

**EXTRA 332F-336-390**



# **Mounted Plain Disc Mowers**





# Dedicated to Quality



## Experience, Competence and Quality

These are key statements in the production of machines at the Kverneland Group forage equipment competence center in Kerteminde, Denmark and with a history of implement production dating back to 1877, the wealth of technical know-how gathered through research and development since then, is applied to find the optimum solution to our customers needs.

## In-house Production

When it comes to cutterbars, the heart of every mower, consistent, uniform quality and reliability is essential, which is why all cutterbars, have been produced and assembled internally at the Kerteminde factory since 1992, giving us full control of every step of the process. A number of quality control procedures have been introduced into the operation, ensuring best possible control of all components.

The accurate, organized and detailed data accumulated via daily testing and process quality checks, is an invaluable tool that gives us a path to follow, in eliminating possible problems in the process, heading off potential problems and troubleshooting product quality issues.



The inhouse cutterbar production has a yearly capacity of several thousand cutterbars.



Welding robots ensure consistent quality.



All cutterbars are testrun and checked for noise and heat level.





### Optimised Cutterbar Setup

In order to meet the exact requirements of our customers, state-of-the-art production techniques are employed, including a recently implemented cutterbar production setup. A cutterbar is essentially a high speed gear transmission where accuracy is a key factor, which is why all cutterbars are processed in a CNC milling machine to ensure correct tolerance before final assembly. Every cutterbar is subjected to

thorough testing and a unique test report is stored for every single cutterbar, providing easy access to a complete history if needed. Our cutterbars are built for hard work, with design features such as fully welded c-profiles eliminating oil leaks and unique rounded gear wheels providing powerful transmission at a low noise level, all features guaranteeing optimum quality and durability.



Every cutterbar is given a unique number, making it easily identifiable for future reference.



Several high capacity laser cutters support the extensive production.

### 'Express' Quick Change of Knives

All disc mowers in the EXTRA range can be fitted with the 'Express' system for quick and easy changing of knives.

Simply place the lever around the bolt, release the spring by turning the lever, and the knife is ready to be replaced by a new one.



# Cutting Performance in New Dimensions

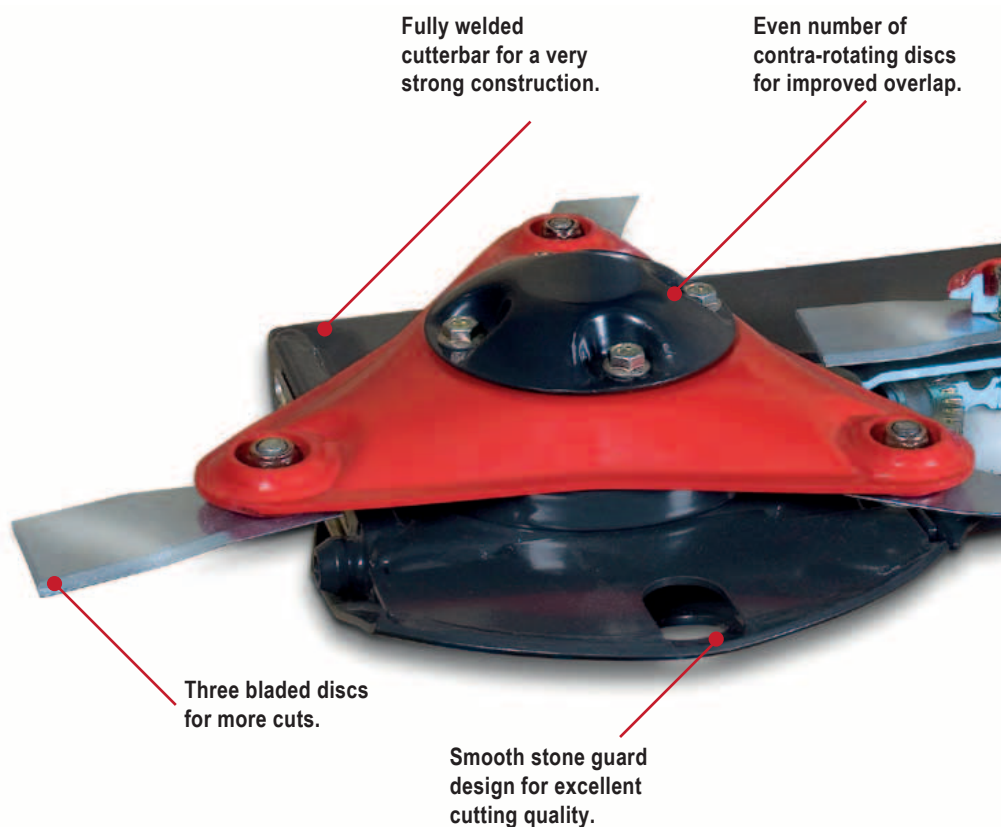


## Low Noise Cutterbar

The newly developed EXTRA cutterbar is designed for low maintenance and offers a very quiet operation. Operators will immediately love the virtually quiet operation of the new cutterbar – convenient during a long and busy working day. The long curved gear wheels run smoothly in oil and provide lots of power transmission with little slack.

