

Fortima

Round balers









The ideal pick-up for harvesting wide windrows:

The KRONE EasyFlow pick-up system has feed augers on either side and works at a width as wide as 2.05 m (6'9") (DIN 11220), picking up every stem, also in corners and bends.

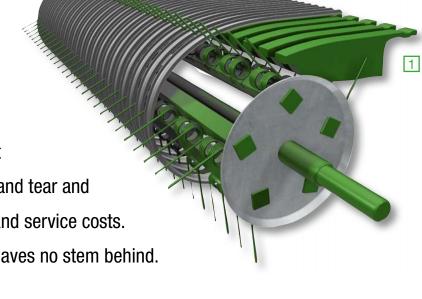


Reduced wear costs yet optimized crop collection

EasyFlow is a camless pick-up that does without a cam track, offering obvious advantages over controlled system: A simple assembly uses fewer moving parts than controlled cam tracks and gives extremely quiet running, which in turn reduces wear and tear and

running, which in turn reduces wear and tear and ultimately service and maintenance and service costs.

EasyFlow – a powerful system that leaves no stem behind.









1. EasyFlow

This pick-up features galvanized scrapers and their special design lifts the crop from the tine for a smooth and and consistent flow of crop into the machine and eliminates the need for a cam track.

2. Roller crop guard

The unit eliminates the risk of pushing up crop in uneven windrows. The machine operates at maximum pick-up and output levels while the crop is flowing smoothly and consistently through the machine.

3. Massive augers

Massive augers feed the material from the sides to the middle of the machine, ensuring a smooth flow from the wide pick-up unit into the narrow bale chamber.

4. Closely spaced tines

Boasting five rows of tines spaced 55 mm (2") apart, EasyFlow picks up even short stems. The deflector plates are galvanized for ultimate durability.



No tools required – height control is quick and easy: Just reset a pin on the guide wheels. The pick-up unit runs particularly smoothly on pneumatic tyres.



For top-quality work without relying on guide wheels: The pick-up is easily secured at the desired height. The

pictured setting is typical for conditions involving deep ruts and extremely rough straw windrows.



Optimized design for an optimized crop flow

The EasyFlow pick-up forms a compact unit that comprises either a feed rotor or a cutting rotor. The clearance between rotor and baling chamber was increased and the rotor was arranged right behind the pick-up itself to increase the intake capacity and ensure a consistent flow even in short stems.



Consistent crop feed:

Fortima models that do not feature a cutting system have a standard feed rotor, which will boost their overall output.



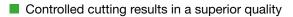
Optimum protection from foreign objects:

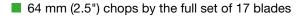
Automatically tensioned pick-up chains, which is overload protected by a shear bolt clutch.



MultiCut

The cutting-edge concept





Central blade selection system quickly changes cutting lengths



Perfect cuts:

A maximum of 17 blades are narrowly spaced at 64 mm (2.5") to produce bales that are easy to break up and spread. The blades are arranged in one row for an excellent quality of cut.



Finest quality of cut!

The KRONE MultiCut rotor cutter features

17 blades to produce short cuts that pay off quickly

by higher bale densities, enhanced silage quality as well as easier and faster bale break-up on the feeding floor. It has been shown that short straw provides

for easier spreading and better absorption of

liquids while being easier to dispose of.



Massive rotor for excellent cuts:

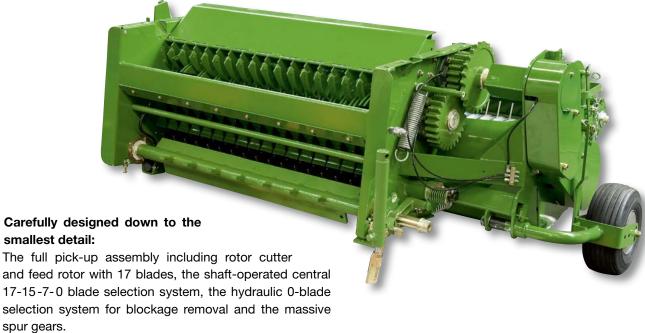
Measuring 415 mm (1'4") in diameter, the cut-and-feed rotor is able to 'swallow' massive amounts of material. Its double tines in chevron formation pull the material consistently through the blades, thereby reducing the risk of peak loads as stems are cut 'one after the other'.



