



**FM/FH/FR/FX SERIES**

CHOPPERS

# WHEN FARMING MEANS BUSINESS

Realising the full potential of farming is about growing and developing your business, not only your crop or livestock, but also your profit. Improve productivity and profitability by focusing on the positives and minimising disadvantageous aspects, through strong, dedicated management.

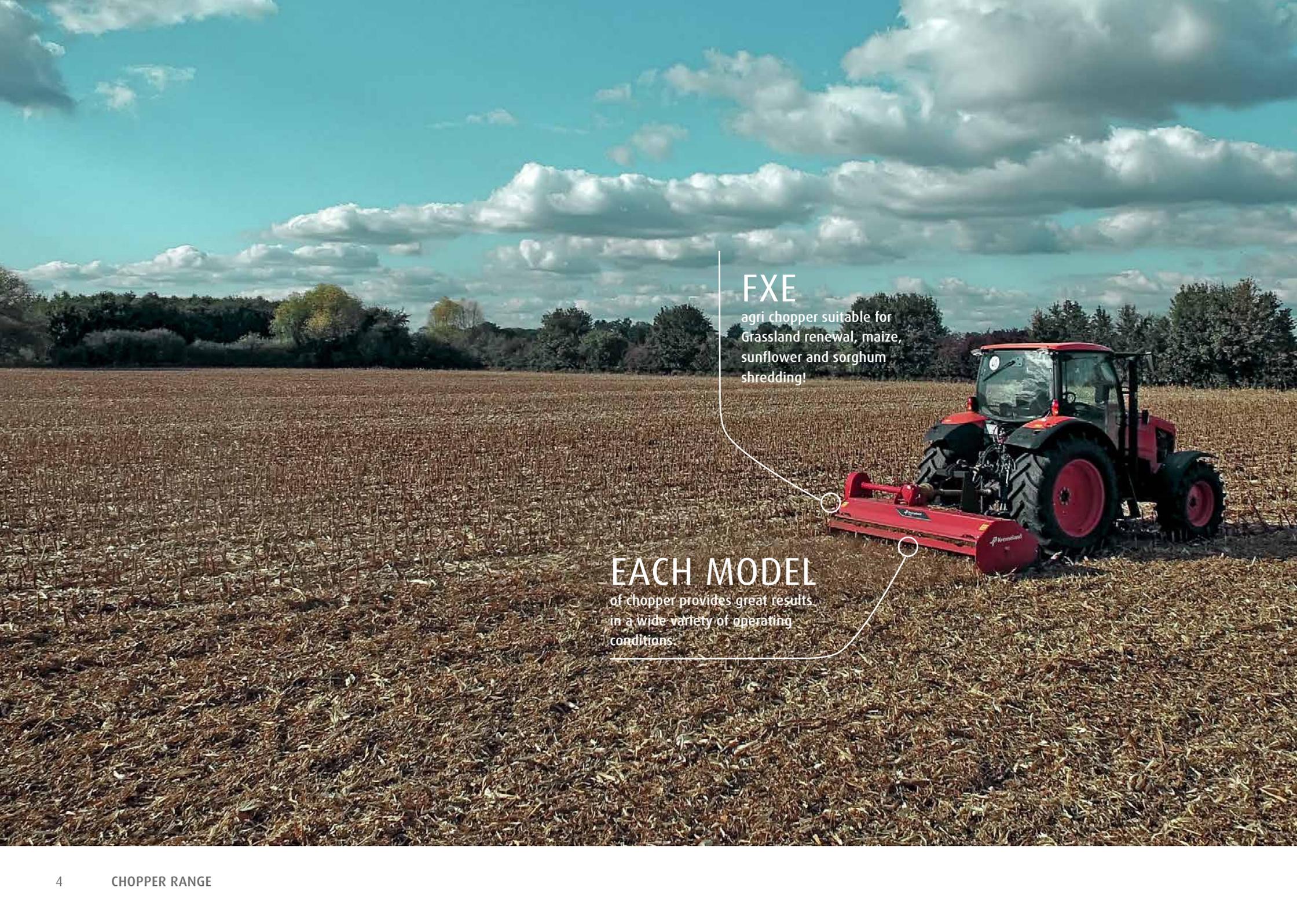
Success springs from determination and clear targets, from laying down the appropriate strategy and allocating correct investments for the future. Quality results require the right ideas and equipment. When there is work to be done, you need the optimal setup and smart solutions that support you towards an easier, more profitable way of working. You need solutions that make tough and demanding conditions less complicated.





