GF

Gyrotedders, 102 and 1002 series

EFFECTIVE TEDDING

GYROTEDDERS GF SERIES 1002

Harvesting high quality fodder is rarely due to chance. Every detail is important.

Every operation must be coordinated and optimised, taking into account the specificities of the fodder, relief, climate, areas to harvest and storage method...

Every extra nutrient energy source given to animals in their basic fodder helps reduce the quantity of concentrate required in the ration.

Tedding is a key link in the harvesting chain because it accelerates drying speed. The aim is simple: it reduces the drying time to preserve the energy value of the fodder and limit weather-related risks.

KUHN offers the most complete and adaptive range of tedders available for the market. KUHN tedders are not only designed to treat the crop properly but to be reliable as well. Farms that beat the weather and the odds run with KUHN machinery.

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

Cost reductions

Good practices

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Comfort - Quality of life

Proximity - Advice

Peace of mind - Services

GF 102 series: economical, highly efficient

Cost control is an essential issue on many farms. With the 102 series range, KUHN provides you with tedders which have all the features required for high-quality tedding without too much sophistication.
On the other hand, no need to worry, they are still KUHN machines: no short-cuts have been made in reliability or longevity. These tenants are part of our basic commitment.

Simplicity and performance

At work, the rotors faithfully follow the tractor, thanks to their pivoting headstock. Activate the hydraulic valve and the tractor lift raises the rotors for transport.

In this position, the rotors are automatically centred and locked; fast and safe transport.

Individual oblique positioning

Each wheel can easily be adjusted obliquely and without tools for accurate tedding along edges, without losing or wasting precious forage.

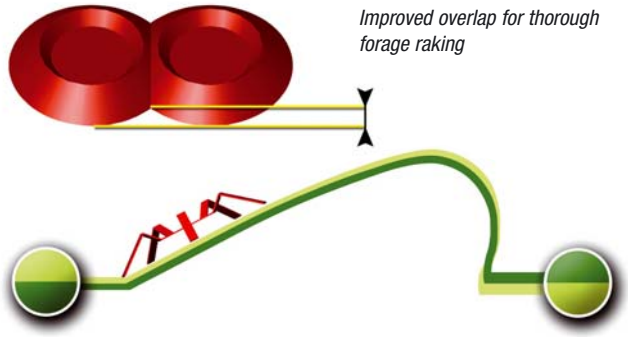
Dry with the speed of light

Small-diameter rotors

Experts are convinced and those who use them swear by them: small rotors are the key to success!

For those who's goal is to harvest a first class crop there are so many advantages:

- Work with a wide angle of attack while turning all of the crop
- Uniform, fast drying
- Fully effective crop inversion
- Unrivalled uniform distribution
- Exceptional ground adaptation
- Minimum distance to center of gravity on mounted tedders reduces lift requirements
- Reduced horsepower requirements.



Improved overlap for thorough forage raking

Forage fully turned over and well aerated thanks to the large pitch angle for improved drying

Theory that backs up the practice

Effect of the various pitch angle settings on tedding efficiency.

PITCH ANGLE Difference in height between rotor front and rear	FLAT ANGLE 24 cm / 9"	AGGRESSIVE ANGLE 40 cm / 15"
Distribution precision		
- good	14%	29%
- average	46%	39%
- poor	39%	32%
Dry matter content Basic product	20.7%	20.7%
after 4 hours	26.0%	28.6%
Average drying speed Increase in the D.M./hour level	1.33%	1.98%
Theoretical drying time to obtain 30 % D.M.	7 hours	4.7 hours

Legends in the making

DIGIDRIVE

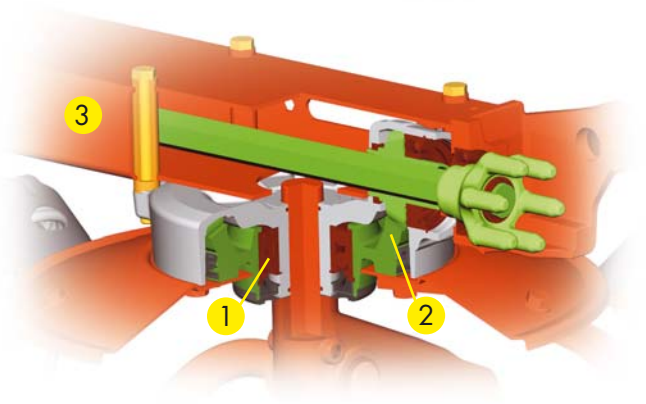
When a KUHN engineer came up with this drive coupling we knew that this would change the rotary tedder as it was then known. Indeed, this patented design made it possible to reliably drive a large number of rotors yet fold them with unrivalled compactness, all with virtually no maintenance or repairs.
Since DIGIDRIVE's inception, nearly 20 years have passed and more than 150,000 tedders are now at work across the land tedding hay with unmatched reliablity.

