



PRECISION DISTRIBUTION TECHNOLOGY

Vogelsang precision distributors
for accurate liquid manure spreading

VOGELSANG – LEADING IN TECHNOLOGY





YOU CAN RELY ON IT

**Quality, experience and
expertise guarantee
future-proof technology**

As a pioneer in agricultural technology, Vogelsang remains one of the leading mechanical engineering companies in this sector. Farmers and contractors worldwide rely on the innovative design and high quality standards of our spreading technology.

Based on our diverse experience and continuous development work, we build highly functional components and entire systems that facilitate reliable and efficient distribution of the nutrients.

Both the production and material quality of our precision distributors and optional equipment are testimony to our responsible actions for the benefit of our customers. Their adaptability and versatility boost yields in addition to fostering sustainability, and allow agricultural operations to react effectively to current circumstances or legal requirements.

THE HEART OF ALL SPREADING SYSTEMS

**Precision distributors
for efficient work**

Liquid manure – a valuable material

Liquid manure and digestates are reusable materials. They are a natural source of plant nutrients that can be precisely spread onto the soil, meaning the need for inorganic fertilizers is greatly reduced. This technology for targeted and precise spreading of liquid manure on arable land or growing crops is not only state of the art, it also prevents the loss of nutrients and is better for the environment than splash spreading systems.

Highest precision

The main requirement for the optimal use of liquid manure is even spreading. Vogelsang precision distributors cut and distribute liquid manure with extreme precision and an excellent variation coefficient of less than 5 percent. This makes the spreading process reliable and safe.

Compatible and universal

The versatile Vogelsang precision distributors can be used in all types of spreading systems, including dribble bar and trailing shoe systems, injection systems, cultivators and short disk harrows.

Overview of Vogelsang distribution technology

Precision distributors



DosiMat DMX

- Maximum precision
- Flexible spreading capacity
- Constant high distribution precision irrespective of the flow rate
- Easy to maintain



ExaCut ECL

- Self-sharpening cutting blades
- Compact housing
- Very smooth running
- Heavy material separator



ExaCut ECQ

- Fast, simple and straightforward maintenance
- Longer service life
- Better distribution precision due to flow optimization
- Low power requirements
- Large cross-sections for less pressure loss
- Resistant to dry running

Additional equipment



SynCult

- Complete set for equipping soil cultivation units for efficient liquid manure spreading
- Quick-and-easy installation



Comfort Flow Control

- System for deactivating individually defined hose groups
- Suitable for part-width section cut-offs and tramline switching