Powerful driveline:

All rotors are driven by massive spur gears, which absorb even the highest loads and which provide a positive and dependable drive – even in less than uniform windrows.







1. One operation:

The KRONE blade selection system selects the blades in sets of 17-15-7 or 0. The operator operates a selector shaft, which swings the desired number of blades into the feed channel. As he alters the spacing between the blades he varies the length of cut by up to 64 mm (2.5"). Position 0 means all blades are swung out for cutting. It couldn't be easier.







2. The controlled cutting system by KRONE:

The double tines pull the crops consistently through the blades. The clearance between the blades and the double tines is very narrow so the crop cannot escape and the cuts are clean and precise.

3. Fully protected:

The automatic 'Non-Stop' auto-reset system and the hydraulic 0-blade selection system are standard specification. The hydraulic 0-blade selection is used to remove potential blockages from the feed channel.

4. Central blade locking system:

To remove the blades from the blade bank, release them by rotating the shaft, which rotates through 90°. Then remove them quickly and conveniently from above.

5. Rotor blocked up - no problem for the KRONE reverser:

The Fortima rotor cutter either reverses manually or hydraulically as an option.





Convenient:

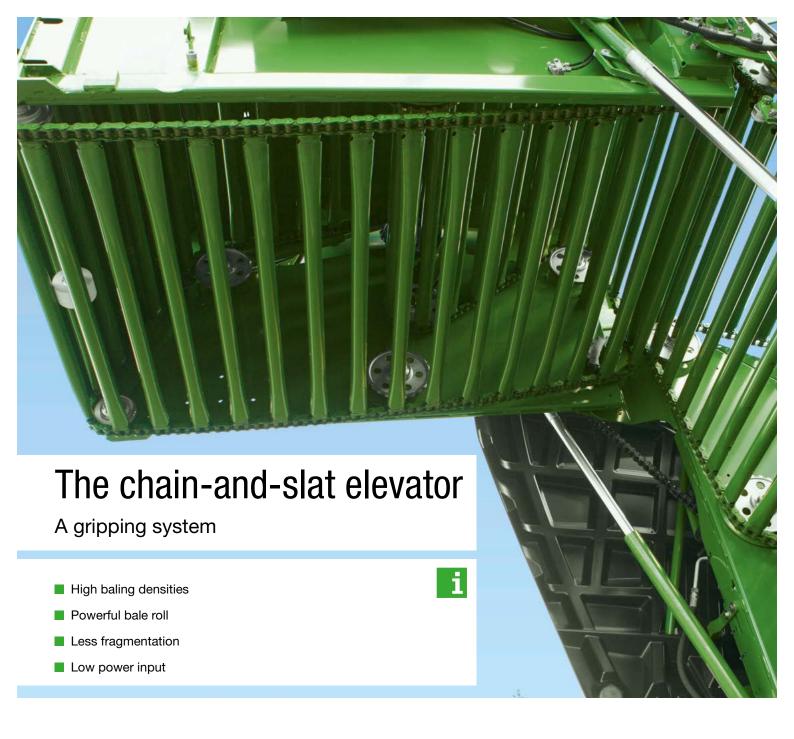
Unlock the blades and remove them from above grinding or replacement. No tools required.



Easy cutting:

The Fortima blade blades cut the crop down their full length. As the stems are pulled across the blades, the system requires less power. Their wavy edges retain their sharpness for a long period of time.







One of the guide rollers and the chain-and-slat elevator (variable chamber model)

Longevity and high density

The heavy-duty chain-and-slat elevator runs on massive guide and drive rollers. The use of more chain links distributes the load more evenly and the use of massive rollers increases the angle at which the chains change direction, reducing the wear on the elevator, increasing its capacity and leading to smooth running. Individual chain links are easy to replace as required.

