



Trailed Disc Mower Conditioners
FC 1061 TC -TL





Contents

04 - 05	FC 3161 TC / 3561 TC / 4061 TC / 4461 TC / 3161 TCD RA / 3561 TCD RA Central drawbar: maximum output	08	FC 3161 TC / 3561 TC / 4061 TC / 4461 TC / 2861 TL / 3161 TL / 3561 TL Less soil contamination for top quality fodder	12 - 13	FC 1061 TL / 1061 TC A great conditioner selection adapted to your needs
06	FC 2861 TL / 3161 TL / 3561 TL Side pull: everything you need	09	What FC users are saying	14 - 15	FC 3161 TCD RA / 3561 TCD RA Swathing without raking
07	FC 3161 TLV Twin swaths less than 3 metres in width	10 - 11	OPTIDISC ELITE: The optimum cut	16 - 17	FC 4061 TC / 4461 TC Great output. Minimum power requirement

FC 1061

Trailed Disc Mower Conditioners

DYNAMIC CUTTING

HOW TO REMOVE FORAGE FROM THE FIELD AS QUICKLY AS POSSIBLE TO KEEP NUTRITIONAL VALUE TO A MAXIMUM? THAT IS THE ISSUE LIVESTOCK FARMERS HAVE TO DEAL WITH IN TIMES OF UNPREDICTABLE WEATHER CONDITIONS AND INCREASING CONCENTRATE PRICES.



INCREASED PRODUCTIVITY NEEDED FOR AN OPTIMUM BASIC RATION. FC 1061 series mower conditioners provide a fast, clean cut of heavy grasses and delicate forage crops as well as quick dry-down. You save money and your machine is more profitable.

LOOKING FOR FLEXIBLE MACHINES. KUHN mower conditioners adapt to various requirements: wide spreading, grouping two swaths, different swath widths... there are many possibilities.

COST-EFFECTIVE MACHINES. The operational costs of these machines are reduced to a minimum as they have a lower power requirement than equivalent models. Maintenance costs are lower too thanks to the reliable OPTIDISC ELITE cutter bar and PROTECTADRIVE safety system.

18 FC 1061
Optional equipment

19 Specifications



CENTRAL DRAWBAR: MAXIMUM OUTPUT

The FC 1061 series with central drawbar (TC) is available from 3.10 m to 4.40 m and can be fitted with different conditioner systems (steel fingers, SQUAREFLEX rollers and DOUBLE CRIMP rollers). Spend less time manoeuvring at headlands with these machines and increase your productivity by 10 to 15% compared to trailed mowers with a side drawbar!

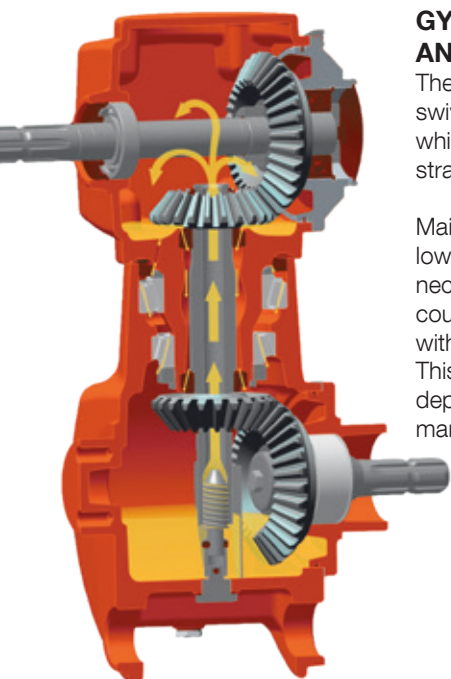
Working comfort and smooth running are far superior with the GYRODINE headstock, exactly what is needed to produce high quality forage. A conveyor and grouper unit is available on the smaller width versions (3.10 m and 3.50 m).

ADAPT DELIVERY TO HARVESTING MACHINES



The machine is designed to handle large forage flows. It has three different delivery modes:

- Regular swaths with adjustable width.
- Wide delivery, extremely uniform **(A)**. Changing from regular to wide delivery is easy and tool free. The swath shields for wide delivery are stored on the drawbar.
- Twin swaths **(B)** with an overall width of 2.70 on the FC 3161 (compatible with 3 m pick-up) and 3.50 m on the FC 3561. Twin swaths are produced with fixed asymmetrical shields, available as an option.



GYRODINE: 90° AND DEPENDABLE

The heavy-duty GYRODINE swivel hitch allows turns of 90° while keeping the PTO driveline straight.

Maintenance requirements are low with only one oil change necessary. The machine is coupled to the lower tractor links with pins stopped from rotating. This hitch system is extremely dependable and ensures safe manoeuvres.

profi
THE FARM MACHINERY MAGAZINE



EXCLUSIVE

PROFI MAGAZINE TALKS ABOUT IT

«It's easy to appreciate no longer having to divide a field into regular strips, especially without GPS.»