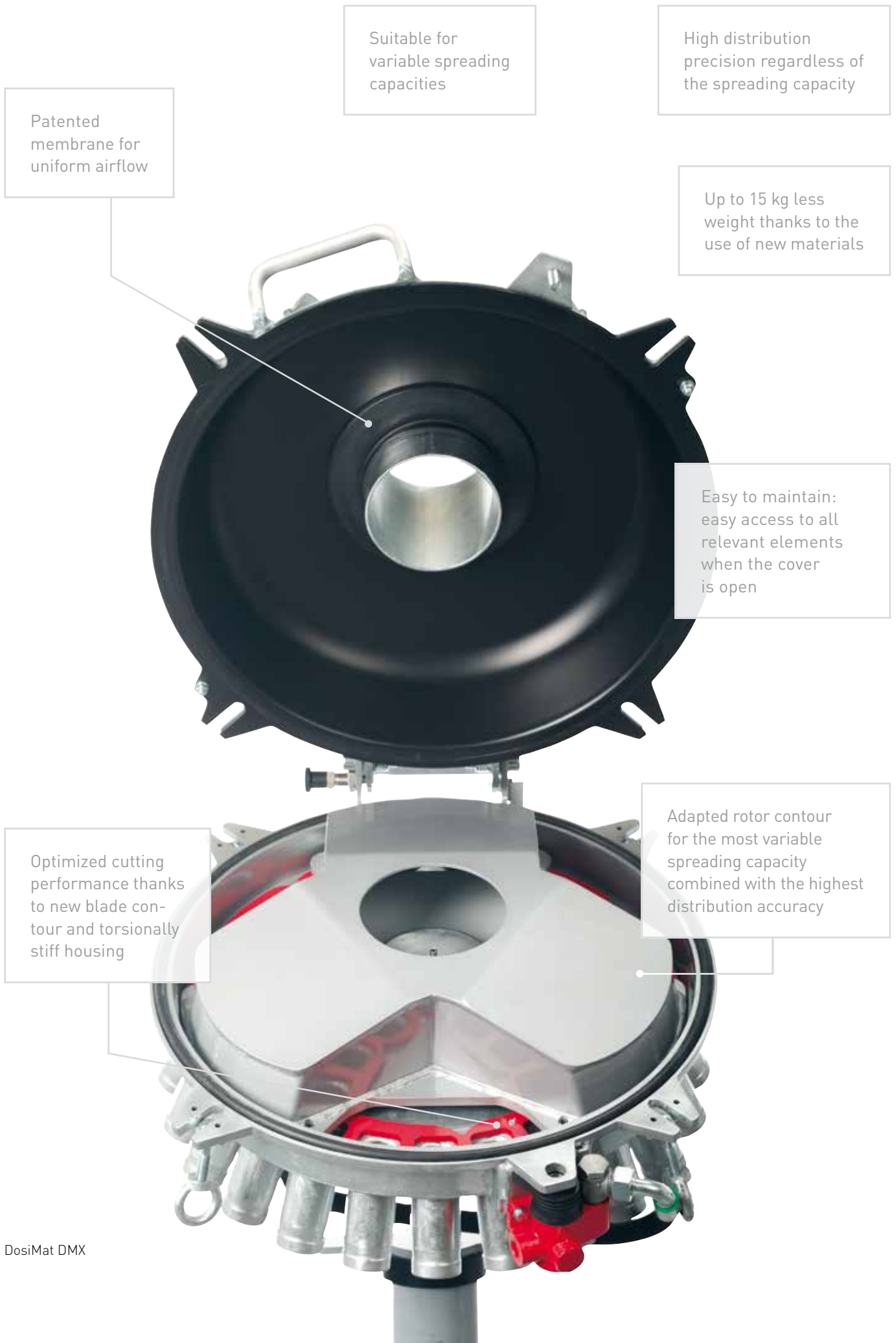
FLEXIBLE AND PRECISE SPREADING CAPACITY

The DosiMat DMX Precision Distributor

With spreading technology, users not only have to consider the economic efficiency of a machine, but are now also confronted with the stricter legal requirements of the German fertilizer regulations. The new design of the DosiMat DMX precision distributor allows both. There is also a flow-optimized rotor, which provides outstanding distribution precision. Irrespective of whether the DosiMat DMX is distributing small or large spreading capacities, the precision distributor can be used flexibly without reconstruction measures, and shreds and distributes the liquid manure precisely at all times. The DosiMat DMX's easy-to-service design proves just as practical. There are fewer hex-head screw plugs, the housing can be opened quickly and the rotor is easier to access.







Suitable for variable spreading capacities

High distribution precision regardless of the spreading capacity

Patented membrane for uniform airflow

Up to 15 kg less weight thanks to the use of new materials

Easy to maintain: easy access to all relevant elements when the cover is open

Optimized cutting performance thanks to new blade contour and torsionally stiff housing

Adapted rotor contour for the most variable spreading capacity combined with the highest distribution accuracy

PERMISSION TO PUMP UP THE VOLUME

Perfectly built for more flexibility
at a steady performance

Advantages of the DosiMat DMX

Plastic housing cover

- Dimensionally stable and slightly curved for more air volume and improved distribution precision
- Reduces the weight of the DosiMat DMX by up to 15 kg

Ventilation

- Automatic regulation of the airflow thanks to a patented membrane
- Ensures uniform flow of the liquid manure into the discharge hoses

Bar or star rotors

- Processing of various spreading capacities without reconstruction measures
- Higher maximum spreading capacity compared with similar models
- Constant high distribution precision irrespective of the flow rate

Cutting blade

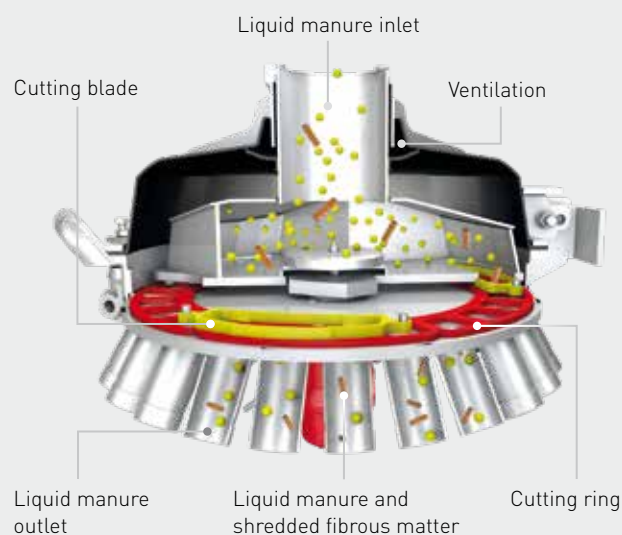
- Reliable shredding and homogenization of the liquid manure thanks to optimized cutting contours

Sealing package

- Prevents mixing of hydraulic oil and the medium
- Simple identification of leaks via leakage checks

Ease of service

- Easy-to-service design for simple maintenance of all relevant elements



(Only cutting blades shown in yellow, rotor removed)

SPECIFICATIONS

Number of outlets	8 – 60
Hose diameter	DN 40 / DN 50 / DN 60

COMPACT HOUSING WITH MAXIMUM DISTRIBUTION ACCURACY

**ExaCut for optimum cutting
results with maximum reliability**

The ExaCut is the compact precision distributor by Vogelsang. Two different models of this distributor are available:

The **ExaCut ECL** distributes the liquid manure centrally with the rotor technology. The high speed of the rotor distributes the liquid manure to the individual Outlets. ExaCut ECL optimizes variety and a flexible range of applications.