The 'grippy' system for straw, hay and silage bales

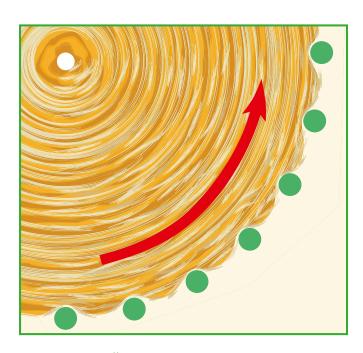
Round balers harvest straw, hay and wilted silage around the world in a wide variety of conditions that require full operational reliability. The chainand-slat elevators respond to these requirements and operate dependably in all these conditions. These elevators will deliver – gentle but firm on the material, with slats 'meshing' with the bale to provide positive rotation and maximum baling pressure.

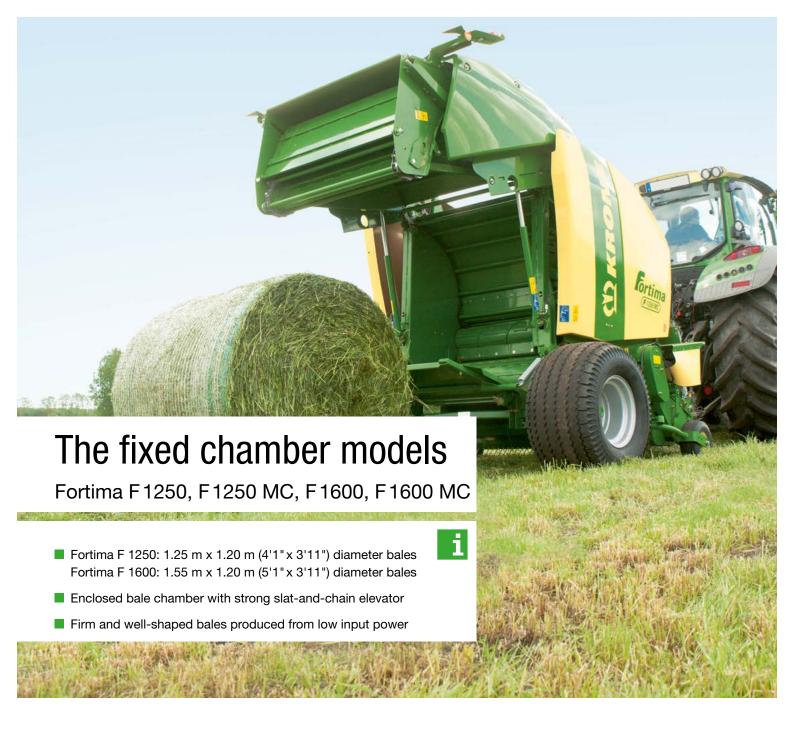








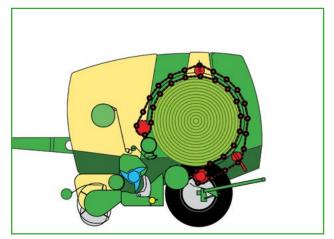


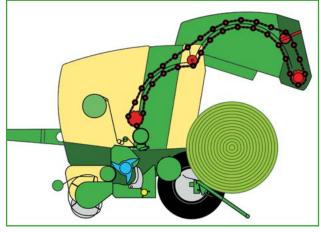


The KRONE fixed chamber concept

The slat-and-chain elevator rolls the bale in the chamber, adding layer by layer and forming a firm and uniform bale. The elevator boasts excellent bale feed properties. Rolling starts earlier and so the baling cycle finishes

earlier as well. The elevator also creates a firmer core which leads to a higher bale density and bale weight – important parameters for high-quality silage but also for the subsequent transport.





Successful baling

Leverage your business and take advantage of our Fortima F 1250 / F 1600 fixed chamber round baler models with and without MultiCut system. Featuring a camless pick-up, a slat elevator with heavy-duty chains, maximum bale densities, an uncluttered design, ultimate durability and ease of maintenance, these balers offer quick payback on your investment.