«A great deal of thought was put into the development of the FC 3160 TDC.»

«The different adjustments can be made with very few tools.»

«The bigger wheels are appreciable because this mower weighs 2,390 kg. Work output and the finish of the machine itself are excellent.»

Source: PROFi, 4/2016, p.30-31

SIDE PULL

The FC 1061 series with side drawbar is available in working widths of 2.80 m to 3.50 m. Different types of conditioner ensure fast dry-down of cut crops.

Advantages:

- Very smooth handling thanks to the GYRODINE headstock and side drawbar.
- Swath central or side delivery, or wide spreading.
- Conditioner options: steel fingers, SQUAREFLEX roller or DOUBLE CRIMP roller.

It is also a very cost-effective machine, designed to ensure fast work output for farms with medium-sized plots.



TWIN SWATHS LESS THAN 3 METRES IN WIDTH

With a 3.10 m cut, 2-speed finger conditioner and hydraulically-controlled swath shields, the FC 3161 TLV mower conditioner can deliver 2 swaths side by side by grouping 6 m of cut crop into a swath width that does not exceed 2.80 m: the ideal size for a forage harvester with a maximum pick-up of 3 metres.

A MODEL FOR CONTRACTORS AND COOPERATIVES

Save time and money with this machine. Raking is no longer necessary and work output by the forage harvester is increased. Forage quality is improved: no more foreign bodies or soil brought into the forage during raking and less risk of stones causing mechanical breakdown.



Drawbar adjusts for an optimum cut

When you change the position of the swath shields the position of the drawbar adapts automatically. This means:

- The tractor wheels never run over the forage except if you need to manoeuvre.
- The machine works the full cut width.
- You deliver a swath that is less than 3 metres and easy to collect by the pick-up.



One hydraulic valve less

Only two hydraulic valves are required to manage the machine as the FC 3161 TLV series is equipped with a circuit selector. The position of the shields can be controlled separately, as is necessary on steep slopes, for example, in order to adjust the point of forage delivery.

LESS SOIL CONTAMINATION FOR TOP QUALITY FODDER

Reduce costs by optimising basic ration. Profits from livestock farming start with feed storage, in silos, bales or in bulk. The aim is simple: produce as much meat or milk as possible from the basic ration by increasing palatability. In order to do this, the sward must remain undamaged and forage must be as soil-free as possible. By concentrating on the technical details of these mower conditioners, KUHN helps you get the most from your forage to increase your profitability.



Constant cutting unit suspension

The mowing unit is suspended by torsion bars on the FC 1061 series.

It follows ground contours closely to produce an even cut and can be adjusted separately on both sides. This helps protect the sward and the machine, and keeps dirt out of the forage.



EXCLUSIVE

An even and uniform spread

The rear of the conditioner hood is articulated. It is guided directly by the main frame to which it is connected so it remains at a constant height from the ground. It is independent from the movements of the cutter bar.



Give soil and grass cover a break

The ultra-large tyres exert very little ground pressure during operations and headland turns. The crop is preserved and soil compaction is avoided.

WHAT FC USERS ARE SAYING

LIVESTOCK FARMERS ALL OVER THE WORLD FACE DIFFERENT CHALLENGES BUT THEY HAVE THE SAME OBJECTIVES FOR THEIR FORAGE HARVEST. THEY WANT TO INCREASE THEIR PRODUCTIVITY AND IMPROVE EFFICIENCY IN ORDER TO SAVE MONEY. NOTHING IS MORE EFFECTIVE THAN HARVESTING TOP QUALITY CROPS. THIS IS WHAT THEY SAY:



R. BREZZI

PIEMONTE ITALY

«The FC 3160 TCR has not just improved hay and silage making on our farm, it has transformed it. We have worked with the machine on over 100 hectares and it has given us high productivity and perfectly formed swaths in spite of a very difficult season. Continuous rain, short operating windows, having to cut quickly without damaging the quality of the forage...we have been able to manage all of this with the new FC and we are very pleased. Even with high ground speeds of 15-18 km/h, you always get great quality forage.»



J. KUJALA

SOUTHERN OSTROBOTHNIA, FINLAND

«We used the FC 3160 TCD for two cuts last year. We cut 700 hectares with the machine. Conditions were extremely difficult in Finland last year because of heavy rain and very wet land, so we were very impressed by the low power requirement of the tractor. The extra-large tyres are absolutely necessary in wet conditions. With the enhanced suspension of the cutter bar, the cut was clean and precise!»