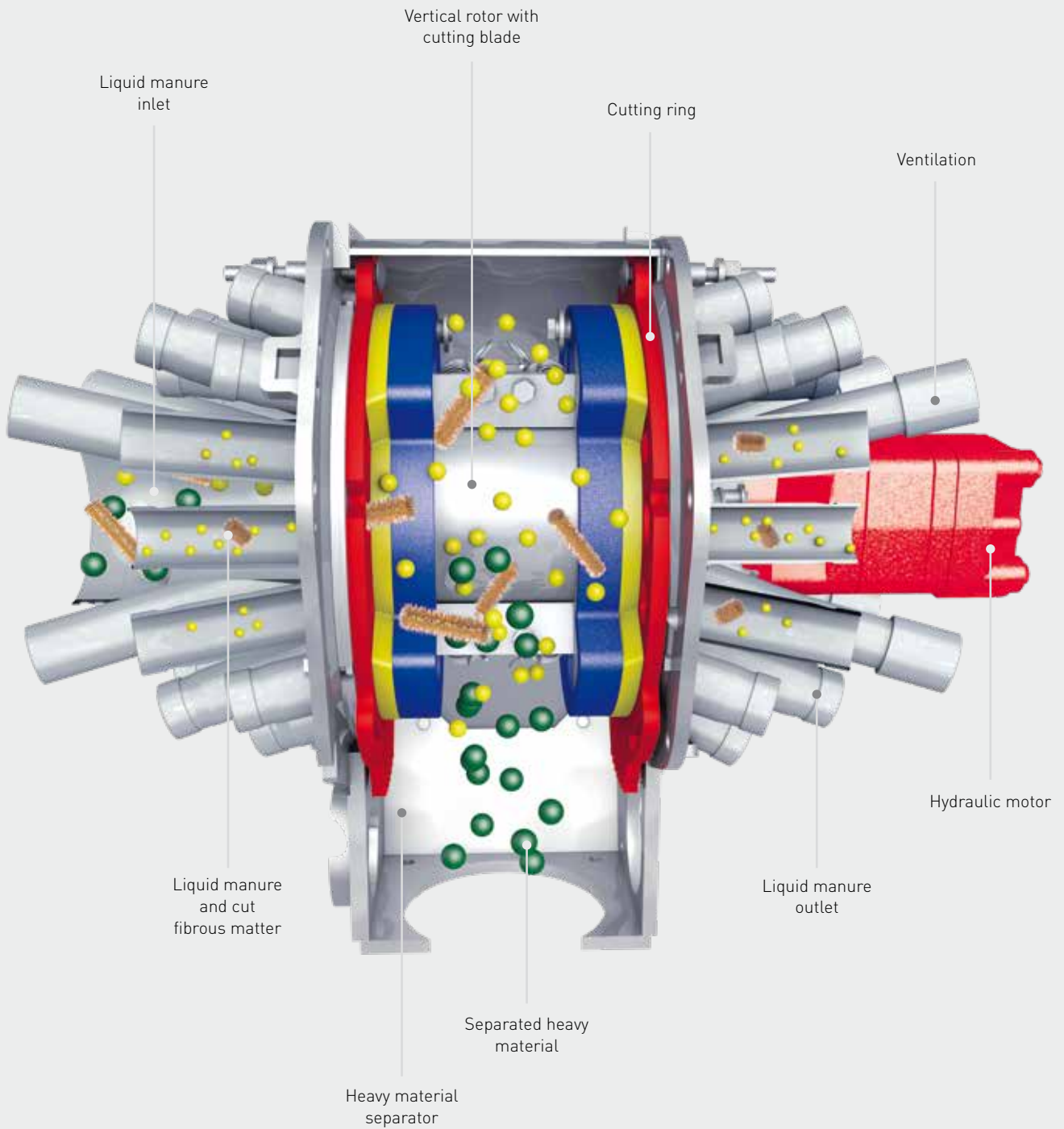
The **ExaCut ECQ**, a further development of the ECL, also works using rotor technology. It also has new features that put it in the top spot in the market: Unbeatable distribution accuracy and maintainability accompanied by an increase in service life and lower power requirements.



V/OGELSANG



Internal view of the ExaCut ECL



COMPACT AND RELIABLE

The ExaCut ECL for efficient cutting and distribution

Distribution technology with rotors

The Vogelsang ExaCut ECL, equipped with a vertical rotor with cutting blades, cuts and distributes precisely in a single process. Thanks to the compact design, this precision distributor can be used as a central or decentralized distributor in the booms of the spreading system. That means working widths of up to 36 meters and systems with up to 120 outlets are now possible. Also, all ExaCut ECL units are equipped with a heavy material separator, to make removing stones or metal parts easy.

Inlet adapter

Many variants are available for the liquid manure inlet on the ExaCut ECL. This allows the ExaCut to be customized to the spreading machine.

ExaCut ECL versatility

ExaCut ECL is available in numerous configurations:

- 14 models with 18 to 60 outlets
- Hose diameters from DN 40 to DN 60, depending on the model
- Cutting rings and rotors are configured according to the application

SPECIFICATIONS

Number of outlets	18/20/24/30/40/48
Hose diameter	DN 40/DN 50/DN 60



ExaCut Vario:

The ExaCut ECL with the adjustable cutting ring

In the special "Vario" version of the ExaCut ECL, a setscrew can be used to adjust the size of the openings in the cutting ring to different liquid manure types and quantities simply and easily.

Unnecessary cutting ring changes are avoided. This saves time and allows different types and quantities of liquid manure to be spread by a single system.

The ExaCut Vario is available with 30 to 60 outlets.

