

# Rotary harrows

Terramat L • Arterra MS • ArterraGrip • EuroTill MS



# Technique for Professional



Our machines stand out thanks to their robust and long living construction, their practical functionality and their ability to consistently meet future requirements thanks to innovative developments. We see ourselves as a partner to our customers, ready to provide comprehensive advice- and service concept. Agricultural technology from Vogel & Noot directly contributes to our customers' personal success and professional enjoyment.







# Rotary harrows for all cultivation processes



ArterraGrip 300 with rubber tapered ring roller



## Seedbed preparation - an important success factor:

A homogenous seedbed is the crucial basic requirement for the uniform germination and early development of the whole crop. This is because in comparison to the natural factors in place such as the type of soil, light conditions and water supply, growth and plant development are clearly influenced by seed preparation.

The requirements for optimum seed preparation are:

- An even distribution of the plant remains (influences light conditions and nutrient reservoir)
- No deep tramlines or compressed zones in the soil
- Uniform working depth, prevention of unnecessarily deep cultivation
- Ground structuring with fine soil in the sowing horizon and a rougher, crumbly structure on the surface

Vogel & Noot rotary harrows are consistently geared towards these practical requirements. The wide selection of different designs covers the range between conventional seedbed preparation after ploughing right through to powerful, combined mulch-sowing. The various equipment options allow the best possible solutions and in doing so create the basis for a successful crop.

# VN rotary harrow application areas:

The use of rotary harrows can be essentially divided into three method groups which differ in the nature and sequence of work steps. The choice depends on the local conditions and the respective cultivation strategy.



## Conventional seedbed preparation in the ploughing process

### Solo

Conventional soil cultivation is characterised by the clear sequence of the three cultivation processes - ploughing, seedbed preparation and sowing. Under good conditions, ploughing works all plant remains deep into the ground and weeds are destroyed through the deprivation of light and air. The cultivation depth is usually between 15 - 30 cm. An appropriate reconsolidation and sufficiently fine crumbling for optimum germination conditions is then achieved with secondary soil cultivation.



## Conventional seedbed preparation in the ploughing process

### Combined with sowing technology

Due to its design principle, a rotary harrow is ideally suited for combined use with sowing technology. Thanks to the compact design, an enormously high lifting power of the tractor hydraulics is not required even with a seed drill, the rear axle and hydraulics are protected and the tractor and equipment remain safe to drive. Both mechanical or pneumatic drills as well as precision seed drills are suitable for the combination. The greatest advantages of combining the use of seedbed preparation and sowing are clearly that time and energy is saved but also, of course, from the point of view of the arable farmer, that the soil is protected due to a reduction of the individual passes.







## Conservation cultivation in the mulch-sowing process

### Combined with sowing technology

Of course, rotary harrow/seeder combinations are also suitable for mulch-sowing because the intensive mixing of the mulch material and very good crumbling create optimum germination conditions. The heavier the soil conditions, the more obvious these advantages become, meaning that less passes with the cultivator are necessary. In addition, fewer demands are also placed on the coulter system of the seed drill. Behind the rotary harrow, conventional drills generally perform smoothly even in mulch-sowing. The rotary cultivator is particularly suited for work in mulching conditions. The "at the ready" tines provide very good penetration and even allow work to be carried out in soils which have not been pre-cultivated.

## The VN rotary harrow range at a glance

				
	<b>Terramat L</b>	<b>Arterra MS</b>	<b>ArterraGrip</b>	<b>EuroTill MS</b>
Features	Compact rotary harrows in many widths, also for specialised crops	Extremely robust rotary harrow with intelligent technology	Rotary cultivator with a distinct suitability for mulch-sowing	Foldable rotary harrows with easy handling
Working widths - rigid	1.00 up to 4.00 m with many intermediate widths	3,00 / 4,00	3,00 / 4,00	–
- foldable	–	–	–	4,00 / 4,50 / 5,00 / 6,00
Permitted tractor hp	up to 120	180 / 180	230 / 230	180 / 200 / 220 / 260





Terramat L 300 with packer roller

## Compact rotary harrow with a broad range of applications

### Advantages at a glance:

Solid 3-point tower, also for use in combination with seed drills

Centrally-located gearbox with rear PTO shaft drive as standard

Pressed gearbox pan with robust rotor bearings

Stable mounting of knife tines with torsion lock ensures a solid grip

Excellent service life due to forged knife tines made of microalloyed fine-grained boron steel

Spring-loaded side impact plates

A compact and lightweight attachment, reliable processing and perfect work are the special features of the VN Terramat rotary harrow. It is particularly swift, and its compact design means that it can be used with tractors up to 120 hp.