## PROCESS

Processing the crop efficiently will boost your grass management, ensuring the correct dry matter content and best possible nutritional value.



## FXE

agri chopper suitable for  
Grassland renewal, maize,  
sunflower and sorghum  
shredding!

## EACH MODEL

of chopper provides great results  
in a wide variety of operating  
conditions.

# KVERNELAND CHOPPER SERIES

## VERSATILE, RELIABLE, EFFICIENT!

The extensive range of Kverneland choppers ensures there is a model to suit every operating requirement. Each model provides great results in a wide variety of operating conditions. All models are solidly constructed with a robust gearbox and rugged "V" belt transmission. A high strength body with double plating in critical areas provides further reassurance. A combination of precision engineered rotor shafts and hard wearing blades ensure reliable operation, while keeping maintenance requirements to a minimum.

### *The Product Range:*

#### **Kverneland FML**

1.50-1.80m working width

#### **Kverneland FHS**

1.55-2.50m working width

#### **Kverneland FHP**

1.55-2.00m working width

#### **Kverneland FHP Plus**

2.00-2.50m working width

#### **Kverneland FRO**

2.35-3.25m working width

#### **Kverneland FRH**

2.35-3.20m working width

#### **Kverneland FRD**

2.80-3.20m working width

#### **Kverneland FXE**

2.80m working width

#### **Kverneland FXN**

1.95-3.20m working width

#### **Kverneland FXZ**

3.20-4.00m working width

#### **Kverneland FXF**

5.60-6.40m working width



## THE SPECIALIST FOR GREEN AREAS



All gearboxes on Kverneland choppers range feature as standard an integrated free wheel.

### Compact Size – Easy to Operate

The Kverneland FML grass chopper is a small, medium duty machine suited to operation use on slightly rough ground, green areas amenity areas, and tidying up pasture. It is available in three models with working widths from 1.50m to 1.80m, is very easy to operate and requires minimal maintenance.

As well as the universal blades fitted as standard, blades for stony conditions and cup blades can also be fitted on request. The FML is suitable for tractors up to 50hp and it is the perfect choice for green areas.

The core of the FML chopper is the rotor: fast rotation speed (2052rpm) in combination with a high number of blades give the FML a superb chopping performance. As standard the FML offers a mechanical offset: the headstock can be fitted in the centre or on the left side of the chopping unit.

*For tractors up to 50hp*

The FML is equipped as standard with a rear roller which allows reliable cutting height control. Alternatively a pair of skids can be supplied on demand.



## EFFICIENT AND DURABLE!

### Compact heavy duty machine

The Kverneland FHS Chopper is a **compact and heavy duty machine for moderately demanding jobs in soft and top fruit orchards, vineyards and light undergrowth**. It is also equally at home tidying pasture and other grass fields, chopping straw and stubble.

Due to its rugged construction the FHS **ensures a long lifetime with minimal maintenance**. Adjustable headstock offset up to 500mm gives added versatility for reaching under fruit trees and safer working close to the edges of drainage channels.

As an option, hydraulic adjustment of the offset can be specified. In addition the standard roller and the skids support the chopper and **provide a consistent working height**.

The design of the FHS is modern and versatile; the latest generation rotor can be **equipped with different types of blades, making them adaptable to most conditions**. Highest rotor speeds (2160rpm) in combination with a counterknife and a double skin, guarantee an excellent shredding **effect with minimal power requirement**.



The Kverneland FHS can be equipped with rake tines to improve chopping on prunings.



A 160mm diameter roller with an adjustable scraper is fitted as standard equipment and ensures correct field performance.





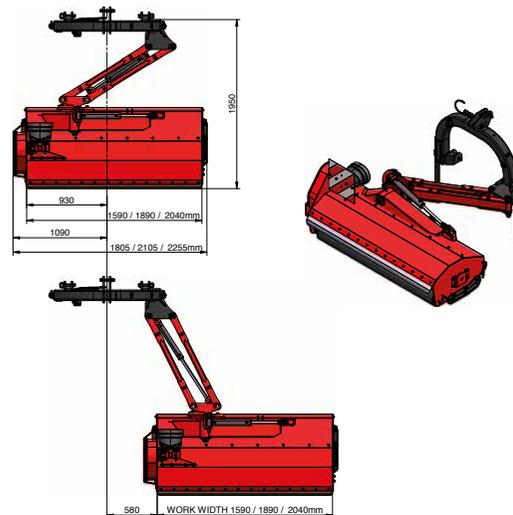


1. Maximum versatility - Cutting horizontal.
2. Vertical.
3. Banks down to an angle of -65 degrees.

## EFFICIENT WORKING IN ALL CONDITIONS



The Kverneland FHP is a new multipurpose chopper for road maintenance, clearing out field edges, ditches and hedges. In addition the FHP shows versatility in operation on grass, light wood and bushes thus being ideal for the maintenance of parks, gardens and road sides.