Minimized maintenance

With rotors driven by DIGIDRIVE and rotor housings lubed for life, the greasing points are limited to a relatively few pivot points allowing you to spend more time in the field and less at the shop.

Furthermore, the rotor housings are made to last:

1. Support by large diameter, double-row angular ball bearings.
2. Thoroughly sealed rotor housing prevents lubricant leakage or introduction of contaminants,
3. Robust mounting of housings to the perifery of broad rectangular frame maximizes strength and rigidity.



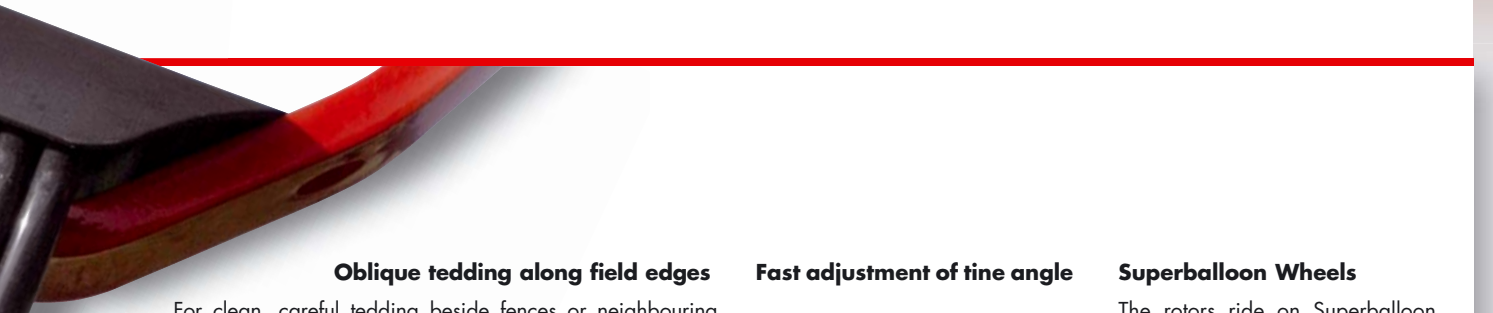
An exceptional level of standard equipment

Tines that don't let you down

When it comes to the tines that actually engage the crop, KUHN leaves nothing to chance: Top quality raw material has been wound to 4 coils tine finger, exacting quality control standards, and a defined attachment system to the arms result in an unmatched design life of at least 180,000 cycles. This provides several hundred hours of work before the need for replacements is necessary.

Asymmetrical tine finger length means both fingers engage the crop equally for more consistent pickup.

Tine guards prevent accumulation of debris around the coils.



Oblique tedding along field edges

For clean, careful tedding beside fences or neighbouring fields, machines are equipped (except GF 13002 GII/17002 GII) with an oblique control system.
Mounted Gyrotedders series 1002 are very easy to use, the operator pulls a rope, momentarily reverses, and the tedder is ready to work in the oblique mode. Optional on mounted Gyrotedders and standard on trailed Gyrotedders up to 10.80 m (35'5''), the oblique setting is controlled hydraulically for absolute comfort.
A double acting cylinder with pilot-operated valves ensure safe functioning without risk of untimely misadjustment.
On slopes, oblique setting is particularly interesting for controlling the flow direction and obtain an optimal soil cover.

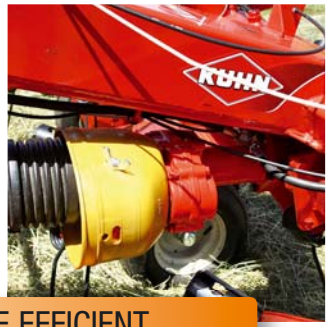
Fast adjustment of tine angle

Long or short, wet or dry forage, different cutting height...The pitch angle is made without tools at the level of the wheel supports.
Never forget: a pronounced pitch angle enables reducing the drying time and increasing the nutritional value of the forage!