The enclosed bale chamber

The KRONE concept of an enclosed bale chamber with slat-and-chain elevator has proven extremely well in a wide variety of conditions around the world and for many decades.

WKRONE

F1600



Fully tensioned

An adjustable tensioner ensures the elevator tension is maintained for a longer time. Hence, retensioning becomes necessary less often and longevity is increased.



Convenient

The Fortima fixed chamber baler features a simple design and only few drive chains, a concept that leads to a reduced input requirement, less service and maintenance and extra dependability.



MiniStop – more bales, higher profits
The ejector throws the bale clear of
the rear door and also serves as a tray
that collects the bale. This allows the
operator to go ahead with the next bale
while the rear door is still closing.

Variable chamber balers

Fortima V1500, V1500 MC, V1800, V1800 MC

■ Variable 1.00 m to 1.50 m (3'3" to 4'11") or 1.00 m to 1.80 m (3'3" to 5'11") diameter bales



- Two separate and endless elevators give dependable operation in the most difficult conditions
- A heavy-duty design that copes with very heavy material





A combined grip on the bale

Fortima is equipped with two chain-and-slat elevators, one operating at the front end and the other at the rear to develop high baling pressures and produce perfectly shaped bales.

Variable bale diameters of up to 1.80 m (5'11")

Our variable Fortima V 1500 and V 1800 models tick all boxes, giving

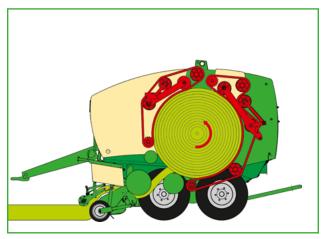
1-1.50 m (3'3"-4'11") and 1-1.80 m (3'3"-5'11") diameter bales from one machine to cater for grass silage applications where smaller bale sizes are preferred as well as applications in hay and straw where larger bales are typical.

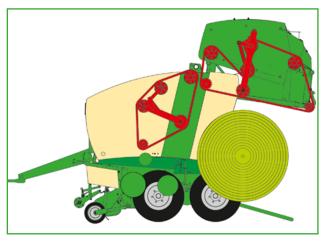




Stunning simplicity

As more and more material enters the bale chamber, the two chain elevators press layer by layer to form tight and well-shaped round bales. The slats mesh with the crop to provide positive bale rotation at any stage of the baling cycle. The baling pressure is supplied by a hydraulic ram that actuates the tensioners at the front and rear ends. As soon as the bale has reached its preset diameter, twine or net wrapping is triggered. As a last step, the tailgate opens and the bale is ejected.







The perfect solution

Drive chains are few and far between. Few chains mean greater efficiency and better operational reliability.

Positive bale starts

Fortima features an extra spiral roller profiled with raised bars that in addition to the starter roller – a design that ensures quick bale starts and optimizes the baling process.





Easy maintenance for reduced costs

Buying a Fortima means tapping into KRONE's long and vast experience and expertise in baler manufacturing. We at KRONE understand the needs of farmers. Our round balers operate around the world and have proven excellently in a wide variety of conditions. Providing high

and perfectly specified. Last but not least, they offer

superior operational reliability.



Adjusting the bale density

The variable bale chamber features two hydraulic rams that alter the bale density infinitely variably after the pressure is set on a spool valve that comes with a pressure gauge.

Powerful driveline

The main gearbox (540 rpm) is positioned centrally. Here, the incoming power is split and sent on to either side, a design that cuts down on driveline lengths and optimizes the power flow to the pick-up, the feed rotor or rotor cutter and the chain-and-slat elevator.



Perfect

The quality of a round baler is defined by two criteria – functionality and technical design. Fortima stands out for its uncluttered and efficient design that minimizes service and maintenance costs.

High-density and well-shaped bales

On the variable chamber model, two hydraulic rams, one on either side of the rear door, exert the full baling pressure at the rear of the baling chamber.





