation time of your machine considerably and increase your work output.

KUHN protect +

Benefit from 36 months in complete serenity because of KUHN's protect + warranty. You can concentrate exclusively on your work and the performance of your machine. Because this is what you expect, when investing in high-tech machinery.

KUHN i tech

An unexpected technical problem always occurs at a wrong time. Your KUHN dealer can support you quickly and efficiently thanks to KUHN i tech. With this 24/7 online service, a quick and exact diagnosis is possible.

KUHN finance

New machine necessary, financing unsure? Modernize your equipment and develop your farm with KUHN finance, in total security and according to your needs and demands. We offer custom-made finance solutions, adapted to your requirements.



FIND OUT WHICH FC CONDITIONS ACCORDING TO YOUR NEEDS!

Front mounted FC

	FC 280 F	FC 313 F	FC 313 DF	FC 313 RF
Ground adaptation	++	+++	+++	+++
Management of pastures	++	+++	++	++
Management of leguminous crops	++	++	++	+++
Management of tall crops	++	++	+++	++

++ very good + good o suitable +++ optimum

Check out the whole KUHN range of disc mower conditioners



1. Rear mounted / 2. Front mounded / 3. Trailed / 4. Combined

For more information about your nearest KUHN dealer and other KUHN products, visit our website at

www.kuhn.com



4 Impasse des Fabriques - BP 50060 -F-67706 Saverne CEDEX - FRANCE

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