## Heavy Duty Cutterbar

The EXTRA cutterbar has a high oil capacity, which ensures a very low working temperature. This guarantees an efficient oil cooling and lubrication of the whole cutterbar. The fully welded cutterbar with overlapping C-profiles makes for a very stiff and strong design, ensuring a very high level of durability.



The complete front can be opened for easy inspection of the cutterbar.

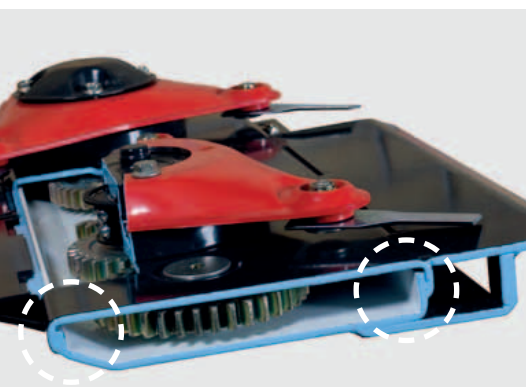
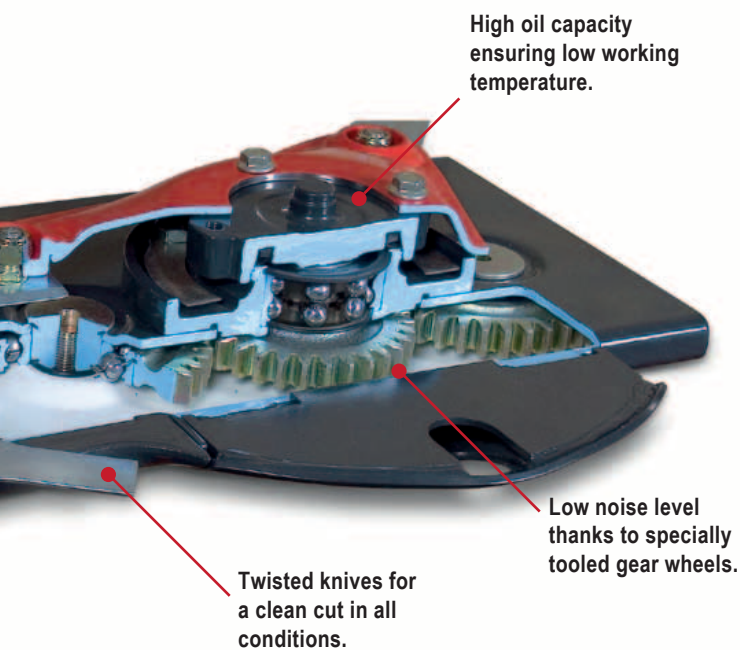


To protect the gear wheels and the drive system, Vicon uses a two-key safety device, designed to break in case of overload.



Each individual disc bearing housing can be removed very quickly for easy maintenance and bearing replacement.

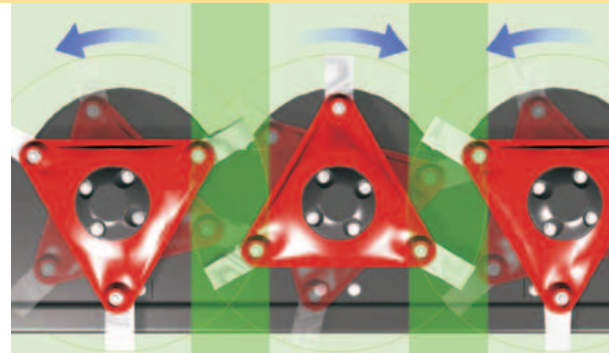




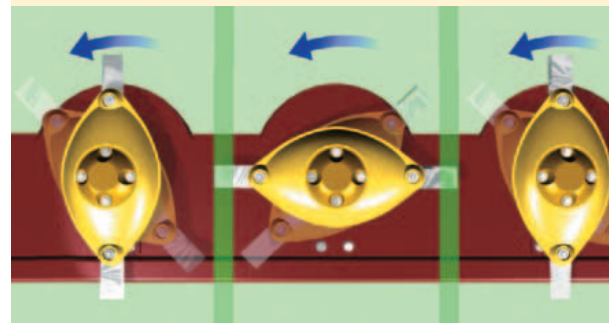
Fully welded cutterbar with overlapping C-profiles for a very strong and stiff construction.