The Terramat can be used in all areas of agriculture. However, due to its finely graduated working widths, it is particularly suitable for specialised crops such as fruit growing, viticulture or vegetable growing.







### Centrally-located gearbox:

Placed centrally on the pan, it ensures minimum bending of the drive shaft and therefore smooth operation. Supplied as standard with rear PTO shaft drive for the operation of combination implements. Optionally available as change-speed gearbox for a rear PTO shaft speed of 540 or 1000 rpm (2nd image)



### Pan design:

A tried-and-tested ball bearing with a large bearing clearance and reliable sealing guarantees a long service life. Quality steel with a wall thickness of 5 mm gives the pan high rigidity. An integrated stone guard protects the rotors.

### Rotors:

The higher number of rotors is a special feature of the Terramat L. With a working width of e.g. 3 m, 13 rotors with 26 tines create a very fine crumb seedbed. The smaller rotor diameter produces the familiar speed.

### Tines:

Forged knife tines made out of micro-alloyed fine-grained boron steel of 300 mm in length guarantee an excellent service life. A torsion lock on the rotor ensures a secure fit thanks to the screw fastening.



### Levelling bar:

The levelling bar provided as standard provides an optimum crumbly structure and optimum levelling. The spring mounting is protected against overload and a continuously adjustable height alteration system with spindle means that the height can be adjusted with the greatest possible ease.





# Arterra MS



Arterra MS 300 with packer roller

## Premium rotary harrow with intelligent technology

### Advantages at a glance:

Convenient, length-adjustable tractor attachment with horizontal compensation between tractor and rotary harrow

Centrally located change-speed gearbox system Walterscheid with a rear PTO shaft drive as standard

Twin gearbox pan with maximum stability and stone guard as standard

Maintenance-free taper roller bearing

Circular rotors for screwed-on tines, optional tine quick changeover system

Levelling bar with automatic height adjustment

The robust construction using components of the highest quality as well as the functional details put the Arterra in the upper class of rotary harrows. With high-quality brand gearboxes, the specially constructed and manufactured pan with the maintenance-free taper roller bearing as well as the stable and at the same time attractive headstock, the Arterra MS is optimally equipped for all applications using tractors up to 180 hp.



### Change-speed gearbox:

The gearbox system Walterscheid is designed for very high tractor performances and stands out in the Arterra rotary harrow range due to the fact that it is extremely reliable. The PTO shaft stub is positioned centrally and right at the back. This ensures limited bending of the drive shaft and therefore smooth operation. Comes with PTO shaft drive as standard for combined use with seed drills. Can be used for a PTO shaft speed of both 540 and 1000 rpm. It is aligned simply by adjusting the change gears.





The bearing tubes are welded with the pan in a special sequence.

## Rotors:

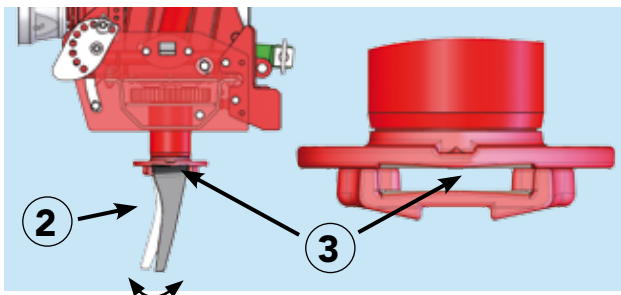
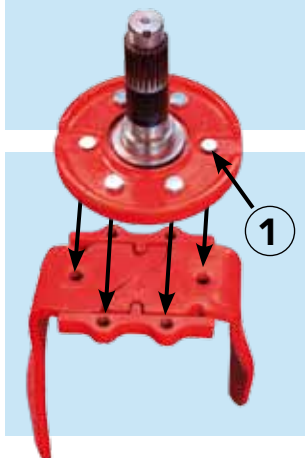
The rotor shaft and tine bracket are forged from one part and are therefore particularly robust. An incredibly high-quality shaft seal guarantees long-term leak tightness and therefore the longevity of the Arterra rotary harrow: A labyrinth prevents the penetration of rough parts and therefore damage to the seal elements from the outside. Twin shaft sealing rings reliably keep the oil in the pan. The standard stone guard on the pan reliably prevents the stones from jamming between the rotors and, in doing so, contributes to the long service life of Arterra implements.