S. BROWN

QUEENSLAND, AUSTRALIA

«As dairy farmers, we really appreciate this machine for its capacity to handle large volumes of forage and to maintain a reasonable speed, as well as for its high quality conditioning with the rotor with steel fingers and for its clean cut. The overall size of the machine (heavy duty gearbox and cutter bar) is an advantage too.»



THE OPTIMUM CUT

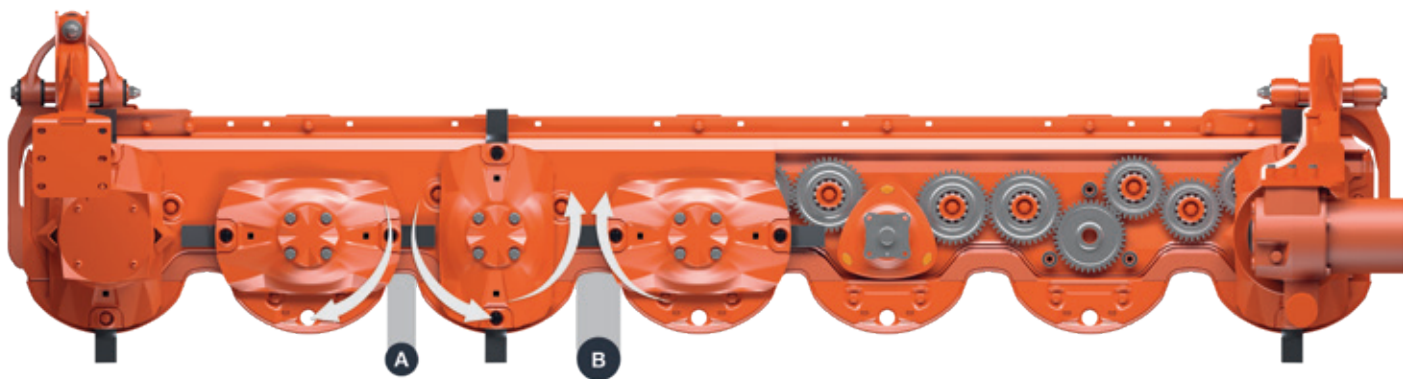
The OPTIDISC ELITE cutter bar was developed with the close collaboration of farmer users. It is a solution that combines cutting quality, operating comfort and is highly reliable.

The requirements of large farms and contractors have been more than met:

- Lubricated for life.
- Perfectly adapted to high-powered tractors.

GREAT CUTTING QUALITY !

KUHN'S OPTIDISC ELITE cutter bar is an excellent example of added value created through the close collaboration between manufacturer and farmer. It is a solution that combines unrivalled cutting quality, operating comfort and is highly reliable. Being lubricated for life and adapted to high-powered tractors, this cutter bar meets the requirements of large farms and contractors.

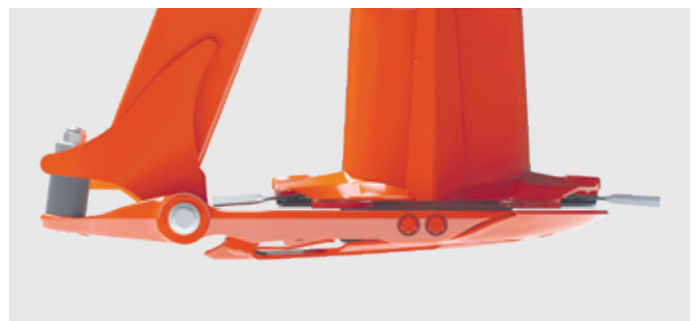


Minimum distance for a clean cut

Spacing is reduced at the point where the discs diverge **(A)** to increase knife overlap. This results in a clean cut even in light or short grasses.

Maximum distance for easy crop passage

Distance is increased at the point where the discs converge **(B)**. This provides more space for the crop to pass through which is quickly carried away to the rear so that the mower can do its job undisturbed.