### Offset articulation

Different offset positions can be reached by different working widths. Versatile in all conditions due to extremely efficient articulation ( $-65^\circ$  &  $+90^\circ$ ).

### Frame

Solid construction, heavily protected and reinforced with double skin as standard.

### Rotor

High performance rotor with fast rotation speed, combined with large number of hammer blades (13 per meter) ensure superb chopping performance in all conditions. (universal or rock blades also optionally available).

### Transmission

Gearbox with freewheel inside and four belts with automatic tensioner ensures smooth and reliable power transmission to the rotor.

### Roller

Standard 195mm diameter roller with integrated bearings and easy cutting height adjustment.

## MORE OFFSET - MORE VERSATILITY



### Compact and easy

Due to the possibility of different working angle positions, the FHP Plus is a highly versatile solution for farm and road maintenance purposes. Compact but robust it offers superb manoeuvrability and provides a high level of reliability.

Compared to the standard FHP chopper, the plus version offers greater offset (1255mm) and reaches positions and working angles impossible to get to with other machines. In addition the FHP Plus can be combined with a front mounted chopper (FRO or FRD), to maximise working width.

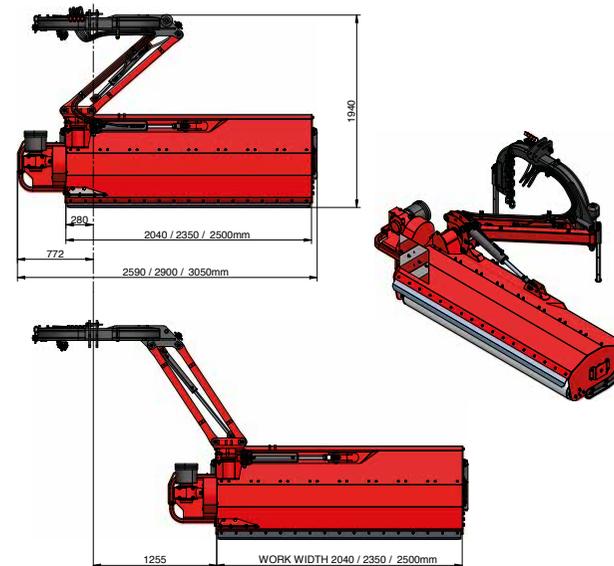
### Lateral transmission

Power transmission by gearbox with integrated freewheel (up to 150hp) and five belts which incorporate an automatic tensioner, provide stable rotor speed even when working in tough conditions. A PTO shaft with wide angle joint is fitted as standard equipment.





Robust and guarded. Main frame and parallelogram articulations designed according FEM analysis and calculations; heavily tested in Kverneland Klepp laboratory to ensure reliable and long working life. Gearbox and transmission protected against misuse during operation.



**Offset articulation**  
Different offset positions can be reached by different working widths. Versatile in all conditions due to extremely efficient articulation (-65° & +90°).

## FRONT, REAR, OFFSET!

### Multi-purpose - for chopping grass, pasture, set-aside land and stubble

A strong double headstock allows mounting the machine in front or behind the tractor. Together with an hydraulic offset facility, it gives multi purpose versatility for nearly all conditions e.g. clearing out field edges, orchards, road edges. Available with hammer blades or universal Y blades combined with fan blades.



### Hydraulic Offset

Ideal for clearing out field edges. Versatile use also for road maintenance. The precisely aligned offset frame machined after the welding process ensures strong and reliable guidance. Greasable nylon bushes ensure a long lifetime.

### Auto-alignment

The central gearbox fitted into the headstock ensures that the pto-shaft remains at the same angle in all working positions. Even on max. 500mm offset the pto angle does not change. This guarantees a smooth drive, reduced wear and a longer lifetime of the pto shaft and the whole driveline (crosses and yokes).