## Tines:

As standard, the Arterra MS is equipped with screwed-on knife tines made from microalloyed fine-grained boron steel of 340 mm in length. These provide an excellent service life. The quick tine changeover system is optionally available and can also be retrofitted. In this process, a specially forged counterplate is screwed onto the existing tine carrier which then holds the quick-fit tines (see below).

## Pan design:

Combined with the special pan design, the highly robust tapered roller bearing with a large bearing clearance provides a very high level of stability. The additional base of the pan is welded over the entire working width and therefore reinforces the pan and bearings. The drive wheels and the bearings are lubricated with oil. This guarantees an optimum lubricating effect, regardless of the surrounding temperatures.



## Tine quick changeover system:

The VN tine quick changeover system is characterised by the fact that the fastening bolts (1) hardly have to take on any stresses during the work. Thanks to their special construction, the tines are positively kept in position in the ground and can be easily removed after the removal of the fastening bolts. The spring-loaded mounting (2) of the tines in the special slot in the holder (3) is an integrated stump-jump system and protects the components of the implement.



## Levelling bar:

With its floating mode of operation, the standard levelling bar provides an optimum crumbly structure and optimum levelling. The working height adjusts automatically, however the highest and lowest levels can also be set manually.





ArterraGrip 300 when mulch-sowing with the MasterDrill<sup>pro</sup> seed drill

## The rotary cultivator with bite

### Advantages at a glance:

Centrally located change-speed gearbox system Walterscheid with a rear PTO shaft drive as standard

Twin gearbox pan with maximum stability and the largest pass

Maintenance-free taper roller bearing

Circular rotors with a tine quick changeover system as standard

Smooth operation, no vibrations as tine brackets are not 90° offset

Optimum seedbed preparation even in heavy mulching conditions

Pivoting side impact plate designed to be extra long for optimum connection

The ArterraGrip rotary cultivator never fails to impress thanks to its unrivalled robustness and versatility. The position of the "at the ready" tines opens up new fields of application for the rotary cultivator. In addition to seedbed preparation on ploughed land, which the rotary cultivator naturally masters equally well, the emphasis in the rotary cultivator's work lies in universal applications in the field of mulch-sowing. The ArterraGrip produces outstanding work, both on pre-cultivated soils (e.g. after the cultivator) and in uncultivated conditions.



### Tine quick changeover system:

The ArterraGrip is equipped with the VN tine quick changeover system as standard. For this reason, retrofitting to the knife tines that are also optionally available can be carried out very quickly.

### Change-speed gearbox:

The change-speed gearbox in the ArterraGrip is identical to that in the Arterra MS rotary harrow. For further information, see page 8.





Assembly of the pan  
in rotating equipment  
increases quality and efficiency

## Rotors:

With a 60 mm rotor shaft diameter, the ArterraGrip is equipped for even the most difficult applications. The rotor shaft and tine bracket are forged from one part and are therefore particularly robust. The design of the shaft seal is identical to that in the Arterra MS rotary harrow and guarantees long-term leak tightness and therefore the longevity of the Arterra implements.

## Tines:

The "at the ready" tines provide the majority of the outstanding quality of work of the ArterraGrip. This arrangement ensures an optimum mixing effect with an optimum ground structuring for sowing: Spring-loaded parts are concentrated in the lower area of the processed layer, i.e. in the seed depositing area. There is also no subsoil compaction, the grip tines avoid lubricating horizons. The working characteristics of the grip tines also avoid a swath formation of harvest remains.