Superballoon Wheels

The rotors ride on Superballoon wheels.

Well proportioned tires that ride close to the tines provide excellent tine height control and flotation minimizing soil contact by the tines resulting in cleaner, better quality forage.



TO MAKE YOUR GYROTEDDER EVEN MORE EFFICIENT

Crop deflectors prevent wrapping on wheel columns

Operating in short sticky crops or long late season crops can be a challenge when wheel columns wrap resulting in frustrating down-time spent clearing the mess.
KUHN tedders as from the GF5902 are fitted with crop deflectors as standard.

All terrain adaptability

Fitted underneath the hitch frame or the drawbar and consequently positioned close to the tines, this additional wheel enables improving the raking quality on undulating grounds.

- The top link or drawbar are cleverly adjusted in floating position.
- When changing tractor, the tine height adjustment in relation to the ground remains the same.
- The additional wheel can also be used as spare wheel.

For operations that require night windrows or to rake in a pinch

The DUPLEX reduction gearbox is used to reduce the rotor rotation speed by 45%. Overnight windrows can thus be produced quickly and easily.
On the GF 13002 GII and 17002 GII, the PTO speed is reduced from 1000 to 540 min^{-1} to obtain the same night windrowing function.

GF 5202: compact but efficient

Gyrotedder with 4 rotors, working width 5.20 m / 17'1'' and hydraulic folding:
a simple, economical machine which will be perfect for farmers with a limited annual area to ted.
With larger diameter rotors fitted with 7 tine arms, the GF 5202 will be particularly useful for tedding long, dense crop.

Oblique for the edges

The size of the GF 5202 makes it particularly appropriate for tedding small fields. Under these conditions, tedding along fences or other neighbouring crops may represent a considerable proportion of the work.

With its single-point oblique positioning, the GF 5202 fulfils this requirement perfectly.

Comfort and safety during transport

The tractor's hydraulic valve is used to fold the external rotors up and move onto the road in less than 3 m / 10'.

With standard equipment including signalling and lighting panels, the GF 5202 is ready for transport in complete safety.

GF 5902 and GF 6502: compact tedders with 6 rotors

Here the quality of work and compactness are the priority: the 6 small-diameter rotors provide gentle forage tedding while avoiding incorporating soil in the forage. Because of improved and uniform distribution, the drying rate is maximized while minimizing wet clumps.
Small tractors with lower fuel consumption are perfectly suitable, even when working over rough and bumpy ground.

Transport width less than 2.55 m / 8'4'' (GF 5902)

Barely wider than the tractor, driving comfort is incomparable and access to the narrowest fields is no problem.
The height remains reasonably low.

A tried and tested headstock

Resulting from long experience, this headstock is particularly suitable for this size of machine.
- Strong construction
- Effective recentering on slopes
- Reduced overhang

No forage loss thanks to the centralized mechanical or hydraulic oblique position setting.

GF 7802: large diameter rotors for work with long cut crops

Gyrotedder with 6 rotors equipped with 7 tine arms, the GF 7802 is the ideal tool for spreading 3 large swaths produced by a 3 m / 10' mower conditioner.
The rotors are designed to handle long and for dense crops.

GF 7802 *GF 7802 at work in oblique position along a border*

Combined shock-absorber and suspension

When manoeuvring at the end of a field, the tedder automatically and smoothly returns to center due to the two large shock absorbers.
During transport, powerful springs provide unrivalled suspension and driving comfort. An appreciable asset with ever increasing tractor speeds in transport. Even when braking suddenly on turns, the rotors remain stable and carefully aligned behind the tractor.

Clever folding

Although wide when working, the GF 7802's 6 rotors fold into a space which is compact enough to facilitate road travel and access to narrow fields.

GF 7902 and GF 8702: for those who need consistant quality of work

With working widths of 7.70 m (25'3'') or 8.70 m (28'5'') and 8 small diameter rotors, these Gyrotedders combine ideal characteristics for high-quality work.
The 8 small-diameter rotors not only ensure an excellent quality of forage but are also the secret of fast drying, excellent ground following and a low proportion of impurities in the forage.