Advantages of the ExaCut ECL

- Self-sharpening cutting blades
- Compact housing
- Very smooth running
- Heavy material separator
- Wide variety – flexible use
- Special sealing package protects the hydraulic circuit against the liquid manure

PRECISION DISTRIBUTOR ExaCut ECL

Optimal cutting results,
maximum reliability

PERFECTLY

Ventilation

Performance-oriented air outlet for high distribution accuracy

Self-sharpening cutting unit

Consistent level of sharpness over the entire life cycle due to easy change of direction

Two-piece cutting elements

Minimal material usage thanks to modular design for maximum cost-effectiveness



Accurate distribution

(according to DLG test criteria)

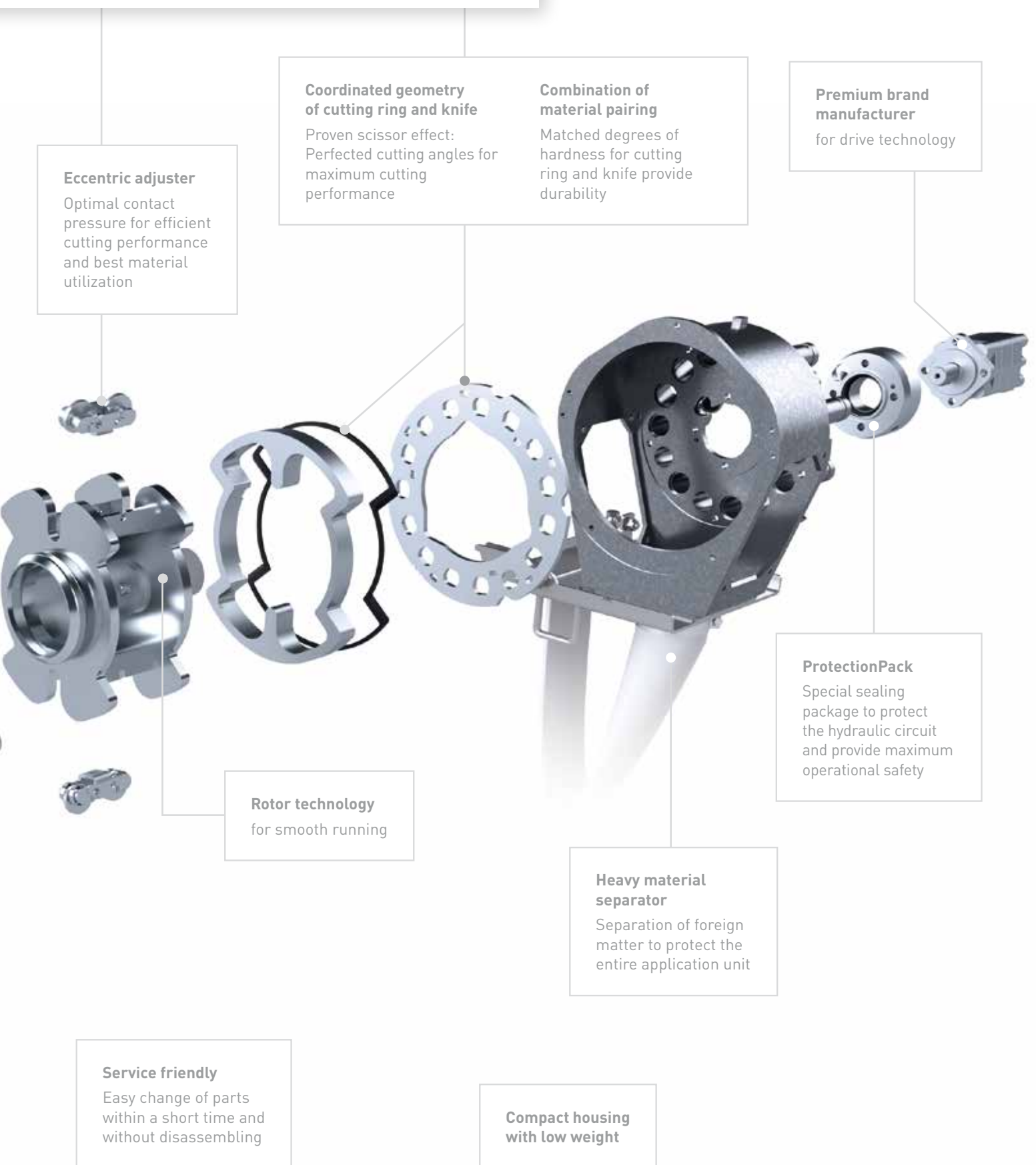
Optimal distribution accuracy for even supply of nutrient

Maximum flexibility

Universal application customization: Adjustment of the throughput volume, outlet numbers, hose diameter and inlet variants

COORDINATED CUTTING UNIT

The core piece of the ExaCut



Eccentric adjuster

Optimal contact pressure for efficient cutting performance and best material utilization

Coordinated geometry of cutting ring and knife

Proven scissor effect: Perfected cutting angles for maximum cutting performance

Combination of material pairing

Matched degrees of hardness for cutting ring and knife provide durability

Premium brand manufacturer

for drive technology

Rotor technology

for smooth running

ProtectionPack

Special sealing package to protect the hydraulic circuit and provide maximum operational safety