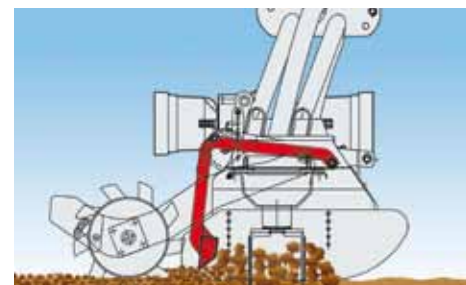
## Pan design:

With a material thickness of 8 mm, the "double-floor" construction is designed for the higher stresses during rotary cultivator operation. It also features enormous passes for this purpose. The tapered roller bearing is located in longer bearing tubes, which in turn means greater stability. The lower edges of the pan are also slanted. Thanks to these two design features, the ArterraGrip achieves incredibly large passes, in order to be able to work without blockages even in extreme mulching conditions.



## Levelling bar:

As is the case with the Arterra MS, the standard levelling bar with its floating mode of operation and special design (vertical at the top/slanted at the bottom) provides an optimum crumbly structure and top-quality levelling.





Now **NEW** in serial:  
Floating operating  
position!



EuroTill MS 600, foldable, with packer roller

## High efficiency with foldable rotary harrows

### Advantages at a glance:

Robust central gearbox and lateral change-speed gearbox

Stable folding frame which holds the gearbox pan on both sides

Gearbox pans with a large-sized rotor ball bearing

Circular rotors with a stone guard all around

Central loosening tines for blanket cultivation

Levelling bar controlled by rollers which is very easy to adjust

Better and exact soil adjustment over the whole working width due to floating operating position

The compact design, the driving comfort and the high outputs with working widths of up to 6 metres are characteristic of the foldable rotary harrows from the EuroTill series. Very often, there is the need for seed preparation using rotary harrows even in large areas as, depending on the location and the soil conditions, this method of cultivation is sometimes the only one that is correct and is also ultimately the cheapest. As well as the large working widths, reliability, wear resistance and simple handling are, of course, required for this purpose. The EuroTill implements meet these requirements brilliantly.



Mechanical type



Hydraulic type

### Floating operating position:

The exterior supports of the folding cylinder are at this new system so designed that both power harrow halves if required aren't rigid over the whole working width but can be operated in "floating position". The advantages are in the better soil adjustment over the whole working width and in the more exact soil cultivation due to constant depth on wavy fields.





### **Rotors:**

With a 55 mm rotor shaft diameter, the EuroTill is equipped for even the most difficult applications. The rotor shaft and tine bracket are forged from one part and are therefore particularly robust. The shaft seal is well protected against foreign bodies penetrating from the outside and is therefore very reliable.

### **Tines:**

As standard, the EuroTill MS is equipped with screwed-on knife tines made from microalloyed fine-grained boron steel which is 300 mm long and 15 mm thick. This ensures an excellent service life. The quick tine changeover system "Superfast" is also optionally available.

### **Pan design:**

The robust pan design made from high-tensile Domex material provides excellent warping rigidity. In the area of the bearing support, additional strengthening provides stability. The tried-and-tested ball bearing with a large bearing clearance ensures safe functioning and a long service life. It is characterised by the stone guard all around the rotors, which reliably protects against damage.



### **Gearbox:**

The central gearbox from the well-known manufacturer Comer is combined with two lateral change-speed gearboxes for changing the rotor speed.



### **"Superfast" tine quick changeover system:**

The "Superfast" tine quick changeover system is optionally available for all EuroTill MS implements. The option of retrofitting is a particular advantage. In this process, a special counterplate is screwed onto the existing tine carrier which then holds the quick-fit tines.



### **Levelling bar:**

The levelling bar provided as standard is controlled by rollers via a parallelogram. This means that adjustment of the working depth demands less correction of the levelling bar setting. The basic position can be adjusted using the spindle.



## Side plates



### Terramat

The spring-loaded side plates provide a clean connection and the robust design with a high material thickness ensures that there is little wear. As with Arterra implements, the transport width remains under 3.0 m even without pivoting or folding of the side plates.