A unique suspension system

You could almost forget that there is a Gyrotedder hitched to the tractor!

At work, the shock-absorbers recentre the machine with unrivalled smoothness when lifting at the end of the field. On very bumpy ground, lateral stability is ensured with no oscillation disturbing the high quality tedding.

During transport, powerful springs provide suspension: even at 40 km/h (24.9 mph) poorly maintained tracks, its behaviour is exemplary, safe and so comfortable!

Compactness ensured

In spite of the considerable working width, the small-diameter rotors limit overhang so that it can be used with lower power tractors.

The height is exceptionally low.

Signalling and lighting panels are standard.

GF 7702 T / 7802 T / 8702 T / 10802 T: the design which makes the dif

Tedding is an operation which requires low PTO capacity.
So why not use these trailed systems designed for use with a small tractor available on the farm, and reduce running costs?
The comfortable transport, easy use, and the long life of these machines are further advantages to these trailed versions.
The family of trailed models is available in widths from 7.70 m (25'3'') to 10.80 m (35'4''), with 3 models equipped with small diameter rotors and one model (the GF 7802 T) more suitable for tedding long-strand forage.

Wheels in front of the rotors

On a trailed machine where the wheels are lifted during work, you need solutions which will reduce weight on the central rotor wheels.

By locating the transport undercarriage in front of the rotors, only part of the weight is borne by these central wheels, the rest being absorbed by the drawbar and the tractor.

There are undeniable advantages:
- Less stress on the central rotors.
- Fewer ruts in wet conditions.
- Improved ground following.

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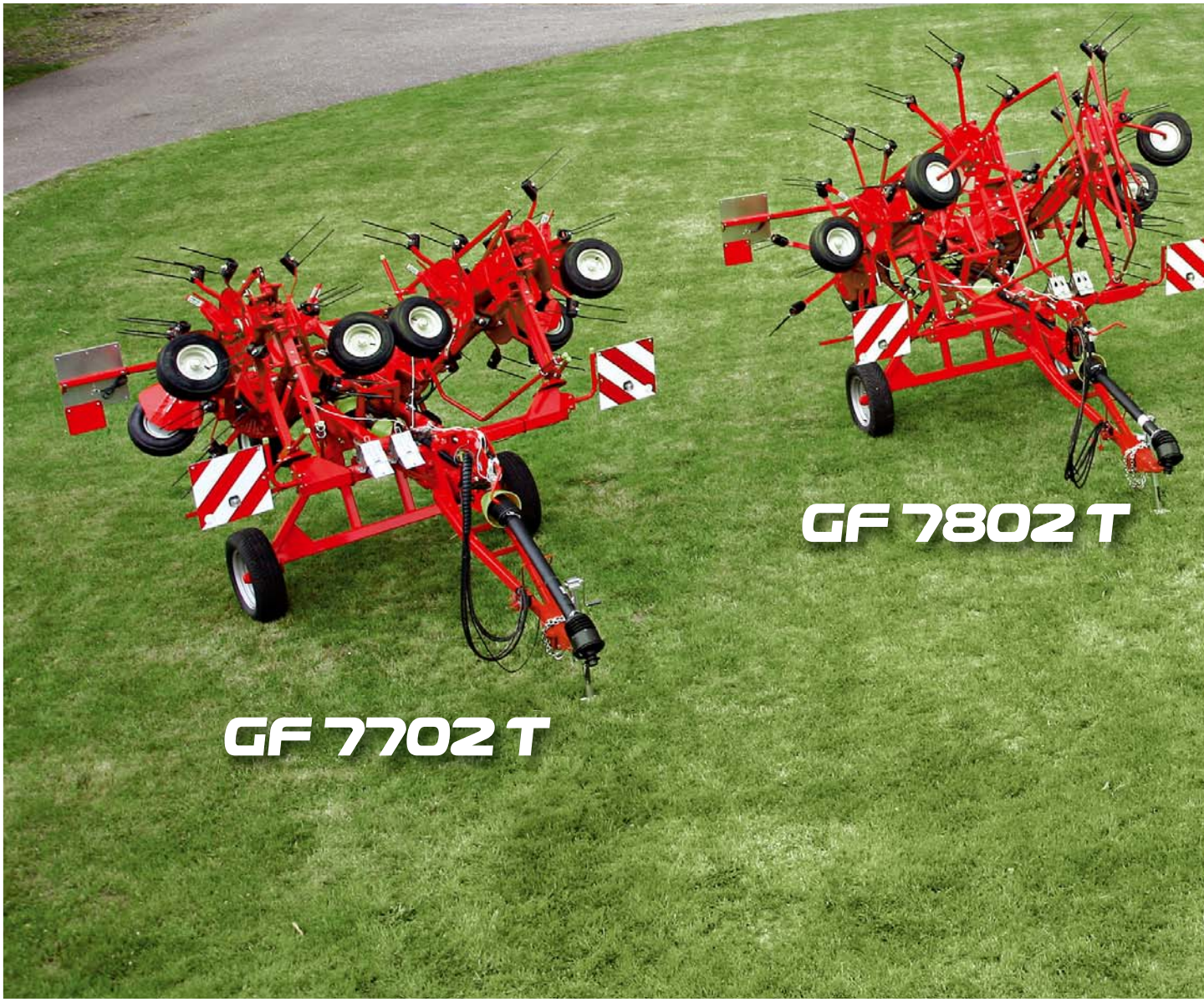
Hydraulic system for oblique setting provided as standard