Low noise level thanks to specially tooled gear wheels with round design and long teeth for efficient power transmission.



Vicon's contra-rotating three bladed discs provide a wider overlap on each disc compared to solutions with uneven number of discs.



## Contra-Rotating Three Bladed Discs

### Three Bladed Discs for More Cuts

With three blades per disc Vicon EXTRA mowers are constantly cutting. This means a third less load per blade and an even load on the drive and smoother power usage in addition to producing a neat, cleanly cut stubble. Each steel blade is precisely angled to immediately convey the cut crop upwards with a combination of mechanical action and air flow towards the conditioning rotor or rollers.

### Contra-Rotating Cutting Discs for Improved Overlap

All Vicon mowers have an even number of contra-rotating discs. Apart from the immediate crop transport to the rear this system ensures that even in wet conditions no stripes of uncut forage are left in the field.



**EXTRAΔ 390**

# **Output and Energy Consumption in Perfect Combination**







### **Efficient Performance Paired with Low Weight**

Vicon introduces a new plain disc mower, the new EXTRA 390 plain disc mower butterfly. A combination that provides efficient performance with its 8.75m working width paired with a low weight design.

The EXTRA 390 is an eco-friendly, energy saving solution purposely build for low operating costs in terms of power and fuel consumption, with power requirements starting at only 110 hp. The low weight of only 1600 kg, together with the ideal weight distribution that butterfly combinations offer, gives the optimum combination of low power requirements, low weight and high efficiency.

Designed to match the needs of large-scale mowing, the EXTRA 390 is packed with features to meet these demands. The centre suspended mowing units in combination with the three-bladed discs offer an unmatched mowing performance. The Vicon BreakBack solution protects the cutterbar from foreign obstacles, and automatically returns the mowing unit to working position. The EXTRA cutterbar offers smooth operation with very low noise level, convenient during a long working day.

All this comes wrapped in a modern exterior design. The complete EXTRA 300 generation appears in the new Vicon design line, following the design of the mower conditioner range. The colours of the tarpaulin have been upgraded into a new attractive combination of red and black, giving a clear family identity throughout the range of disc mowers and mower conditioners.

**EXTRAΔ 390**

# A Full-Feature Machine



## **Two Mounting Options**

EXTRAΔ 390 can be adjusted for optimal operation according to different circumstances, such as field contours or working width of the front mounted mower. To ensure optimal overlap between front and rear units, the mowing units can be mounted in two positions on the suspension arm. This also gives you an option of wider overlap in hilly conditions, lessening the need for SideShift equipment.

## **Vertical Transport Position**

For transport the mower folds into a compact position well behind the tractor. The folding design ensures that the weight is distributed evenly, with the weight of the mower close to the tractor. Endguards are foldable to further limiting transport height, which is below 4.0m and transport width is limited to 3.0m.

## **Centre Suspension**

The mowing units are centre suspended offering an even weight distribution across the complete mower width. Faster and more precise adaptation to ground contours is also achieved due to the centre suspended design. The benefit is less skid wear and optimum protection of the stubble.





Two mounting options.



BreakBack System.



Vertical Transport Position.



Excellent Ground Adaptation.



Centre Suspension.



Headland turns.

### BreakBack System

The Vicon BreakBack system protects the cutterbar from foreign obstacles. If hitting an obstacle, the BreakBack system will swing the machine backwards and over the obstacle, automatically returning the mower to working position, once the obstacle has been passed.

### Excellent Ground Adaptation

EXTRA 390 is fitted with two adjustable ground pressure springs, making setting of the best possible ground pressure easily done, to match the needs of each specific mowing operation.

### Headland Turns

When turning on headlands the hydraulic cylinder, which is also used when going into transport position, ensures ample clearance to the swath, so they remain undamaged.



EXTRAΔ 336

## At the Centre of Control



125° vertical transport position for excellent weight distribution.



The centre suspended design enables fast and precise adaptation to ground contours.



When encountering an obstacle the BreakBack system protects the cutterbar by swinging it back and up.





### **Extensive Working Width – Low Weight**

The new Vicon EXTRA 336 boast an extensive 3.5m working width at a weight of only 775 kg, which means the machine can be operated with tractors as low as 65 hp, making this a very attractive machine for farmers with smaller tractors, who still needs to cut substantial areas. Paired with the EXTRA 332F front mounted machine the joint working width is an amazing 6.4m.