Small-diameter bales

Small diameters are typically required in silage applications, because small bales are easier to handle, break up and feed. The 1.00-1.30 m (3'3" - 4'3") diameter bales produced by Fortima V 1500 suit most wrappers perfectly.



Versatile

High versatility and utilization are key parameters in cost-effective round baler operation. A Fortima V 1500 /1800 not only produces highest densities and highest-quality bales in difficult conditions but offers typical KRONE features, including the camless

S Continua C

EasyFlow pick-up and the optional bale ejector with ejector arm.

Bale ejection guaranteed

On the variable chamber model, the optional ejector is linked to the rear door and tips as the door opens, allowing the bale to roll onto the ground and clear of the closing rear door. There is no need to reverse the tractor at the end of the wrapping cycle.



Large-diameter bales

Large-diameter bales are often preferred in straw and hay as they offer better efficiency, save wrapping material and reduce labour costs.



Quad twine wrapping

Tight and fast

- Shortest tying cycles, shorter than cycles using twin twine
- More bales per hour
- Less fuel and less labour cost



Plenty of storage capacity

The large storage compartment holds up to 11 balls of twine. Hoops hold the rolls in place for smooth uncoiling.



Convenient functionality:

The tying cycle is triggered by an electric motor. The motor tensions the drive belt, which drives the rubber wheel and this in turn pulls the twine into the chamber.



Four threads bring four-fold quality

The quad twine wrapping system from KRONE impresses by significantly shorter tying cycles compared with traditional twin wrapping systems. Four threads make for plenty of overlap and multiple layers on the edge for firm bales and maximum densities. The quad twine system is controlled from the Comfort on-board electronic system.





Perfect twine guidance:

A coned pulley controls the number of twine wraps applied per cycle. Two guide blocks are used to distrubute the four threads uniformly across the full width of the bale. As the wrap cycle starts, the threads run over the rubber wheel and the pressure roller into the bale chamber, where they are picked up by the rotating bale.



Perfect bales every time

Four threads (1-4) tie the bale a number of times, applying extra twine along the edges depending on the settings. Four

threads tie up well-shaped bales, which will not lose shape as they are handled several times over.



Well-shaped bales

The adjustable net brake wraps the bales tightly and ensures they retain their integrity in transport.



Bale watch:

A sensor on a toothed wheel measures the number or wraps applied and transfers the information to the cab computer. Once the set number of wraps have been applied, the net is cut automatically.



Less fuel per bale

Fortima's net wrap system is straightforward by design and offers superior functionality. The advantage of net wrapping is that it is faster than twine wrapping and helps you produce more bales per hour. Higher throughputs free up valuable time that can be spent on other jobs and cut the tractor's fuel consumption per bale. The net wrap system accepts rolls with a total net length of up to 3,600 m (11,811 ft).



Convenient functionality

At the end of the baling cycle, the electric motor triggers net wrapping – either automatically or manually.



For long working days

The large storage compartment holds three net rolls and protects them from rain. The rolls may provide up to 3,600 m (11,811 ft) of netting and are secured by a retainer.



Easy fitting

Fitting the rolls or balls is easy and convenient from the ground. To replace an empty net roll, simply swing out the dispenser arm and slide the fresh roll onto it. Then the net is fed into the net wrap system.



The control centre

All Fortima balers can be specified with the on-board Comfort electronic system, which processes the sensor signals automatically for the control unit.

Well-shaped bales:

All Fortima F models are specified with the Medium level electronic system. Two pointers on each side of the machine's front indicate the current baling pressure.





Easier work

KRONE offers a choice of electronic control units that help reduce operator stress and fatigue. Each control box features a clear and uncluttered screen that displays all relevant machine data and a user-friendly interface.



Control box

Fortima F is controlled from this standard-fit operator unit. It indicates the target pressure, switches from net to twine wrap and activates the blades and the pick-up.



Beta II terminal

The easy-to-use Beta II terminal offers a 4.3" colour display screen and a touch pad with 8 well grouped keys. The unit displays baling pressures, bale diameters, start of tying/wrapping and bale counts and allows operators to retrieve all spool and sensor functions.