Heavy material separator

Separation of foreign matter to protect the entire application unit

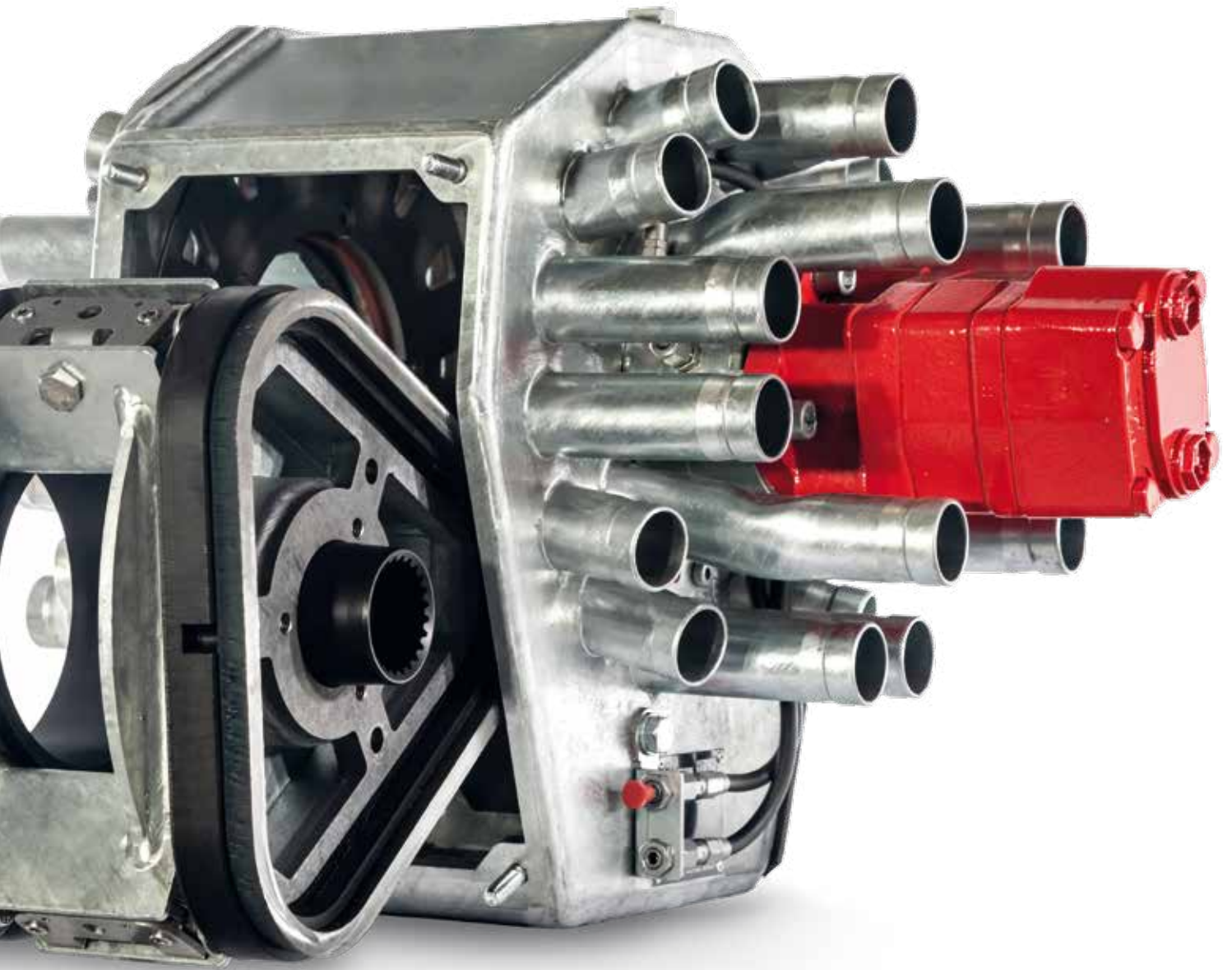
Service friendly

Easy change of parts within a short time and without disassembling

Compact housing with low weight

MORE STAYING POWER, LESS WORK

Expect the best:
The new ExaCut ECQ distributor
from Vogelsang



Just like the stock market, agriculture figures are important. The new ExaCut ECQ is shaking up the distributor market – where growth has been focused exclusively on precision with a totally different kind of innovation. It uses 50% less power and can be used for 50% longer than comparable distributors. The totally revised design also reduces the time required for maintenance work. Thanks to the ExaCut ECQ's completely new service concept, wear parts are much more easily accessible – even the eccentric adjuster can be clamped without any maintenance at all.

Maintenance is faster, easier and less complicated than ever before!

As with all Vogelsang machines, the design of the distributor pays considerable attention to ensuring the easiest possible maintenance. A new feature as part of the ExaCut ECQ QuickService principle is the large maintenance port. This provides direct access to all relevant internal parts. Neither the distributor, as a whole, nor the cover needs to be dismantled – not even to clamp the eccentric adjuster.

Service life has been extended by up to 50%

The optimized ExaCut rotor technology with tri-lobe design reduces the speed and the internal pressure in the distributor, reducing the strain on the cutting blades. This has enabled the service life to be extended by 50%, while simultaneously improving cutting performance and average distribution.

The nutrients are distributed even more precisely

Flow simulations and tests led to a modification of the rotor and housing. Larger cross-sections and new flow guide plates calm the flow and ensure unprecedented distribution precision.

Power requirements reduced by up to 50%

The new rotor design and reduced speeds naturally use less energy and oil. A smaller contact surface results in less friction resistance and reduces the hydraulic pressure. The new design also has a positive impact on the pump's power consumption. The more open design with larger cross-sections creates an easier liquid manure inflow and thus prevents unnecessary pressure loss.

Advantages of the ExaCut ECQ

Faster, easier and less complicated maintenance than ever before!