On these professional machines, field edges or tedding on slopes is managed as efficiently as possible in incomparable comfort: activate a control valve and the machine is ready to work in oblique mode to left or right.

GF 7702 T / 7802 T / 8702 T / 10802 T: attention to detail and perfectio

A type of coupling to suit everyone

Depending on the country and available tractor equipment, you can choose an oscillating bar coupling or the upper coupling.
In both cases, the height of the tines above the ground is adjusted using a simple crank.
When a support wheel is mounted under the coupling to improve the quality of ground hugging in the direction of movement, the drawbar is set to floating position.
The main drive with its wide angle ensures vibration-free work under all conditions.



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A clever folding system

Lowering the transport wheels is combined with the rotors tilting forwards. Thus in transport position, the height dimension is reduced, load distribution on the tractor is optimal and road behaviour at high speed is perfect.

GF 13002 GII and 17002 GII: the new references on the market

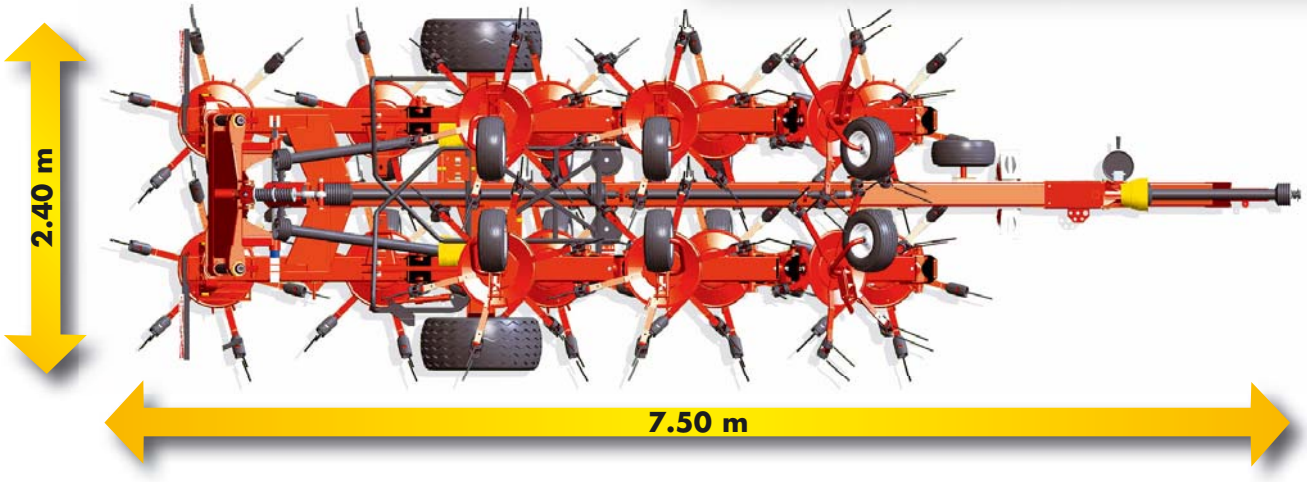
EXTREME COMPACTNESS

OPTIMAL COMPACTNESS

Dream measurements!