### **Vertical Transport Position**

EXTRA 336 is folded hydraulically into a 125° vertical transport position. The low gravity point ensures excellent weight distribution, with the weight of the mower close to the tractor. Additionally the weight is evenly distributed on each side of the mower. Transport height is limited, so passing through narrow gateways or under bridges is no problem.

### **Centre Pivot Suspension**

The EXTRA 336 is centre suspended to give an even weight distribution across the complete mower width. Faster and more precise adaptation to ground con-tours is also achieved because of the centre suspended design. The benefit is less skid wear and optimum protection of the stubble.

### **BreakBack system**

To offer maximum protection of the cutterbar, EXTRA 336 is fitted with the Vicon BreakBack solution. When encountering an obstacle the BreakBack will swing the machine backwards and over the obstacle, returning to its original working position, once the obstacle has been passed.

### **Adjustable For Any Tractor**

The linkage pins on EXTRA 336 can be adjusted for four different positions, ensuring compatibility with any tractor. Another advantage is that the overlap in combination with a front mounted machine like EXTRA 332F can be optimized, to ensure that the complete working width on both machines is utilized. Furthermore the mowing unit can be mounted in two different positions on the suspension for easy setting of optimal overlap.

### **Lift on Headlands**

Lifting on headlands is easily done without activating the 3-point linkage of the tractor. A hydraulic cylinder is used for lifting on headlands and turning is simple thanks to sufficient ground clearance. The same cylinder is used when going into transport position

### **Clean Cutting Performance**

The latest generation of the EXTRA cutterbar is fitted to EXTRA 336, offering unmatched cutting performance thanks to the triangular three-bladed discs.

The large compensating spring in combination with the centre mounted design provides perfect flotation of the complete cutterbar.

### **Adjustable PTO Speed**

Vicon EXTRA 336 comes factory fitted with the option of being operated with either 540 or 1000 rpm. It requires no additional accessory. All that is needed is simply to turn the main gearbox on the suspension 180°.



EXTRA 336 can be operated with either 540 or 1000 rpm without additional accessory.



# EXTRAΔ 332F

## Less Weight, More Go



### **Built for Any Terrain**

Outstanding ground following ability, easy operation and low weight are among the highlights of this machine. The new 332F is characterized by excellent cutting performance and ground following ability in all terrain. Eight contra-rotating discs ensure that cutting quality remains outstanding, encouraging rapid regrowth from clean stubbles. This is the perfect machine for daily grazing in combination with a loader wagon, joined up with a trailed or rear mounted machine, or as part of a butterfly combination.

With a working width of 3.2m and an operating weight of only 680 kgs, the EXTRAΔ 332F requires as little as 55 hp to operate. Run in a combination with a 3.2m on the rear, would give you a mowing combination capable of effortlessly handling 6.2m crop.

### **Responsive Mowing**

The very responsive kinematics associated with the headstock design will step in when encountering even the smallest obstacles during operation.

To offer maximum protection and lessen the shock loads on the complete machine, the cutterbar will move backwards and up, letting any obstacle pass without risk of damage.

### **Excellent Serviceability**

EXTRAΔ 332F has outstanding service access to the cutterbar, which is an advantage compared to most other machines with a flexible suspension. Even when the machine is raised, you can open the entire front cover.





Good view of the machine from the tractor cabin.



Easy access to the cutterbar with foldable front and side guards.



Two springs provide excellent ground following ability.



The machine is standard equipped with two swath discs, allowing a swath width of 2.2-2.4 m.

### Two-Speed Driveline

Standard PTO speed is 1000 rpm. However by simply switching driveline pulleys, 750 rpm for reduced fuel consumption can be achieved. This makes it possible to maintain the correct PTO speed, but using reduced engine revs, creating an opportunity for lower fuel consumption. An innovative solution solving the problem of front PTO systems not offering an economy speed.



By switching driveline pulleys changing from standard PTO speed of 1000 rpm to 750 rpm is possible.



A BreakBack solution, integrated in the headstock, helps clear obstacles.



## EXTRA 332F

# Outstanding Ground Adaptation

### Remarkable Adaptation Range

The EXTRA 332F is exceptionally well adapted to varying field conditions and contours. At standard settings the cutterbar has a remarkable 430mm upwards and 210mm downwards adaptation range, in combination with transverse pivoting range of 17°. This wide spectrum allows the machine to follow the ground in all conditions without overloading the cutterbar.