### Headstock

The heavy duty headstock is well proven with the design taken from the Kverneland power harrow.





### Lateral Drive

Drive by five VX type V-belts running on invertible pulleys which allows adaptation for 540 or 1000rpm drive. Idler wheel with automatic tensioner spring always ensures stable and low wear on belt drive.



### Counter Knives and Double Skin

One standard U-counter knife. A second U-counter knife is available (optional equipment) for more intense shredding and heavy conditions. Also combinable with double skin.



Y blades.



Hammer blades.

### Rear roller

Standard equipment for reliable depth control in all conditions. Ø 160mm with 45mm bearing hub and greasable ball bearings. Replaceable integrated bearing housing. Roller interchangeable with skids.





# VERSATILE AND RELIABLE

The Kverneland FRH is a multi-purpose machine for chopping grass, pasture, set-aside land and stubble. The hydraulic offset facility of the FRH gives you the possibility to clear out field edges, orchards and road edges. A choice of hammer blades or universal Y blades with short fan blades produce perfect shredding quality in all conditions. With an offset facility of up to 52cm the FRH range is the ideal solution for field and farm maintenance. In addition the large diameter of the rotor (540mm) guarantees excellent cut quality with low power requirement. Easy and minimal maintenance make the FRH a cost effective machine to operate.

## Frame

Headstock designed and tested for heavy applications. With all forces and stress concentrated on the three point linkage.

## Transmission

Central gearbox rated up to 160hp with an integrated free wheel as standard. The drive pulleys are reversible allowing for operation with either 540 or 1000rpm input speed. Five grooved V-belts combined with an automatic tensioner ensure smooth power transmission. No maintenance required.

## Performance

A massively strong tube with dimensions of 245 x 10mm forms the basis of the rotor. The large overall working diameter of the rotor (540mm) guarantees an excellent cut with a low power requirement. The counterknife and the double skin are suggested for a finer shredding of residues and a longer working life of the frame. Skids and a roller are standard equipment and provide accurate control of working height. The roller has a 245mm diameter and is self-cleaning (the blades are running very close to the roller profile - 15mm).



Frame.



Transmission.



Rotor.



## VERSATILITY COMBINED WITH EFFICIENCY



Double headstock.



Front mounting.

Double headstock allows front or rear mounting of the FRD. Sliding tube integrated in the headstock; all forces are concentrated on the three point linkage. Standard fit 52cm hydraulically operated offset facility.

### Robust Transmission

A central gearbox rated up to 160hp with double integrated free wheel as standard. The drive pulleys are reversible allowing for operation with either 540 or 1000rpm input speed. Five V-belts combined with an automatic belt tensioner ensures smooth power transmission, preventing slippage in the toughest working conditions. No maintenance is required. The double headstock allows front or rear mounting of the FRD. Sliding tubes are integrated in the headstock; all stresses are concentrated on the three point linkage. Standard fit 52cm hydraulically operated offset facility.



## EXCELLENT PERFORMANCE

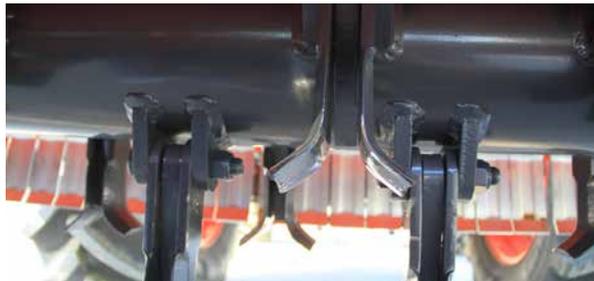
as well as very limited power requirement and maintenance activities (low operating costs) make the FXE chopper the ideal choice for farmers and contractors.

## EXCELLENT PERFORMANCE – LOW OPERATING COSTS

### An agri chopper suitable for different crops

The Kverneland FXE is an agri chopper suitable for grassland renewal, maize, sunflower and sorghum shredding. The frame of the chopping unit is designed with a curved profile, while the rear cover can be opened to handle large amounts of crop residue. In addition, the high chopping chamber guarantees blockage free performance in even the toughest conditions.

The roller bearings are integrated and protected and do not need regular greasing. The semi pivoting wheel kit is also maintenance free. A double skin and a second counter knife can be added as accessories in order to extend the life of the chassis and create finer chopped residues.



The rotor of the FXE can be equipped with universal blades or hammer blades. Lateral skids are fitted as standard.