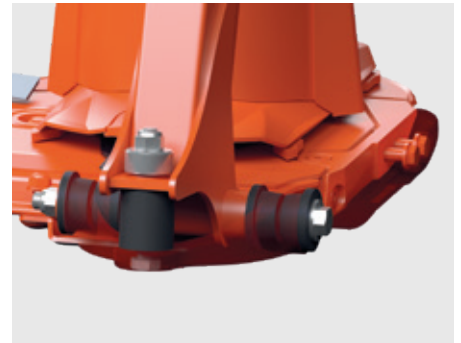
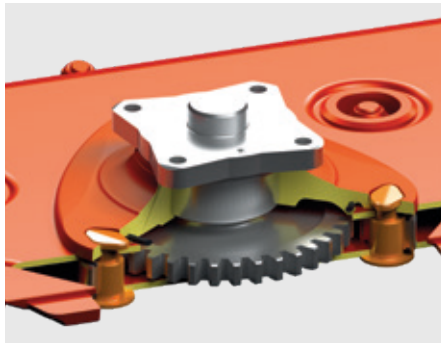
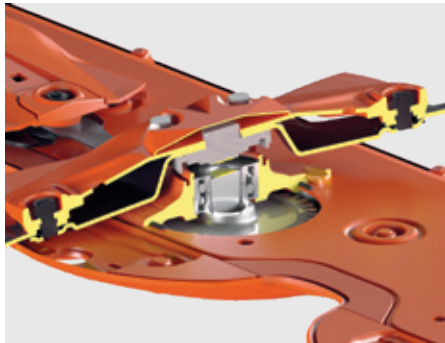
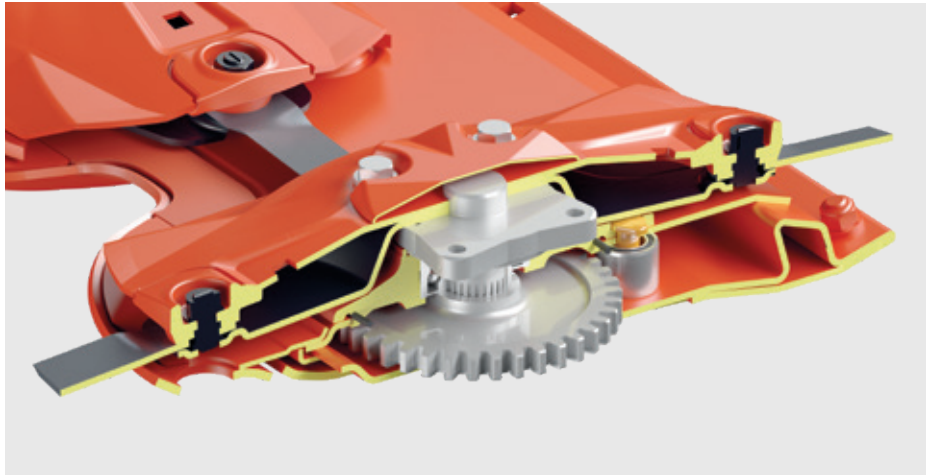
Smooth running

On wet ground, earth can build up in front of the cutter bar, but not with OPTIDISC ELITE! It is equipped with skids designed to improve smooth running. Plant cover is protected, forage quality is high, and a regular cut is ensured, even in difficult conditions.

TOP-OF-THE-RANGE PARTS STRENGTHEN THE HEART OF THE CUTTER BAR

Top-of-the-range parts strengthen the heart of the cutter bar:

- Disc-bearing station with double-row angular contact ball bearings.
- Large-diameter gear wheels in high-precision forged steel with 3 teeth intermeshing.
- Discs with forged and heat treated cups over the whole surface area.
- Disc skids in treated steel with the option of adding protection (screw fastening).
- PROTECTADRIVE safety.



PROTECTADRIVE:

Protects and reduces costs

In the event of a violent impact between a disc and an obstacle, the shaft holding the disc can shear just above the bearing groove. The gearwheels are protected. In less than 15 minutes, the machine is operational again at a very low repair cost.

EXCLUSIVE

Extra rigid where it counts

The disc bearing stations are attached by long screws that go through the cutter bar. It is a solution that prevents them from being pulled out of the cutter bar in the event of an impact.

The disc-drive pinion remains securely in place and repair costs are reduced.

EXCLUSIVE

For a longer machine life

Shock absorbers between the cutter bar and the main frame are highly effective when mowing at high speeds.



FAST-FIT:

100% safe knife attachment

Mowers are equipped with FAST-FIT knives as standard. A powerful leaf spring puts constant pressure on the knife retainer for increased securement, and knives are changed in no time at all.