Vogelsang's well-known QuickService principle:

- Easy maintenance of the distributor thanks to removal of the cutting blade and rotor unit through the generously dimensioned maintenance port
- No need to dismount the precision distributor or the cover
- Eccentric adjuster clamping without disassembly or special tools

Nutrients are distributed even more precisely

Better distribution precision due to flow optimization:

- Rotor and housing optimized based on simulation and tests
- Flow guide plates for better distribution precision
- Flow calming due to generous cross-sections

Service life extended by up to 100%

Optimized ExaCut rotor technology:

- Tri-lobe rotor design allows reduced speed with the same cutting performance and spreading swath
- Longer cutter service life
- Reduced effect of the internal distributor pressure on blade wear: 50% less force due to internal pressure

Resistant to dry running

- low frictional heat-up even with dry running
- very little wear

Power requirements reduced by up to 50%

New technology saves fuel and oil:

- Lower speeds result in reduced oil requirement without impairing cutting performance
- Reduced areas exposed to internal pressure reduce frictional resistance and thus hydraulic pressure

Large cross-sections for less pressure loss

Open design improves pump performance:

- Wider inlets and orifice diameters reduce pressure loss
- The pressure at the feeder pump drops
- Power consumption and wear on the pump are reduced

SPECIFICATIONS

Number of outlets	24/30/36/42/48
Hose diameter	DN 40, DN 50
Side inlet diameter	DN 150/DN 125/DN 100
Inlet positioning	Side/top

THE ExaCut ECQ PRECISION DISTRIBUTOR

Exactly what a precision distributor should look like

Number 1 for maintenance

Simple and completed in an unparalleled time of up to 20 minutes, without disassembly of the precision distributor

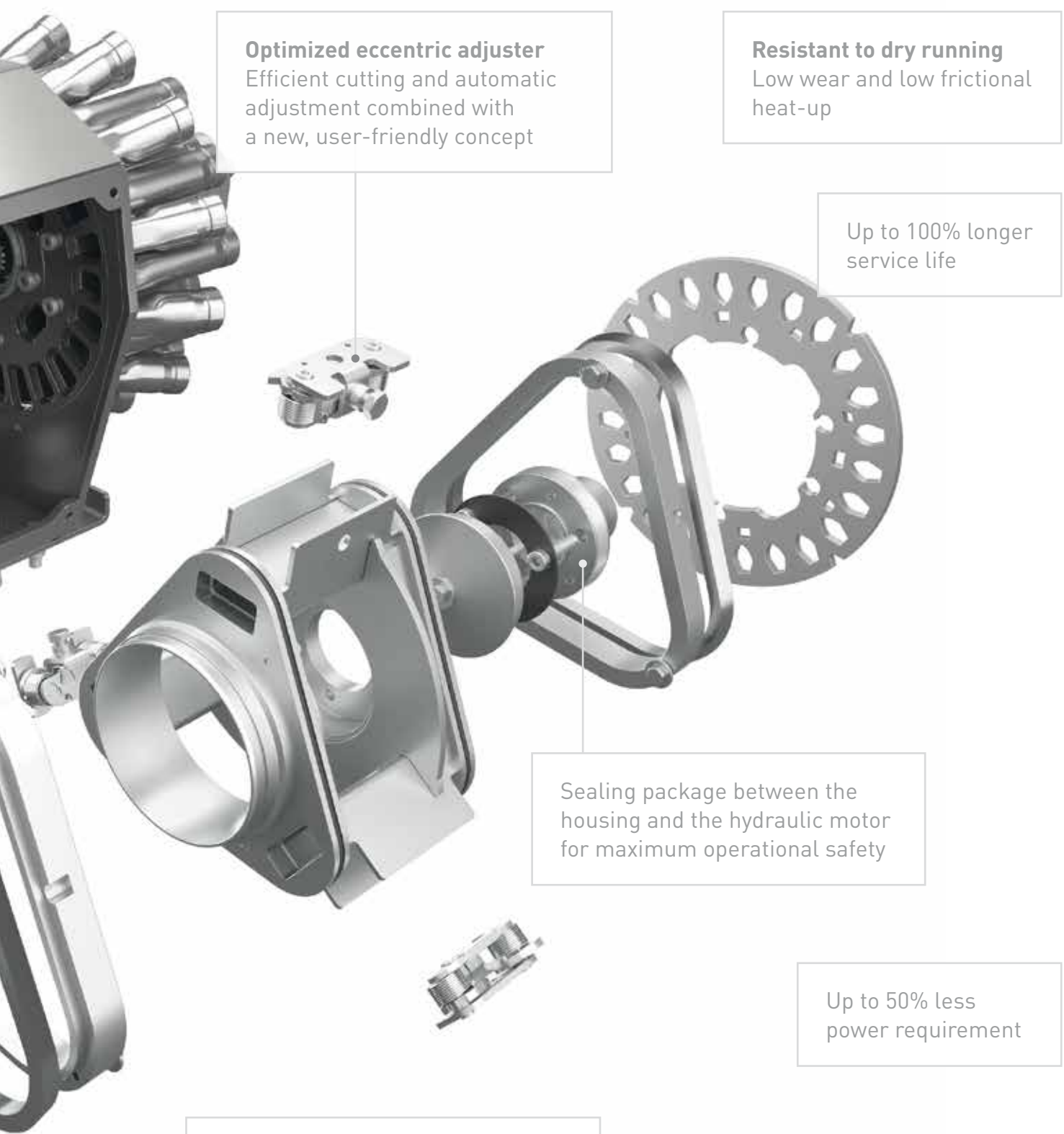
Self-sharpening cutter

Rotation direction changes maintain a constant degree of sharpness over the entire lifetime