### Arterra/ArterraGrip

The Arterra rotary harrow side plates have a suspended attachment to the pan. They can therefore adjust automatically to different working depths. A separate wearing part in the lower part ensures that costs are kept down.



### EuroTill

The height of the stable side plates is easy to adjust, the spring-loaded fastening provides clean connections and safety even in rocky conditions.

## Depth adjustment



### Terramat

In the case of the Terramat L, the depth is controlled via a lateral holed screen with a number of different options.



### Arterra/ArterraGrip

In the case of Arterra implements, the working depth is set via a finely adjusted grid element. The markings simplify the precise setting to the right and left.



### EuroTill

In the case of the EuroTill MS, the working depth is continuously set with one spindle per part width. A hydraulic roller adjustment is optionally available for this purpose.

## Diamant tines

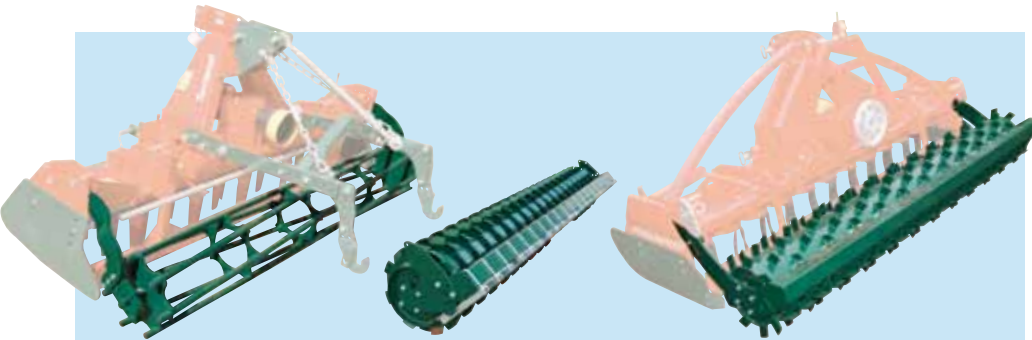


### Strength meets strength with VN Diamant wearing parts

As a high-end solution for soils which increase wear/for work in hard soils or soils which have not been pre-cultivated, the Arterra MS knife tines and the grip tines of the ArterraGrip rotary cultivator are also available with a hard metal facing. Small hard metal plates are applied to the actual part in a unique production process. It is characterised by the high level of strength, even of the basic material. These diamant wearing parts therefore guarantee a significantly increased service life, reduced expenditure on replacing parts and an overall reduction in costs due to wear. Due to the dimensional stability of the tines, the working quality of the entire machine also remains consistently high throughout the entire lifecycle of the parts. This is particularly the case for the outstanding mixing effect of the grip tines.



## Rollers



### **Tubular cage roller:**

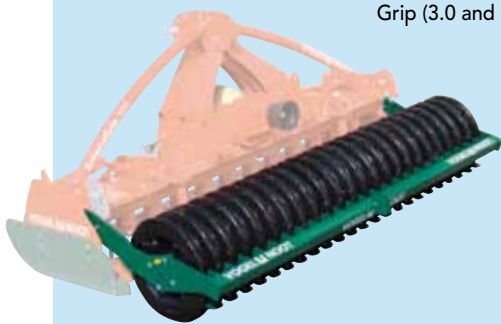
- 400 or 480 mm diameter
- Good crumbling on average soils
- Leaves an open soil structure
- Lightweight

### **Crumbler packer roller:**

- 500 mm diameter
- Excellent crumbling in heavy soils
- Deeper consolidation than with packer roller
- Excellent ground drive
- For Terramat and Arterra/ArterraGrip (3.0 and 4.0 m models)

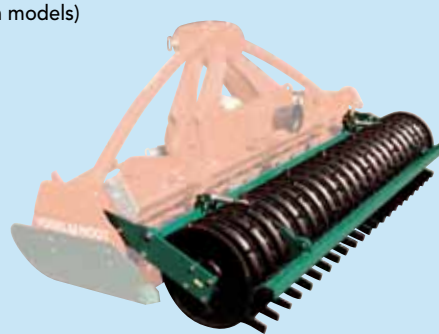
### **Packer roller:**

- 470 or 500 mm diameter
- Very good all-round features
- Particularly clog-resistant, thanks to scraper
- Tough in stony conditions
- Good ground drive