Knives free to rotate

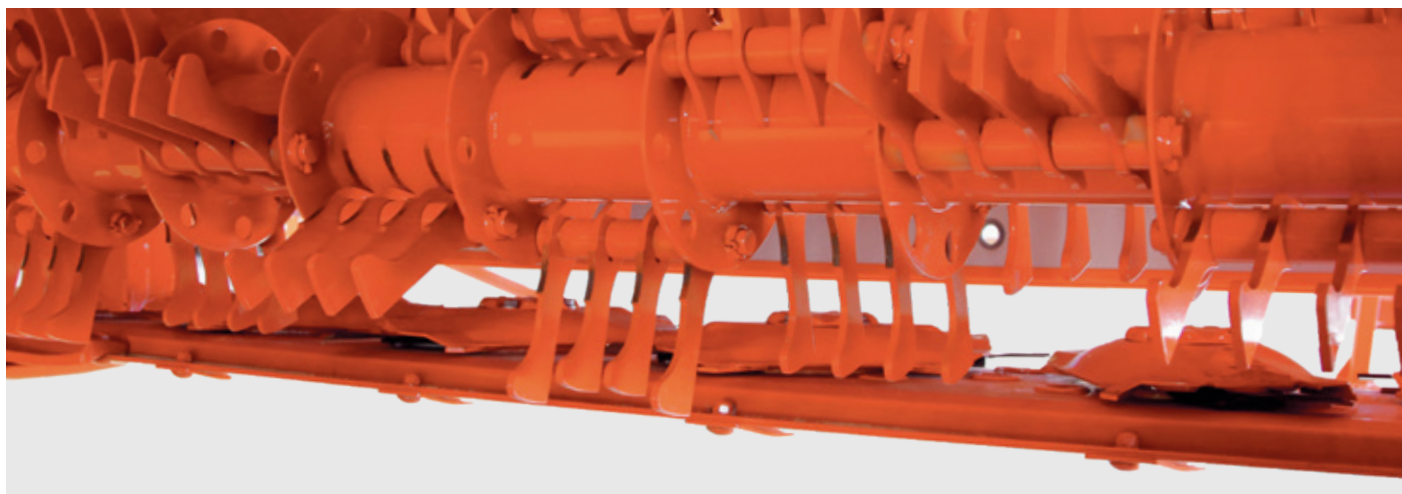
For better cutting quality and a longer service life, the knives rotate freely 360°.

A GREAT CONDITIONER SELECTION ADAPTED TO YOUR NEEDS

DIGIDRY PIVOTING FINGERS IN STEEL FOR TOUGH CONDITIONS

Steel fingers are highly effective in heavy, long and mature forage as well as in short forage. The conditioner's high-capacity intake produces smooth forage flow through the machine.

Power requirement for this type of conditioner is kept low with quicker forage passage and no need for recirculation. Well-structured, fluffy swaths are created by the position of the fingers that fluff up the forage, sending it up in the air before it comes down to form the swath. The swaths are well-shaped and airy so they dry out quicker and produce more energy and nutrient-rich forage. At reduced conditioner speed, the steel fingers can also work alfalfa.



Conditioning intensity set in a few seconds

To adapt conditioning to forage requirements you just have to set the two-speed selector. Reduce rotor speed for legumes (780 min⁻¹) and speed it up for dense grasses (1000 min⁻¹).



KUHN ASSET

Unrivalled swath delivery

The conditioner hood is guided directly by the machine's main frame. Swath delivery is not affected by the cutter bar's movements so it is more regular.

ROLLERS: GENTLE CONDITIONING OF DELICATE CROPS

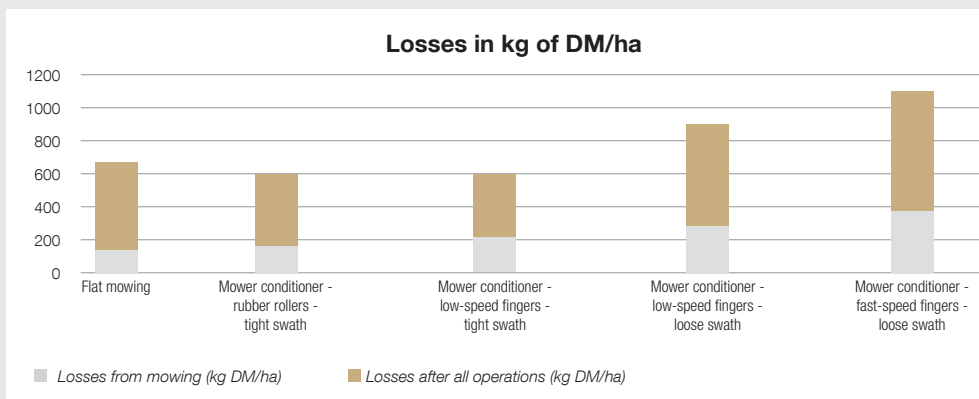
One of the best ways to reduce concentrates in feed is to integrate plant protein into it. Legumes are ideal for this, as long as the leaves are retained in the harvest! Tests carried out by Arvalis (French Institute), the Chamber of Agriculture and the FD machinery co-operative highlight the benefits of rollers.

Rollers save around €100/ha/cut

Losses caused through crop operations are reduced by using rollers (tight swaths). For a well-balanced ration, it is necessary to buy concentrate to make up for leaf loss. Depending on the price of raw materials, the cost can be as much as €100/ha/cut, so it is definitely worth considering a conditioner with rollers!

Harvest earlier!

The mower-conditioner with rubber rollers produced 80% of dry matter by the second evening as opposed to the third evening for the other methods.