FXE can be equipped with a rear roller (195mm diameter) or 2 semi-pivoting wheels (155 SR13) for a constant control of the working height.

# THE CHOPPER FOR SPECIALISTS

## Great versatility in all conditions

The FXN range comprises Kverneland's largest and toughest grass and straw choppers built for heavy-duty work on set-aside land and cultivated fields. But also suited to fruit farms, clearing scrub and tidying pasture. The FXN is available in 4 working widths covering all operating requirements.

## *Heavy construction for reliable operation*

## Unique versatility and high field performance

Kverneland FXN choppers offer unique operational versatility. The high rotor speed combined with a large number of blades increases the cutting efficiency, while reducing the input power required. The rotor is manufactured precisely and is dynamically balanced after the blades have been fitted; this provides smooth running without vibration.

## Range of accessories

The FXN can be equipped with different blade types in order to fulfill all operating requirements. Skids are included in the standard configuration. Wheels are optionally available. Furthermore a double skin and second counterknife are also optionally available. However, all models are solidly constructed throughout with a robust gearbox and very strong power transmission to the "V" belts driving the rotor. In addition, a strengthened chassis incorporates double plating in the areas subjected to highest stress.

The combination of Kverneland's precisely manufactured rotor shafts and hard wearing blades makes the FXN models extremely reliable.





1. **Lateral transmission** - Five V-belts combined with an automatic belt tensioner ensure smooth power transmission, preventing slippage **even in the toughest working conditions**.  
No maintenance is required.

2. **Rotor** - A massively strong tube with dimensions of 245 x 10mm forms the basis of the rotor. Choice of universal or hammer blades. The **large diameter of the rotor (650mm)** guarantees excellent cut quality with low power requirement.

# THE KING OF THE CHOPPERS!

## More than 40 years experience

The Kverneland FXZ range has been designed to fulfill the most demanding requirements. FXZ choppers have been designed to provide comprehensive chopping of crop residues for more effective decomposition. The development of these choppers was focused on the requirements of intensive users. They are ideal for very demanding and specialized contractors. The FXZ is excellent for shredding crop residues, chopping straw, maize and sunflower stalks as well as set-aside land.



Semi pivoting wheels (10/8.0 x 12.8 ply) as standard ensure good stability and a constant working depth of the FXZ during field operations.



Semi automatic linkage (Cat III) allows fast coupling of FXZ. In addition the floating top link mounting permits easy control of the working height without stressing the headstock.

The FXZ is always equipped with a double lateral transmission. External and centralized greasing points for the rotor ensure a quicker maintenance.





### Rotor

The same rotor can be equipped with either Y blades or hammer blades; in all configurations special fan blades lift the material up for a better shredding effect. The large diameter (760mm) guarantees an excellent cut with low power requirement.



# HIGH PERFORMANCE POTENTIAL

## High performance rotor for excellent shredding in all conditions

The FXF foldable is particularly suitable for tractors up to 260hp, with working widths from 5.60 to 6.40m.

Wide in the field - narrow on the road: Despite the wide working width the FXF folds to 2.50m transport width. The highly efficient rotor, which works at a speed of 2025rpm ensures excellent chopping in all conditions, thanks to its diameter of 540mm, and 144 blades plus fan blades.

Highest rotor speeds (2025rpm) in combination with a counterknife and a double skin, guarantee an excellent shredding effect with minimal power requirement.

The lateral transmission with five belts tensioned automatically. Available as an option are pivoting wheels or rollers that guarantee a constant working height.

The FXF offers maximum reliability, efficiency and versatility. This comes from 40 years of experience in building choppers.



The central gearbox (250hp) is equipped with free wheels; the lateral transmission with automatic belt tensioners ensures reliability and a low maintenance requirement.



Working width from 560 to 640cm. The standard roller (Ø245mm) is running close to the profile to ensure a self-cleaning effect.



Semi pivoting wheels (10/8.0 x 12.8 ply) available as option ensure good stability and a constant working depth during field operation.



Transport width 250cm.

## ORIGINAL PARTS & SERVICE

# ONLY ORIGINAL PARTS WILL KEEP YOUR MACHINE A KVERNELAND

Did you know that our parts are manufactured to the same high standards and strict specifications as the Kverneland machines? Original Parts will always work and fit as intended, and are guaranteed to keep your machine running at maximum performance.