Delta terminal

Delta has a 5.5" touch screen, a touch pad with 12 function keys and a dial, allowing operators to retrieve information on valve / sensor and diagnosing functions as well as yield data.



CCI 200 terminal

CCI 200 has a large 8.4" colour touch screen, 12 function keys and a dial. This is the terminal for ISOBUS-compatible machines. Offering the same features as the Delta terminal, CCI 200 offers an extended yield metering functionality plus further app based optional functions. For added operator comfort, it also has inputs for an optional joystick (WTK) with customizable controls and a CCTV camera.



TIM (Tractor Implement Management)

TIM makes it even easier to operate Fortima. It allows the baler's on-board control box to control even a number of tractor functions. Once the bale has reached the set diameter, TIM stops the tractor and triggers the tying cycle. Then it opens and closes the rear door. The system can also start off the tractor automatically, but this functionality is currently disabled because it is prohibited by law.



- Easy access for easy maintenance
- Automatic chain lubrication
 Option on fixed-chamber Fortima models
- Automatic chain tensioning



Scoring on long service life:

The automatic chain lubrication system benefits from a large oil reservoir and eccentric pump for minimum maintenance and added viability.



Automatic chain lubrication:

An eccentric pump supplies oil to the chain drives at a rate set on the eccentric shaft.



Easy maintenance for reduced costs

Not only is Fortima designed for highest densities and outputs but also for an uncluttered layout and easy access to all service points. Service and maintenance are as easy as it can get, with lubrication banks and automatic chain lubrication cutting effort and time down to a minimum. We took care

of every detail.





Clean:

To avoid downtime due to contaminated oil, the variable chamber Fortima features an oil strainer with a visual indicator – to ensure optimum functionality and peace of mind.



Operating like clockwork:

Spring-loaded and automatic chain tensioners reduce the time spent on maintenance and provide for extended chain service life. Longevity is one of KRONE's major concerns.



Maximum operator comfort:

All 'hidden' lubrication points are grouped in easy-access lubrication banks, making service and maintenance less time-consuming and more convenient.

The running gear

You'll go for this!

- Auto-levelling in undulating terrain
- Outstanding operator comfort
- Excellent tracking





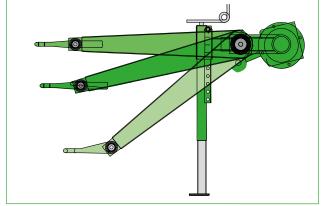
Flexible attachment

Pin hitch, hook, ball hitch or pivoting drawbar – machine owners can choose from a variety of hitch options to attach Fortima to any tractor back end: the 40 mm

(1.6") hitch ring for top-mount attachment, the 40/50 mm (1.6"/2") hitch ring for bottom-mount attachment, the K80 ball head and the height adjustable drawbar.







The universal machine

Special conditions require special equipment. To meet all our customers' requirement, Fortima is available with a wide range of running gear. Choose from standard and tandem setups, braked and unbraked versions as well as air and hydraulic brakes (export version).







1. Choice of tyres to suit your needs:

The standard axle is available with 11.5/80-15.3 10 PR to 500/50-17 10 PR sized tyres. Large flotation tyres reduce the risk of ground compaction and rutting.

2. Light-footed and smooth-running

The optional tandem axle gives soft, quiet and safe running. The choice of tyres available ranges from 11.5/80-15.3 10 PR to 19.0/45-17 10 PR.

3. Safety is key

An air brake system is available as optional specification for Fortima V 1500. Export models can be specified with hydraulic brakes.

4. High-stability stand:

The crank height adjustable stand has a telescoping end that can be retracted to increase the ground clearance in voluminous windrows.



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KRONE excellent net wrap



Excellent EDGE, RoundEdge and **StrongEdge** are net wrap products that stand out for their high quality and ability to adapt to the current crop conditions. The KRONE net wraps were specifically developed for KRONE round balers, where they provide the best results at any one time.