ARVALIS
Institut du végétal



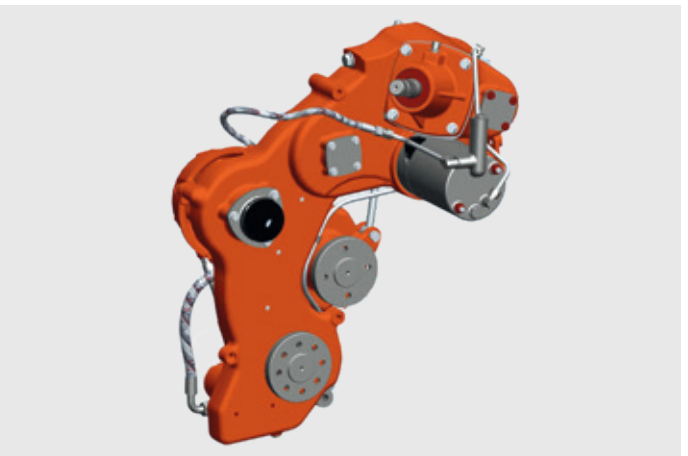
Rubber or steel

Models in the 1061 series can be equipped with roller conditioners:

- **1.** In rubber, with the exclusive SQUAREFLEX design (TLR/TCR).
- **2.** In steel, with the DOUBLE CRIMP ROLLER (TLS/TCS).

They grip the plant evenly to allow the humidity to escape. The nutritional value of delicate forage crops is retained.

With a large 240 mm diameter, they are very robust and forage circulation is improved. Pressure between the rollers can be adjusted from 100 to 500kg/m to suit the type of forage and conditioning intensity desired. The steel rollers are not available in all countries. Please contact your Authorised Dealer to find out.



EXCLUSIVE

Synchronised and maintenance-free drive

The roller drive system contains gearwheels only. The two rollers are perfectly synchronised, unlike belt or chain systems. This is an important advantage with respect to roller life and the elimination of vibrations. The drive housing is also protected by a KUHN-exclusive shear bolt. Even in the event of impact with a foreign body, the machine and its drive system are protected.

SWATHING WITHOUT RAKING

The FC 3161/3561 TCD RA models are designed for professional use by contractors, large operations and machinery cooperatives. Their rear grouper unit makes them ideal for harvesting all silage crops. They also provide maximum flexibility with different delivery options.



ADAPT DELIVERY TO THE HARVESTING MACHINE

A grouper belt gathers two swaths as soon as they are cut in order to form:



A twin swath for pick-up by a silage harvester.



A narrower swath for pick-up by a baler or loader wagon.

Save time and improve forage quality

Using the grouper belt means one less pass with the rake later on and results in better quality forage:

- no additional leaf loss during raking.
- no incorporation of soil or foreign bodies in the swath.



Forage delivery to the left or right

The grouper belt is positioned to the rear of and parallel to the mowing unit so cut crop can be delivered to the right or the left. It is easier for the driver to keep the front unit aligned with the uncut forage when using a front combination - FC 1061. The belt can be lifted and run faster or slower at any time to adapt to the amount of uncut crop or slopes.



Stay relaxed in the cab

Mower-conditioner adjustments are very easy. All functions required to monitor the machine and its grouper are centralised on a control box in the tractor cab. The control box comes as standard. Among its most important functions are belt-speed control and direction of delivery.



Autonomous hydraulic drive

The conveyor belt is driven by an integrated hydraulic unit whose pump is powered by an output on the GYRODINE headstock. This drive system is a real advantage for machinery cooperatives and contractors as the machine can easily adapt to different tractors. Tractor oil supply problems? Never again!

FC 4061 TL | 4461 TC

GREAT OUTPUT MINIMUM POWER REQUIREMENT

FC 4061 AND 4461 machines at widths of 4.00 m and 4.40 m respectively are designed for tractors from 130 hp. Large forage operations appreciate their high productivity and low power requirement at these widths.



LARGE-WIDTH MODEL OF THE FC 1061 SERIES

**It has all the features of the FC 1061
with central drawbar.**



OPTIDISC ELITE: the optimum cut

The OPTIDISC ELITE cutter bar is maintenance-free and equipped with the FAST-FIT quick-release knife system. To avoid knife related costs, the PROTECTADRIVE safety system protects the gearwheels. In the event of a violent impact between a disc and an obstacle, the disc shaft can shear just above the bearing thanks to a cleverly designed shear groove.