Generous cross sections for maximum effectiveness

Reduced pressure losses, reduced power consumption for the components in the liquid manure system, spreading capacity increased (by almost 30%)





Optimized eccentric adjuster

Efficient cutting and automatic adjustment combined with a new, user-friendly concept

Resistant to dry running

Low wear and low frictional heat-up

Up to 100% longer service life

Sealing package between the housing and the hydraulic motor for maximum operational safety

Up to 50% less power requirement

Number 1 in distribution precision

Thanks to a coefficient of variation of 1.4%*

* DLG test report 7030



VOGELSANG 15 M BLACKBIRD WITH EXACUT ECQ

- ✓ functionality and quality of work
- ✓ handling, operation and maintenance

DLG Test Report 7030

DIRECT LIQUID MANURE INCORPORATION FOR EFFICIENT NUTRIENT USE

**The SynCult retrofitting set
for tillage equipment**

Incorporating liquid manure and digestates directly into the soil using tillage equipment saves you time and money and reduces the number of crossings. Direct liquid manure incorporation prevents nutrient losses. Our SynCult is an upgrade kit consisting of an adapter frame, a liquid manure precision distributor, discharge hoses and appropriate brackets. The fastening points for the precision distributor and the liquid manure outlet are predetermined, guaranteeing good work results and a long lifetime. As the SynCult was developed in partnership with tillage equipment manufacturers, the guarantee on the tillage equipment remains fully valid even after installation of the SynCult.

Current manufacturing partners for SynCult are Amazone, Horsch and Köckerling.

Advantages of the SynCult

- Direct incorporation of liquid manure for optimum use of nutrients
- Hassle-free compliance with training periods
- Combines several work steps in one to save on time and costs
- Ingenious upgrade concept, including assembly instructions
- Quick and easy installation
- Full guarantee on the tillage unit

Equipment and options

- Working widths of 4 – 12 meters (*depending on the manufacturer)
- DosiMat DMX precision distributor for working widths of up to 7 meters, ExaCut precision distributor for working widths of 8 meters and above
- The distributor is fasted to the tillage unit using a specially designed, hot-dip galvanized adapter
- Hose diameter DN50