No need to extend your machine shed, the 17 m (55'8'') of GF 17002 GII won't take up any more room than some of the 10 m (32'8'') Rotary tedders on the market!

On the road, absolute comfort:
- Width and height do not exceed those of the tractor.
- Easy access to fields with its reduced length, the position of the axle assembly and large rotor clearance.



Every road a highway

With a dedicated transport axle, poorly maintained roads or long distances are no longer a challenge.

- Rotors are not subject to transport shocks thus maximizing the longevity.
- Excellent weight distribution.
- Safe, stable transport, even at high speed.

According to road regulations in force in place

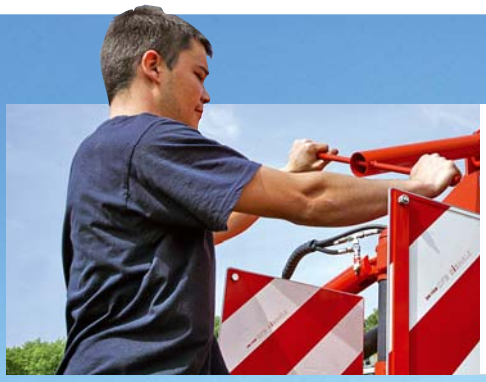
GF 13002 GII and 17002 GII: all terrain adaptability!

The 16 rotors of the GF 17002 GII follow the changes in terrain as well as two 8-rotor or four 4-rotor tedders.

- The rotor ramp can oscillate vertically independenty of the carrier chassis.
- The weight of the chassis is held by the large transport wheels during work.
- The small-diameter rotors provide efficient turning and fast drying of the forage.
- The wheels, situated as close as possible to the tines, limit impurities and ensure long life for the tines.

CLEVER FOLD

Unfolding or folding operations are very easy and fast. Time lost in



Quick adjustment of tedding height

The tedding height and angle of the tines above the ground is easy to adjust from a single point.

The operator can alter the height and angle as required to match the conditions in the field.

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changing fields is reduced to a minimum, for maximum daily output.

Ted up to15 ha (37 ac) per hour or 1 ha (2.5 ac) in 4 minutes!

Exceptional productivity for farmers who want to maximize their hay and grass harvesting outputs and minimize drying time.
This oustanding work output enables even drying of the whole field and makes the best of weather windows when the crop is at the optimal stage: the ideal insurance to harvest quality forage.

Clear crossings

Simple controls from the tractor's hydraulic system will set the tedder into a partially folded position in just a few seconds making crossings between fields and over ditches a snap.

The large rotor clearance is also particularly appreciated and prevents any forage build-up when manoeuvring on headlands.

GF 13002 GII and 17002 GII

KUHN PATENT

Intelligent design

The two outer sections are held in place by straps. They are used to reduce stress on the main frame and rotor structures.

Thanks to the fastening to the rotor ends, the two sections remain perfectly stable, without any oscillation. The straps also double as safety guards, replacing the traditional metal guards that are heavy and often distorted or fragile after a few seasons.

When folding for transport, the two straps automatically wind up like a safety belt.

Another innovative system patented by KUHN!

Cross a windrowed field without making a mess

Large tedders that transport utilizing the small tedding wheels make a mess out of previously formed windrows.

No problem for the GF 13002 GII/17002 GII design due to the considerable ground clearance.

Straight, neat edges

These extra-wide Gyrotedders will clearly function well in small fields and also have the ability to perform irreproachable work along field borders. A hydraulically controlled curtain deflector limits the discharge on the right side and is available as optional equipment.