### **Rubber tapered ring roller:**

- 580 mm diameter
- Leaves a grooved surface
- Intensive reconsolidation in strips
- Ideal for combined sowing
- Only for Arterra/ArterraGrip



### **Cracker roller:**

- 550 mm diameter
- Grooved consolidation
- Leaves an optimum soil structure
- Blockage-free work
- Only for Arterra/ArterraGrip

## Accessories



### **Track loosener**

All Vogel & Noot rotary harrows are equipped with adjustable track looseners. This option loosens the tramlines behind the tractor wheels and avoids irregular soil compaction.



### **Track indicator**

The Terramat and Arterra rotary harrows can also be fitted with track indicators for use with the seed drill. These are operated by a double-acting hydraulic system and fold vertically.

### **Lighting**

The optioning lighting is fixed to the machine.

## Seed drill mounting



### **A) Hydraulic hitch:**

A hydraulically operated hitch is available for combination with 3-point mounted seed drills (not for EuroTill MS). Robustly built, the lifting geometry shifts the weight of the seed drill forward to the optimum position and therefore reduces the entire lifting force requirement. High lifting power through 2 cylinders.

**NEW: Hydraulic hitch also for EuroTill MS**

**B)** On request, also with stroke limitation via a mechanically operated switch-off valve.

**C) Mechanical hitch:** (only for Terramat implements)

The mechanical hitch is a cost-effective alternative to the hydraulic attachment parts. The simple height adjustment guarantees an optimum working position of the seed drill

### **D) Mounting three-point linkage:**

The mounting seed drills can be mounted and dismantled particularly quickly and easily using the quick-release three-point linkage. The standardised three-point linkage is optimally adjusted to the three-point tower of the rotary harrow and therefore also promotes the lifting force requirement.



# Rotary harrows – technical data



		Terramat							
Key data		L 100	L 120	L 150	L 165	L 185	L 200	L 225	L 250
Working width	cm	94	123	145	166	188	209	230	252
External width	cm	107	137	158	180	201	223	244	265
Max. permitted kW/hp		44/60	44/60	59/80	59/80	59/80	59/80	73/100	73/100
Number of rotors		4	5	6	7	8	9	10	11
Tine dimensions	mm	300x12	300x12	300x12	300x12	300x12	300x12	300x12	300x12
Drive speed	rpm	540	540	540	540	540	540	540	540 <sup>1)</sup>
Rotor speed	Series	305	305	305	305	305	305	290	290
	Optional	-	-	-	-	-	-	-	340 <sup>2)</sup> or 350 <sup>3)</sup>
Weights									
with cage roller (Ø 400)	kg	354	406	495	565	627	667	740	803
with cage roller (Ø 480)	kg	-	-	-	-	-	-	-	-
with packer roller (Ø 470)	kg	375	434	533	607	676	720	800	870
with packer roller (Ø 500)	kg	-	-	-	-	-	-	-	-
with cracker roller (Ø 550)	kg	-	-	-	-	-	-	-	-
with rubber tapered ring roller (Ø 580)	kg	-	-	-	-	-	-	-	-
Equipment									
Attachment category	Series	I / II	I / II	I / II	II	II	II	II	II
	Optional	-	-	-	-	-	-	-	-
Change-speed gearbox		-	-	-	-	-	-	-	O
PTO shaft drive		S	S	S	S	S	S	S	S
Drive shaft	with slip clutch	S	S	S	S	S	S	S	S
Drive shaft	with pin safety clutch	-	-	-	-	-	-	-	O
Quick-release tines		-	-	-	-	-	-	-	-
Front levelling bar		-	-	-	-	-	O	O	O
Rear levelling bar		S	S	S	S	S	S	S	S
Hydraulic roller adjustment		-	-	-	-	-	-	-	-
Hydraulic hitch		-	-	-	-	-	-	-	O
Semi-mounting three-point linkage		-	-	-	-	-	-	-	O
Track loosener		O	O	O	O	O	O	O	O
Lighting		O	O	O	O	O	O	O	O

1) With optional change-speed gearbox also 1000 rpm.