### Unrestricted Movement

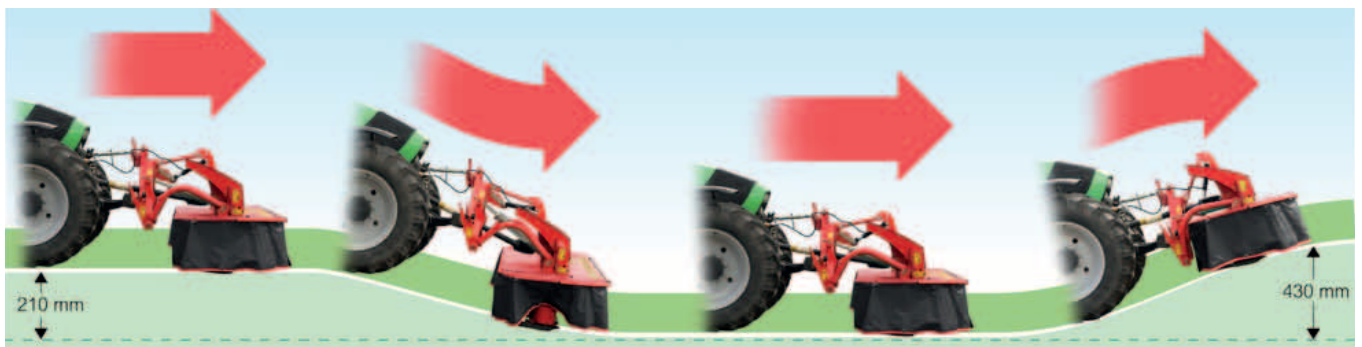
There is no wearing on the front linkage of the tractor, as the integrated suspension design does not require a flexible front linkage - the relative movements are done by the machine itself. This also means that you are not restricted by the limited flexibility typically originating from the front linkage.

The mowing unit moves independently from the front linkage, ensuring the best possible pattern of movement and the transverse adaptation sets the standard in this segment.



### Easy Operation of the Machine

Correct setting of the machine is very user-friendly. The front linkage is set to a specified height and the mower unit is operated by a separate hydraulic cylinder integrated in the suspension. Ground pressure is provided by two springs and cutting quality is always excellent due to Vicon's three-bladed discs.



An adaptation range of 430mm upwards and 210mm downwards ensures untroubled ground following.



# Technical Specifications

| Type  | EXTRA 332F | EXTRA 336 | EXTRA 390 |
|---|------------|-----------|-----------|
| Working width (m)   | 3.20       | 3.50      | 8.75      |
| Swath board L/R or swath roller L/R fitted, approx. (m)               | 1.2-1.6    | 3.2       | -         |
| Weight approx. (kgs)  | 680        | 775       | 1600      |
| Number of discs   | 8          | 10        | 16        |
| Stubble height (mm)   | 20-50      | 20-50     | 20-50     |
| Discs (rpm)   | 3000       | 3000      | 3000      |
| Power requirem. min (kW/hp)   | 40/55      | 44/60     | 81/110    |
| PTO standard (rpm)  | 750/1000   | 540/1000  | 1000      |
| Overrun clutch  | o          | o         | o         |
| Friction clutch   | o          | o         | o         |
| Hydraulic transport folding   | -          | o         | o         |
| * Minimum requirement on weight of tractor. • = standard o = optional |            |           |           |

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 purpose, please contact proper assistance or supervision of a technical assistant. © Kverneland Group Kerteminde AS.

## Optional Equipment



High skids.



Throwing wings.



Lighting kit.





## Kverneland Group

**Kverneland Group is a leading international company developing, producing and distributing agricultural machinery and services.**

Strong focus on innovation allows us to provide a unique and broad product range with high quality. Kverneland Group offers an extensive package of systems and solutions to the professional farming community. The offering covers soil preparation, seeding, forage- and bale equipment, spreading and spraying.



## Original Spare Parts

**Kverneland Group spare parts are designed to give reliable, safe and optimal machinery performance - whilst ensuring a low cost life-cycle. High quality standards are achieved by using innovative production methods and patented processes in all our production sites.**

Kverneland Group has a very professional network of partners to support you with service, technical knowledge and genuine parts. To assist our partners, we provide high quality spare parts and an efficient spare parts distribution worldwide.

**Kverneland Group UK Ltd.**  
Walkers Lane, Lea Green, St. Helens  
Merseyside, WA9 4AF  
Phone + 44 1744 8532 00

**Kverneland Group Ireland Ltd.**  
Hebron Industrial Estate  
Kilkenny, Ireland  
Phone + 353 56 51597

**Kverneland Group Canada Inc.**  
1200, rue Rocheleau  
Drummondville (Québec), J2C 5Y3, Canada  
Phone +1 819 477 2055

**[www.vicon.eu](http://www.vicon.eu)**