The KRONE universal net wrap. This net spreads exactly from edge to edge and is the best option in any crop and on every round baler.



excellent RoundEdge

This net offers better edge to edge spreading technology and therefore generous coverage beyond the edges, protecting the well-shaped bales from ingress of moisture and loss due to fragmentation.



excellent StrongEdge

This is the extra strong net among the KRONE net wrap products. With two threads knurled into one warp thread, this net offers an enormous resistance to tearing as well as larger meshes and excellent UV-stability – properties that make it particularly suitable for use in hot and sunny regions and in coarse material.



Technical data of KRONE excellent net wraps

Product	Length m (miles)	Width mm	Number of linear warp threads	min. resistance to tearing in kg	X-treme UV
Edge	2,600 (1.6)	1,245 (4'1")	50	260	V
Edge	3,600 (2.2)	1,245 (4'1")	50	260	\checkmark
RoundEdge	2,600 (1.6)	1,245 (4'1")	50	260	\checkmark
RoundEdge	3,600 (2.2)	1,245 (4'1")	50	260	$\mathbf{\nabla}$
StrongEdge	2,600 (1.6)	1,245 (4'1")	50*	320	$\mathbf{\nabla}$
StrongEdge	3,600 (2.2)	1,245 (4'1")	50*	320	\overline{V}

^{*} knurled into 25 warp threads

X-treme UV

The warranty for best possible UV protection by all KRONE net wraps.

KRONE excellent film wrap

The KRONE **excellent Slide** film wrap system comprises three high-quality films for best results in silage and highest-quality animal feed in any condition.



A product range that meets the needs of all harvest situations There is the common 750 mm (2'6") film roll as well as the 500 mm (1'8") film. Running a 1,800 m (1.1 miles) length, KRONE **excellent Slide 500** is approx. 17 % longer than 750 mm (2'6") wide silage film, a clear advantage when it comes to wrapping small-diameter bales.

KRONE **excellent RoundWrap** film is a new addition to the KRONE film wrap family. Measuring 1,280 mm (4'2") in width, the film covers the bale completely and is the best match for a KRONE round baler net wrapping system.



Technical data of KRONE excellent silage film

Product	Width mm	Length m (miles)	Thickness μm	No. of layers
SLIDE 500	500 (1'8")	1,800 (1.12)	25	5
SLIDE 750	750 (2'6")	1,500 (0.93)	25	5
SLIDE Extra	750 (2'6")	1,900 (1.18)	21	5
RoundWrap	1,280 (4'2")	2,000 (1.24)	16	5
SLIDE Smart 750	750 (2'6")	1,500 (0.93)	25	3



Technical Data

Fortima fixed chamber model

		Fortima F 1250	Fortima F 1250 MC	Fortima F 1600	Fortima F 1600 MC
Bale width	approx. mm	1,200	1,200	1,200	1,200
Bale diameter	approx. mm	1,250	1,250	1,550	1,550
Length	approx. mm	4,200	4,200	4,360	4,360
Height	approx. mm	2,490	2,490	2,620	2,620
Width*	approx. mm	2,570	2,570	2,570	2,570
Camless pick-up Work width (DIN 11220)	approx. mm	2,050	2,050	2,050	2,050
Number of tine rows		5	5	5	5
Feed rotor		Standard	-	Standard	-
Rotor cutter		-	Standard	-	Standard
Maximum number of blades		-	17	-	17
Minimum blade spacing	approx. mm	-	64	-	64
Tyre versions		11.5/80-15.3 10 PR 15.0/55-17 10 PR 19.0/45-17 10 PR 500/50-17 10 PR**	11.5/80-15.3 10 PR 15.0/55-17 10 PR 19.0/45-17 10 PR 500/50-17 10 PR**	11.5/80-15.3 10 PR 15.0/55-17 10 PR 19.0/45-17 10 PR 500/50-17 10 PR**	11.5/80-15.3 10 PR 15.0/55-17 10 PR 19.0/45-17 10 PR 500/50-17 10 PR**
Power requirement	approx. kW/hp	36 / 50	36 / 50	36 / 50	36 / 50
Power input		12 V	12 V	12 V	12 V
Driveshaft speed	rpm	540	540	540	540
Hydraulic couplers		2sa	2sa	2sa	2sa