Kverneland has been a symbol of quality since 1879; the experience we have, combined with a constant strive to improve our products, ensures you the best parts available for your Kverneland machine. Parts and Service surrounds your machine with a safety-net; the quality ensures optimal usage of the machine, the quality of the parts refers to a low life-cycle cost and longer wearing time.

Our long term relationship starts at the purchase of your Kverneland machine, and we will continuously stay by your side for support and assistance. We will guide you on the way to make sure you achieve maximum performance, productivity and profit.

Do not compromise quality with cheap solutions, remember that only Original Kverneland parts are the guaranteed solution to achieve what is expected by a Kverneland machine.



### YOUR PARTS SPECIALIST

Through our worldwide dealer network you will find your local dealer, whom is always prepared to assist you. Your Kverneland dealer knows every inch of your machine and will gladly provide the expertise needed to ensure that you are operating at maximum potential.

Your parts specialist has got all the parts that you need and will also have the facilities to service your machine. Make sure to visit your Kverneland dealer on a regular basis to be updated on promotions and product news that you will not find elsewhere.



### ALWAYS AVAILABLE

Time is money, and we know the importance of receiving the right parts at the right time! Your Kverneland dealer is supported by a massive distribution network to supply you with exactly what you need, when you need it.

Our main distribution centre is located in Metz, France. A strategic location for distributing parts to all corners of the world. With over 70.000 parts in stock and 24/7 service, we are ready to supply you with parts – at any time!



### EASY ACCESS TO INFORMATION

Are you looking for a complete overview of parts for your machine? Maybe you are searching for more technical information? Our Online Search Database, *MyKverneland*, provides all information available for your machine.

Various documentation like Parts Manuals, Operation Manuals, Software updates and FAQ's, it is all there. *MyKverneland* is available in several different languages and can be accessed wherever and whenever. All answers are easy to find – just a few clicks away!

# TECHNICAL DATA

	Choppers for Green Area and Vineyards						
Model	FML			FHS			
<b>Dimensions &amp; Weight</b>							
Working width (cm)	150	180	155	185	200	230	250
Transport width (cm)	170	200	177	207	222	252	272
Weight (kg)	300	335	475	540	572	620	655
<b>Attachment to Tractor</b>							
Pto input speed (rpm)	540			540			
Min-Max. power requirement (hp)	25 - 50			35 - 80			
<b>Operation</b>							
No. of universal blades	80	96	40	48	52	60	64
No. of hammer blades	-	-	20	24	26	30	32
Rotor speed (rpm)	2052			2160			
Blade tip speed (m/s)	40			51			
Rotor shaft diameter (mm)	40			50			
Rotor diameter (mm)	102			169			
Cutting diameter (mm)	376			452			
No. of belts	3			5			
Belt tensioner	by screw setting			automatic			
<b>Equipment</b>							
Offset (mm)	-			500			
Rear roller (mm)	135 ●			160 ●			
Rear wheels	-			-			
Skids	●	●	●	●	●	●	●
I counter knife	-	-	●	●	●	●	●
II counter knife	-	-	○	○	○	○	○
Double skin	-	-	●	●	●	●	●

	Side Pivoting Choppers					
Model	FHP			FHP Plus		
<b>Dimensions &amp; Weight</b>						
Working width (cm)	155	185	200	200	230	250
Transport width (cm)	180	210	225	255	285	305
Weight (kg)	740	780	820	900	960	985
<b>Attachment to Tractor</b>						
Pto input speed (rpm)	540			540		
Min-Max. power requirement (hp)	45 - 100			70 - 130		
<b>Operation</b>						
No. of universal blades	40	48	52	52	60	64
No. of hammer blades	20	24	26	26	30	32
Rotor speed (rpm)	1800			1858		
Blade tip speed (m/s)	43			44		
Rotor shaft diameter (mm)	50			50		
Rotor diameter (mm)	169			169		
Cutting diameter (mm)	452			452		
No. of belts	5			5		
Belt tensioner	automatic			automatic		
<b>Equipment</b>						
Offset (mm)	580			1250		
Rear roller (mm)	195 ●			195 ●		
Rear wheels	-			-		
Skids	●	●	●	●	●	●
I counter knife	●	●	●	●	●	●
II counter knife	○	○	○	○	○	○
Double skin	●	●	●	●	●	●