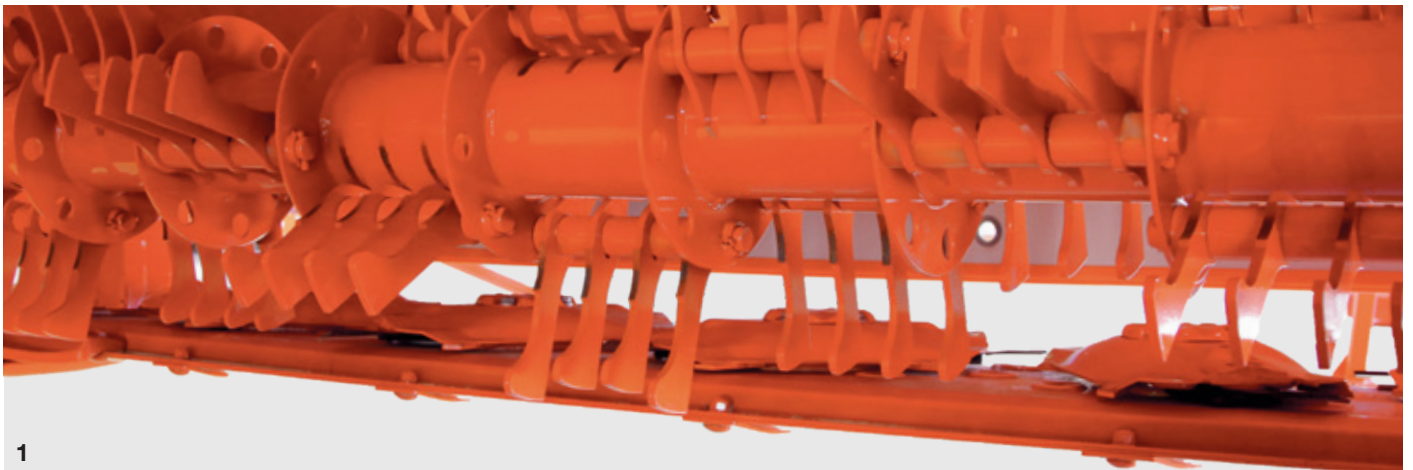
CHANGE DELIVERY MODE

**Different delivery modes are possible:
Swathing and wide spreading.**

Stable on difficult terrain

The FC 4461 is equipped with large twin wheels that:

- Ensure the machine is less subject to sinking on the plot and to prevent wheel tracks if pivot irrigation is used.
- Protect plant cover in wet conditions.
- Provide stability on bumpy ground and dirt paths.



A conditioner that adapts to you

Three types of conditioner can be fitted to FC 4061 and FC 4461 machines. The DIGIDRY conditioner with steel fingers **(1)** is best in difficult conditions. For legumes and delicate forage crops, opt for the conditioner with the SQUAREFLEX rubber roller **(2)** or the DOUBLE CRIMP steel roller conditioner **(3)**.

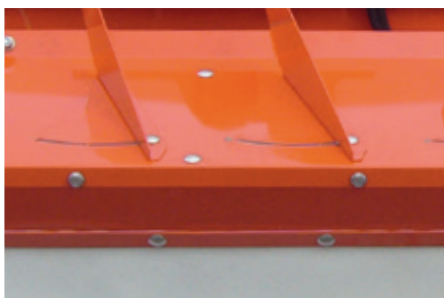
OPTIONAL EQUIPMENT



FC 3161 TCD/FC 3561 TCD

Asymmetrical swath shields

Asymmetrical swath shields can be fitted to the rear of the machine to produce twin swaths. Twin swaths can be collected by pick-ups less than 3m.



FC 3561 TCR/TCS, 4061 TCR/TCS, 4461 TCR/TCS

Wide spreading kit

A shield with deflector fins can be fitted to the rear of the machine. The fins pivot automatically (except FC 4061 and FC 4461) when the drawbar cylinder is adjusted. With this system, forage is spread in an even layer over a large width for fast dry-down.



FC 1061 TL/FC 1061 TC

Hydraulic control of cut height

For certain mowing conditions (stony areas, flattened grass,...), cut height can be modified hydraulically. An indicator shows the cut height.



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.



Specifications

Model	
Working width (m)	
Number of discs with protective skids	
Knife attachment	
Disc bearing stations removable from the outside	
Conditioning system	
Conditioner rotor speed (min ⁻¹)	
Conditioner drive	
Swath width, min, max (m)	
Wide spreading system	
Cutting height adjustment	
Suspension adjustment	
Tyres	
Transport width (m)	
Lighting and signalling	
Attachment	
PTO drive	
PTO speed (min ⁻¹)	
Free wheel	
Min. PTO requirement (kW/hp)	
Tractor hydraulic requirement	
Weight (kg)	TLD
	TCD
	TLV
	TLR
	TCR

◆ standard ◇ option - not available

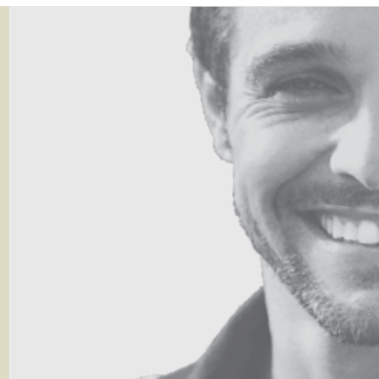
OPTIONAL EQUIPMENT (according to model and coun
Hydraulic control of FLEXPROTECT side guards - hydra