Technical Data

Fortima – the variable chamber model

		Fortima V 1500	Fortima V 1500 MC	Fortima V 1800	Fortima V 1800 MC
Bale width	approx. mm	1,200	1,200	1,200	1,200
Bale diameter	approx. mm	1,000 - 1,500	1,000 - 1,500	1,000 - 1,800	1,000 - 1,800
Length	approx. mm	4,520	4,520	4,860	4,860
Height	approx. mm	2,700	2,700	2,850	2,850
Width*	approx. mm	2,570	2,570	2,570	2,570
Camless pick-up Work width (DIN 11220)	approx. mm	2,050	2,050	2,050	2,050
Number of tine rows		5	5	5	5
Feed rotor		Standard	-	Standard	-
Rotor cutter		-	Standard	_	Standard
Maximum number of blades		-	17	-	17
Minimum blade spacing	approx. mm	-	64	_	64
Tyre versions		11.5/80-15.3 10 PR 15.0/55-17 10 PR 19.0/45-17 10 PR 500/50-17 10 PR**	- 15.0/55-17 10 PR 19.0/45-17 10 PR 500/50-17 10 PR**	11.5/80-15.3 10 PR 15.0/55-17 10 PR 19.0/45-17 10 PR 500/50-17 10 PR**	– 15.0/55-17 10 PR 19.0/45-17 10 PR 500/50-17 10 PR**
Power requirement	approx. kW/hp	36 / 50	36 / 50	40 / 55	40 / 55
Power input		12 V	12 V	12 V	12 V
Driveshaft speed	r/pm	540	540	540	540
Hydraulic couplers		2 sa free return line	2 sa free return line	2 sa free return line	2 sa free return line

All specifications, weights and dimensions do not necessarily comply with standard specifications and are therefore not binding.

^{*} Different specifications apply depending on tyres and number of axles

^{**} on single-axle models only





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Products

Find extensive information on our full product range. This section holds everything you need — from video clips to manuals.



Sales organisation

Here you find a distributor in Japan as well as your local KRONE dealer who will be pleased to support you. This is where you find your KRONE partner who will be pleased to assist you.



Jobs

Would you like to join our company? KRONE is often looking for diligent and motivated staff to work at our farm machinery factory as well as at our commercial trailer production plant. So, this section is always worth a visit.



Media center

The KRONE 'database' holds thousands of documents, pictures, test reports and much more. Here you find very detailed information on KRONE products that are of special interest to you.



Events

Are you in for a KRONE live experience? Check out for KRONE events and look at a machine on show or watch it during a demonstration. After all, there is little that is more effective than a hands-on experience.



Service

Here you find all the service information you require – from a point of contact at the factory to finance schemes for your KRONE machine as well as training schemes for staff and users.



Download Center

Are you looking for a KRONE calendar for your desktop or a smart picture for your presentation? Here, at the KRONE download center, you will find plenty of useful material for a wide range of projects.



Used Machinery

KRONE often has a wide range of demonstration or exhibit machinery on offer. This is a good site to find your KRONE machine. Then contact your local KRONE dealer to arrange the details of a potential purchase.



Parts

24/7... This service gives you the opportunity to find your KRONE part at any time and without waiting. The KRONE Agroparts Portal has an article number and exact description for every part. You can order the part instantly at your local KRONE dealer by sending an e-mail to Agroparts.



KRONE shop

Are you looking for a gift or are you a collector of farm models? Then you should definitely shop around at our KRONE shop. We take your orders at any time of the day.



Maschinenfabrik Bernard KRONE GmbH

Heinrich-Krone-Straße 10 D-48480 Spelle

Telefon: +49 (0) 5977.935-0 Telefax: +49 (0) 5977.935-339

info.ldm@krone.de www.krone.de