● Standard equipment   ○ Option   - Not available

# TECHNICAL DATA

	Multipurpose choppers							
Model	FRO			FRH			FRD	
<b>Dimensions &amp; Weight</b>								
Working width (cm)	235	280	325	235	280	320	280	320
Transport width (cm)	255	300	345	255	300	345	300	345
Weight (kg)	863	980	1080	1025	1135	1225	1220	1380
<b>Attachment to Tractor</b>								
Pto input speed (rpm)	540 or 1000			540 or 1000			540 or 1000	
Min-Max. power requirement (hp)	60 - 140			70 - 160			90 - 160	
<b>Operation</b>								
No. of universal blades	40	48	56	56	72	80	72	80
No. of hammer blades	20	24	28	28	36	40	36	40
Rotor speed (rpm)	1730 - 1828			1844 - 1949			1844 - 1949	
Blade tip speed (m/s)	46 - 48			52 - 55			52 - 55	
Rotor shaft diameter (mm)	60			60			60	
Rotor diameter (mm)	220			245			245	
Cutting diameter (mm)	503			541			541	
No. of belts	5			5			5	
Belt tensioner	automatic			automatic			automatic	
<b>Equipment</b>								
Offset (mm)	500			550			550	
Rear roller (mm)	195 ●			245 ●			245 ●	
Rear wheels	○	○	○	-	-	-	-	-
Skids	●	●	●	●	●	●	●	●
I counter knife	●	●	●	●	●	●	●	●
II counter knife	○	○	○	○	○	○	○	○
Double skin	○	○	○	○	○	○	○	○

	Agri choppers						
	FXE	FXN		FXZ		FXF	
<b>Model</b>							
<b>Dimensions &amp; Weight</b>							
Working width (cm)	280	280	320	320	400	560	640
Transport width (cm)	300	302	342	352	432	250	250
Weight (kg)	940	1174	1302	1750	2200	2400	2700
<b>Attachment to Tractor</b>							
Pto input speed (rpm)	540 or 1000	540 or 1000		1000		1000	
Min-Max. power requirement (hp)	65 - 110	55 - 160		100 - 260		130 - 260	
<b>Operation</b>							
No. of universal blades	68	72	80	120	152	144	160
No. of hammer blades	34	36	40	60	78	72	80
Rotor speed (rpm)	1789 - 1887	1844 - 1949		1603		2025	
Blade tip speed (m/s)	56 - 59	63 - 66		64		57	
Rotor shaft diameter (mm)	45	60		60		60	
Rotor diameter (mm)	194	245		273		245	
Cutting diameter (mm)	600	651		767		541	
No. of belts	5	5		2 x 4		2 x 5	
Belt tensioner	by screw setting	automatic		by screw setting		automatic	
<b>Equipment</b>							
Offset (mm)	540 ○	-		-		-	
Rear roller (mm)	245 ○	245 ○		-		245	
Rear wheels	○	○	○	●	●	○	○
Skids	●	●	●	●	●	○	○
I counter knife	●	●	●	●	●	●	●
II counter knife	○	○	○	○	○	○	○
Double skin	○	○	○	○	○	○	○

● Standard equipment ○ Option - Not available

Information provided in this brochure is made for general information purposes only and for worldwide circulation. Inaccuracies, errors or omissions may occur and the information may thus not constitute basis for any legal claim against Kverneland Group. Availability of models, specifications and optional equipment may differ from country to country. Please consult your local dealer. Kverneland Group reserves the right at any time to make changes to the design or specifications shown or described, to add or remove features, without any notice or obligations. Safety devices may have been removed from the machines for illustration purposes only, in order to better present functions of the machines. To avoid risk of injury, safety devices must never be removed. If removal of safety devices is necessary, e.g. for maintenance purposes, please contact proper assistance or supervision of a technical assistant. © Kverneland Group Ravenna S.r.l.

# TECHNICAL DATA

		Baldes for Choppers										
Model		FML	FHS	FHP	FHP Plus	FRO	FRH	FRD	FXE	FXN	FXZ	FXF
	Cup blades	•										
	Y blades	•										
	Y with middle fan blades		•	•	•	•						
	Y with long fan blades						•	•				•
	Y with short fan blades								•	•		
	Y blades										•	
	Hammer blades		•	•	•	•						
	Hammer blades						•	•				•
	Hammer blades								•	•		
	Hammer blades										•	
	Rock blades	•	•	•	•	•						



**WHEN FARMING MEANS BUSINESS**

[kverneland.com](http://kverneland.com)