2) With optional change-speed gearbox for a PTO shaft speed of 540 rpm

3) With optional change-speed gearbox for a PTO shaft speed of 1000 rpm

4) Also possible with a PTO shaft speed of 540 and 750 rpm when the standard change gears are replaced

5) For a PTO shaft speed of 540 rpm and when the standard change gears are replaced

6) For a PTO shaft speed of 750 rpm and when the standard change gears are replaced

7) With optional mounting lugs

8) With optional change gears (Z13 / Z20)

9) With optional change gears (Z14 / Z19)

10) Cage roller diameter 450 mm

11) On lateral rotary harrow pans



				Arterra		Arterra		EuroTill Hydro		
L 275	L 300	L 350	L 400	MS 300	MS 400	Grip 300	Grip 400	MS 400	MS 500	MS 600
273	292	338	402	300	400	300	400	400	500	600
287	299	350	416							
73/100	88/120	88/120	88/120	132/180	132/180	170/230	170/230	132/180	161/220	191/260
12	13	16	18	12	16	12	16	16	20	24
300x12	300x12	300x12	300x12	340x15	340x15	330x15	330x15	300x15	300x15	300x15
540 <sup>1)</sup>	540 <sup>1)</sup>	540 <sup>1)</sup>	540 <sup>1)</sup>	1000 <sup>4)</sup>	1000 <sup>4)</sup>	1000 <sup>4)</sup>	1000 <sup>4)</sup>	1000	1000	1000
290	290	290	290	340	340	340	340	310	310	310
340 <sup>2)</sup> or 350 <sup>3)</sup>	340 <sup>2)</sup> or 350 <sup>3)</sup>	340 <sup>2)</sup> or 350 <sup>3)</sup>	340 <sup>2)</sup> or 350 <sup>3)</sup>	283 <sup>5)</sup> or 255 <sup>6)</sup>	283 <sup>5)</sup> or 255 <sup>6)</sup>	283 <sup>5)</sup> or 255 <sup>6)</sup>	283 <sup>5)</sup> or 255 <sup>6)</sup>	352 <sup>8)</sup> or 399 <sup>9)</sup>	352 <sup>8)</sup> or 399 <sup>9)</sup>	352 <sup>8)</sup> or 399 <sup>9)</sup>
887	1090	1287	1413	1275	-	1390	-	-	-	-
-	-	-	-	1325	1733	1440	1848	2320 <sup>10)</sup>	2660 <sup>10)</sup>	3000 <sup>10)</sup>
960	1170	1380	1520	-	-	-	-	-	-	-
-	-	-	-	1415	1823	1530	1973	2710	3050	3390
-	-	-	-	1580	1972	1695	2125	-	-	-
-	-	-	-	1585	2042	1700	2192	-	-	-
II	II	II	II	II	II	II	II	III	III	III
-	-	-	-	II or III <sup>7)</sup>	II or III <sup>7)</sup>	II or III <sup>7)</sup>	II or III <sup>7)</sup>	-	-	-
O	O	O	O	S	S	S	S	S <sup>11)</sup>	S <sup>11)</sup>	S <sup>11)</sup>
S	S	S	S	S	S	S	S	O	O	O
S	S	S	S	-	-	-	-	-	-	-
O	O	O	O	S	S	S	S	S	S	S
-	-	-	-	O	O	S	S	O	O	O
O	O	O	O	-	-	-	-	-	-	-
S	S	S	S	S	S	S	S	S	S	S
-	-	-	-	-	-	-	-	O	O	O
O	O	O	O	O	O	O	O	-	-	-
O	O	O	O	O	O	O	O	-	-	-
O	O	O	O	O	O	O	O	O	O	O
O	O	O	O	O	O	O	O	S	S	S

S = standard equipment

O = optional additional equipment

- = not available

The illustrations and data given here are not binding and may be subject to change without notice.



## References

### Veronika Wimmer

vulgo Bichler  
Haidershofen, Austria  
**Farm size: 75 ha**



Ms Wimmer operates her 75 ha farm on a full-time basis. The main activities are dairy farming and crop cultivation, including in particular fodder crops, maize and cereals.

A mixed soil cultivation method is used.