Manufacturer partner for SynCult

 **AMAZONE**

HORSCH
Landwirtschaft aus Leidenschaft

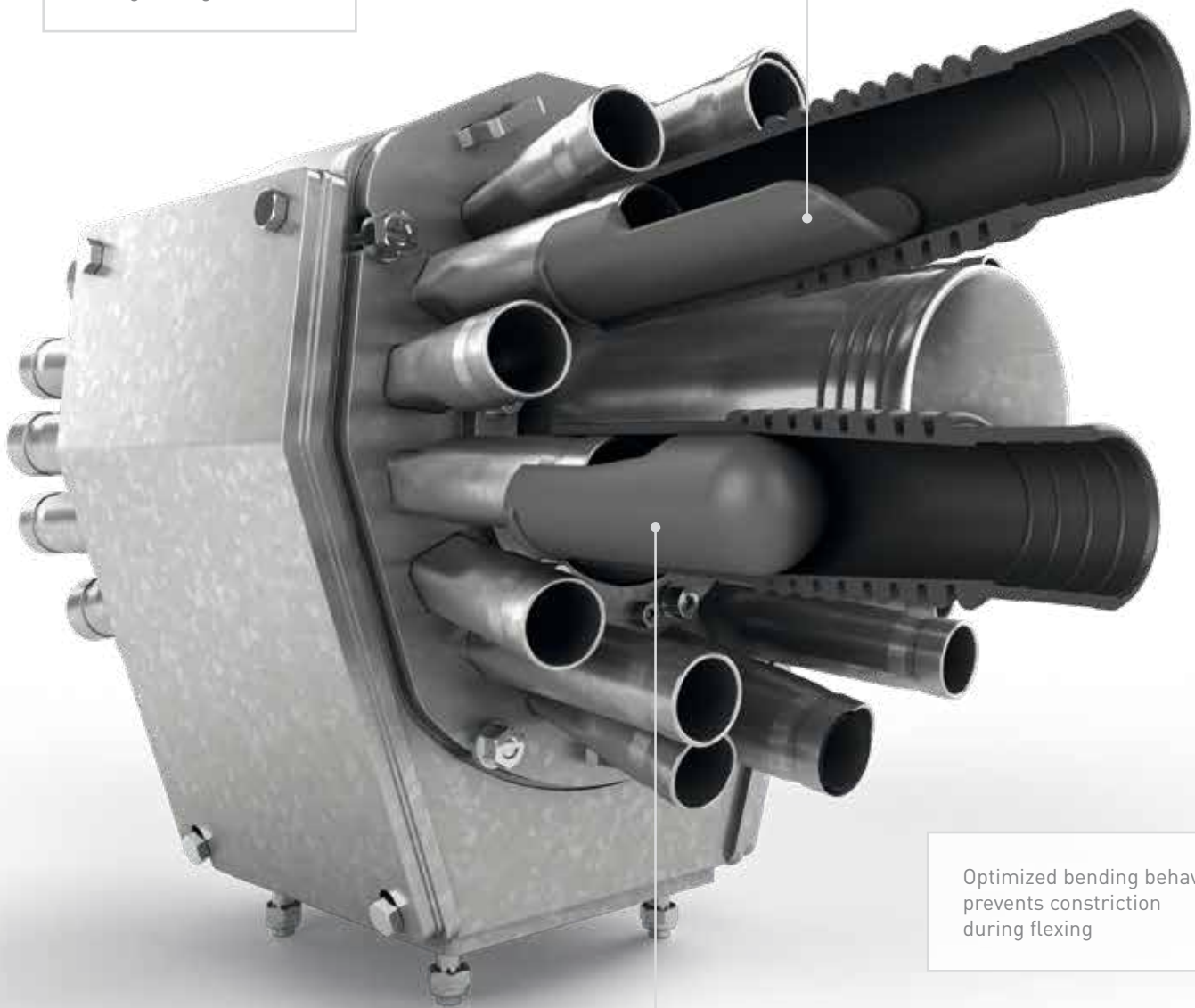
 **KÖCKERLING**



High weather resistance
thanks to the
EPDM rubber used

Fast opening and closing
through a larger air duct

CFC deactivated:
Free flow without edges
on which fibrous matter
could accumulate



Optimized bending behavior
prevents constriction
during flexing

CFC activated:
The outlet is
securely closed.

Very simple assembly



GREATER CONVENIENCE, MORE OPTIONS

Comfort Flow Control for optimal flow control and use of specific hose groups

Comfort Flow Control (CFC®)

To spread liquid manure individually via specific sections of a dribble bar linkage, an easy-to-operate flow control system is required. The Vogelsang Comfort Flow Control (CFC) offers a surprisingly simple solution for part-width section cut-offs, tramline switching or switching off selected hose groups on the spreading system.

Practical, flexible and precise

The way the patented CFC works is uniquely simple and clever: It primarily consists of a type of balloon and small compressed-air line. It is correspondingly economical and robust. CFC is installed in the hose outlets of the spreader device immediately downstream of the respective distributor. Then each individual hose or the individual hose groups can be activated and deactivated electro-pneumatically from the cab at the touch of a button.

Switching off the tramline



Advantages of the Comfort Flow Control

- Easy to install
- Quick operation by pressing a button in the cab
- Reliable hose switch-off for partial width sections, tramlines, switch-off of individual groups
- Hose switch-off customized to individual requirements
- Economical spreading for all field shapes
- Can be retrofitted to any system

ACCURATELY COMBINED FOR COMPLETE OPERATION

Efficient and effective spreading technology from Vogelsang

Both the treatment of liquid manure and spreading technology makes the precision distributor ideal for successful cultivation. Vogelsang offers intelligently designed dribble bar systems with different working widths for every type of vehicle, in order to distribute valuable liquid manure in an economic and environmentally friendly way. The dribble bar and trailing shoe system both meet the current stricter fertilizer regulations for close to the soil, strip spreading of organic fertilizer. Depending on the area of application and soil characteristics, the use of an XTill from Vogelsang is recommended. Work processes such as plowing, tilling or seed bed conditioning can easily be combined with liquid manure incorporation, in particular for row crops.

Dribble bar systems for tankers



SwingUp

- Working widths from 7.5 to 18 m



SwingMax

- Working widths from 21 to 33 m



SwingMax36

- Working width 36 m

Dribble bar systems for self-propelled vehicles



Compax

- Working widths from 12 to 18 m



BackPac

- Working widths from 21 to 30 m

Trailing shoe systems for tankers



SwingUp Slide

- Working widths from 12 to 18 m



SwingMax Slide

- Working widths from 21 to 30 m



BlackBird®

- Working widths from 12 to 18 m

Strip tillage technology



XTill® VarioCrop

- Variable adjustable for all row crops

WHEN IT COMES TO SERVICE, WE LEAVE NOTHING TO CHANCE

Comprehensive services for smooth operation and a long lifetime

Support and supply from A to Z

Because we are aware that close customer proximity is essential for our mutual success, we design our services to best meet your needs. In Germany and in countries where we have subsidiaries, Vogelsang service centers and contractual partners generate an active dialog with our customers and provide reliable support.

This means you always get the precise support you need in every phase of our partnership. Our highly qualified staff make it possible – experts such as consultants and technicians who know your Vogelsang machines inside and out.



Since its establishment in 1929, Vogelsang has become an internationally recognized mechanical engineering company with numerous branches, sales centers and subsidiaries.



We think ahead

Thinking ahead in your best interest begins with our extensive and detailed product documentation. Spare parts are available within a short time due to our high degree of vertical integration in production. In addition, you will always find an authorized service partner in your area who can help with repairs and wear part replacement. The Vogelsang ServicePack completes the offer. Whether you need start-up, on-site training, training at the Vogelsang facility, or full service support with a maintenance contract and a wear parts service package – we offer a support program tailored specifically to your needs.

What we offer

We provide solutions in the following sectors:
AGRICULTURAL TECHNOLOGY, BIOGAS,
INDUSTRY, TRANSPORTATION, WASTEWATER



Our broad range of products and services

- Consulting and service
- Data management and control technology
- Disintegration technology
- Individually tailored solutions for special applications
- Pumps and pump systems
- Solid matter feeders
- Solids reduction, separators and mixers
- Spreading technology
- Supply, disposal and cleaning

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