FC 2861 TL	FC 3161 TC/TL	FC 3161 TLV	FC 3161 TCD RA	FC 3561 TC/TL	FC 3561 TCD RA	FC 4061 TC	FC 4461 TC
Side pull	Centre pivot or side pull	Side pull	Centre pivot	Centre pivot or side pull	Centre pivot		
2.67	3.10			3.50		4	4.40
6	7			8		9	10
FAST-FIT quick release knife system							
◆ (PROTECTADRIVE safety included)							
TLD/TCD/TLV: pivoting steel fingers; TLR/TCR: SQUAREFLEX rubber rollers; TLS/TCS: steel rollers							
TLD/TCD: 780 and 1,000 (adjustable by selector lever); TLR/TCR/TLS/TCS: 780							
by gear housing with anti-lock safety							
0.90 to 1.90	0.90 to 2.30	single swath: 0.90 to 1.80 twin swath: 2.70 to 2.80	0.90 to 2.30	1.10 to 2.70			
◆ (TLD/TCD); ◇ (TCR/TCS); - (TLR/TLS/TLV)							
centralised by rod, direct indication							
with torsion bar, separate left / right adjustment							
11.5/80 x 15.3	400/60 x 15.5 (TC) 380/55 x 17 (TL)	380/55 x 17	400/60 x 15.5	400/60 x 15.5 (TC) 380/55 x 17 (TL)	400/60 x 15.5		4 wheels 11.5/80 x 15.3
2.55	3.00			3.50		4.02	4.45
◆							
GYRODINE headstock - 2-point - Cat. 2 and 3; compatible Quick-hitch, cat. 2							
1 3/8" - 6 splines as standard; 1 3/8" - 21 splines as option							
540	1,000 (TL: 540 as option)	1,000					
Integrated in the drive gearbox							
48/65	55/75		60/82	62/84	67/91	69/94	76/103
1,980	2,160	-	-	2,280	-	-	-
-	2,390	-	2,890	2,540	3,050	2,680	2,830
-	-	2,160	-	-	-	-	-
2,090	2,260	-	-	2,390	-	-	-
-	2,500	-	-	2,615	-	2,745	2,905

try): Supporting chains - Set of raised skids for cut heights from 45-85mm and 85-110mm - Skid lining - Additional protection plates for lower part of cutter bar - ulic control of cut height - Swath-shield extensions to reduce swath width...

KUHN SERVICES*

KUHN sos order - Spare parts service, 24/7**
KUHN protect+ - The choice of professionals!
KUHN i tech - For ever quicker repairs!
KUHN finance - Invest rationally!



*Not all services are available in all countries. **Except 1 January, 1 May and 25 December

MyKUHNN

THE LINK TO MY SUCCESS!

MyKUHNN is your online space. Sign up today and find out how MyKUHNN's exclusive services will help you manage your KUHN machinery and terminals more effectively. Log on with your computer, mobile phone or tablet computer to access spare parts catalogues, technical documentation and many connected services.



Check out KUHN's hay and silage making range



1. Disc mowers - 2. Disc mower conditioners - 3. Drum mowers - 4. Gyrotedders - 5. Gyrorakes - 6. Belt mergers - 7. Balers - 8. Wrappers

KUHN SAS - 4 Impasse des Fabriques - BP 50060 - F-67706 Saverne CEDEX - FRANCE
KUHN NORTH AMERICA, INC. - 1501 West Seventh Avenue - Brodhead, WI 53520 - USA
KUHN FARM MACHINERY PTY. LTD - 313-325 Foleys Road - Deer Park, VIC, 3023 - AUSTRALIA
KUHN FARM MACHINERY (U.K.) LTD - Stafford Park 7 - GB TELFORD/ SHROPS TF3 3BQ

To find your nearest KUHN dealer,
visit our website www.kuhn.com

Information given in this document is only for information purposes and is non-contractual. Our machines are in compliance with regulations in force in the country of delivery. In our literature, and for improved illustration of certain details, some safety devices may not be in operating position. When operating these machines, these devices **must** be in position in accordance with the requirements indicated in the operator's manuals and pre-delivery instructions. RESPECT THE ROAD REGULATIONS IN FORCE AS WELL AS the tractor gross vehicle weight rating, its lift capacity and maximum load per axle and tyres. The tractor front AXLE load must always comply with the regulations of the country of delivery (In Europe, it must reach minimum 20 % of the tractor net weight). We reserve the right to change any designs, specifications or materials listed without further notice. Machines and equipment in this document can be covered by at least one patent and/or registered design. Trademarks cited in this document may be registered in one or several countries.

To protect the environment, this leaflet is printed on chlorine-free paper.
Printed in France - 920 759 GB - 07.21 - Copyright 2021 KUHN