"I use the VN Arterra rotary harrow together with a John Deere 6420 (120 HP) tractor. With its exceptionally smooth operation and neat work, the compact Arterra rotary harrow gives excellent results when used for mulching prior to maize cultivation in the spring. I also still use a VN ©plus M950 4-furrow plough with WXL430 bodies, which again meets very high standards."

### Georg Wallner

Wallner farm  
Treffelstein, Germany  
**Farm size: 85 ha**



Mr Wallner operates an 85 ha dairy farm. He mainly grows cereals and fodder crops, and cultivates his soils using a plough and mulch. This dedicated farmer has been using a Vogel & Noot ArterraGrip 300 rotary harrow in combination with a pneumatic seed drill since 2007.

"Our soil is very stony. We therefore needed a really robust and stable soil cultivation machine. The ArterraGrip rotary harrow is exactly that and was therefore the best choice for us. It is also very compact and very easy to maintain."

### Antonio Díaz Carmona

Alameda de la Sagra  
Toledo, Spain



I have been a Vogel & Noot customer for the last six years and purchased my Arterra MS 400 four years ago.

On my farm, we cultivate around 300 ha of maize, of which 100 ha are irrigated. I mostly use the Arterra rotary harrow for the irrigated fields.

The quality of the work produced by this rotary harrow is exceptional and the amount of time I save in comparison to conventional methods (where I had to cover the field two to three times) is a major advantage for me.

The Arterra is a "3 in 1" machine: the very long and robust knife tines ensure the perfect breaking up and crumbling of the soil, the rear levelling bar evens out the surface and finally the packer rollers finish off the seedbed to perfection.



## Mr Vandler Hubert

et Aimé  
GAEC du Pratelle  
Langatte, France



Mr and Mrs Vandler run an arable (particularly maize cultivation) and dairy farm. The farm's soil is loamy and limy.

Mr Vandler: "In 2009 we decided to buy a rotary harrow. In the end we opted for the Vogel & Noot ArterraGrip 400. The most impressive feature of the Vogel & Noot rotary harrow is the excellent mixing of crop remains. The ArterraGrip also works extremely well on uncultivated soils and the work is very neat. This machine has proven to be the best choice for us when it comes to preparing the seedbed for sowing."

## Cernel Slavko

Cernel farm  
Sv. Jurij ob S'cavnici, Slovenia  
**Farm size: 40 ha**



Mr Cernel owns 40 ha of arable land and has been cultivating the soil with a Vogel & Noot Arterra MS 300 since August 2009. He uses the rotary harrow in combination with the Vogel & Noot Master-Drill A 300 seed drill. Mr Cernel also owns a Vogel & Noot Grubber TerraFlex with a mechanical seed drill.

"The biggest advantage for me is that by combining the rotary harrow and seed drill, I only have to cover the field once in order to cultivate the soil and sow the seeds. The design of the Vogel & Noot machines is also impressively robust and high quality, which makes it easy to work with heavy soils."

## Bálint Végi

Kossuth Mg Zrt.  
Solt, Hungary  
**Farm size: 1300 ha**



Mr Bálint Végi is the technical manager for the 1300 ha Kossuth mg Zrt. farm. The farm primarily cultivates crops and vegetables. The farm uses a number of Vogel & Noot machines, including a EuroTill 600 rotary harrow, three ploughs and a compact-disc harrow.

"We mostly use the EuroTill 600 rotary harrow in the spring to prepare the seedbed for the vegetables. The rotary harrow is very robust and the wear parts have a long lifespan. The 6 metre working width also allows us to cover a large area. What's more, the rotary harrow is impressively easy to use and transport."



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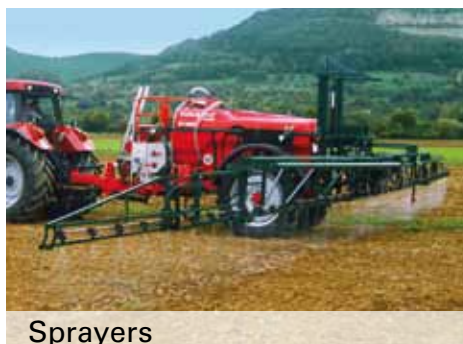
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