TECHNICAL SPECIFICATIONS	GF 222 T	GF 422	GF 502	GF 582	GF 642	GF 5202	GF 5902	GF 6502
Working width DIN (m/ft)	2.60/ 8'6''	4.20/ 13'9''	5.00/ 16'5''	5.75/ 18'8''	6.40/21'	5.20/ 17'1''	5.90/ 19'4''	6.50/ 21'3''
Number of rotors	2	4	4	6	6	4	6	6
Number of tine arms per rotor	6	6	6	5	6	7	5	6
Coupling	Trailed	3 point mounted cat. 1 and 2		Mounted 3-point, Cat. 2				
PTO speed (min^{-1})	540							
Free wheel	-							
Border tedding system	-	Individual oblique setting on wheels				Mechanical centralized oblique setting		
Wheels under the central rotors	15 x 6.00 - 6					16 x 6.50 - 8		
Wheels under the outer rotors	-	15 x 6.00 - 6				16 x 6.50 - 8		
Spare wheels	-				Optional equipment			
Wheel deflectors	-	option					standard	
Wheels on the transport undercarriage	-							
Tine deflectors	-			standard				
Lighting	-			standard				
Signalling	-			option	standard		option	standard
Transport width (m/ft)	2.60/ 8'6''	2.50/8'2''	2.85/9'4''	3.00/9'8''			2.53/8'4''	3.00/ 9''10''
Transport height (m/ft)	-	2.37/7'8''	2.72/9'	2,95/9'7''	3.30/ 10'9''	2.80/9'2''	3.01/9'9''	3.29/ 10'8''
Weight (kg/lbs)	225/496	452/996	522/1150	690	850	660/1455	811/1787	920/2028
Tractor hydraulic equipment	-	1 SA		1 DA	1 SA	1 DA		1 SA
Tractor power requirement (kW/hp)	15/20	29/40	29/40	36/50	44/60	40/55	44/60	44/60

TECHNICAL SPECIFICATIONS	GF 7902	GF 7802	GF 8702	GF 7702 T	GF 7802 T	GF 8702 T	GF 10802 T	GF 13002	GF 17002
Working width DIN (m/ft)	7.80/25'7''	7.80/25'7''	8,70/28'5''	7.70/25'3'	7.80/25'7'	8.70/28'6''	10.80/35'5''	13.00/42'7''	17.20/56'4''
Number of rotors	8	6	8	8	6	8	10	12	16
Number of tine arms per rotor	5	7	6	5	7	6	6	6	6
Coupling	Mounted 3-point, Cat. 2			Tractor drawbar					
PTO speed (min^{-1})	540							1000	
Free wheel	Integrated in central gearbox								
Border tedding system	Single point oblique adjustment			Mechanical hydraulic oblique setting				Border curtain (as option)	
Wheels under the central rotors	16 x 9.50-8	16 x 6.50-8	16 x 9.50-8		16 x 6.50-8	16 x 9.50-8		16 x 6.50-8	
Wheels under the outer rotors	16 x 6.50-8								
Spare wheels	Optional equipment							standard	
Wheel deflectors	standard								
Wheels on the transport undercarriage	-			195/65 R15			26 x 12.00 - 12	10.0/75 - 15.3	340/55 - 16
Tine deflectors	standard								
Lighting	standard								
Signalling	standard								
Transport width (m/ft)	3.00 / 9'10''							2.40 / 7'11''	
Transport height (m/ft)	2.95/9'7''	3.36/11'	3.25/10'7''	3.15/10'3''	3.53/11'6''	3.15/10'3''	3.30/10'8''	2.68 / 8'9''	
Length (m/ft)	2.25/7'5''	2.70/8'8''	2.36/7'7''	4.60/15'1''	4.60/15'1''	4.60/15'1''	4.60/15'1''	6.50/21'3''	7.50/24'6''
Weight (kg/lbs)	1150/2535	1085/2391	1250/2755	1415/3119	1327/2925	1478/3258	1800/3968	2550/5621	3140/6922
Tractor hydraulic equipment	1 DA			2 DA				1 DA	
Tractor power requirement (kW/hp)	51/70	51/70	59/80	40/55	40/55	40/55	51/70	59/80	73/100

KUHN Services*: benefits for **maximum** use and **profitability** of your equipment

The KUHN difference through services means …

- Receiving advice of **partners trained** in the latest product developments, to select the machine best suited to your needs,
- Benefiting from a **technical documentation** that will accompany you during all of your machine's service life, to best capitalize on your machine,
- Having a **Parts** service **available** all day round, 7 days a week at competitive prices,
- Anticipating the unexpected with the **KUHN** protect + **warranty extension**, and face the unexpected with **KUHN** i tech at your dealership,
- Investing **rationally** with **KUHN** finance.

** Some services may not be available in certain countries.*

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