

EFFICIENCY IN USE

MDS – THE COMPACT ALL-ROUNDER

MDS/UKS



STRONG TECHNOLOGY WITHIN A SMALL SPACE – MDS AT A GLANCE

New

SMART ELECTRONICS

ISOBUS or QUANTRON-A spreading computer

SINGLE-CHAMBER TANK

no central roof

ADJUSTING DEVICE

Front-positioned
outside the dirt area, visible from the tractor

PROTECTIVE GRILLE

Large

CONTAINER AND FRAME

in separate design

BRUSHES ON METERING DUCT

for precise spreading patterns

STAINLESS STEEL

hopper bottom, slide and agitator shaft

Maintenance-free enclosed

OIL BATH GEARBOX

Compact design for increased productivity and efficiency: The RAUCH MDS precision fertiliser spreaders combine trend-setting technologies in a small space to provide you with maximum benefits. Precise fertiliser distribution and metering, even emptying, precise boundary spreading - benefit from an innovative solution that uses its strengths for you in almost all fields and takes you forward effortlessly.

FOLDING TARPAULIN

New

WEIGHING FRAME

for automatic application rate control

POWDER COATING

LED LIGHTING

**PLASTIC
SPREADING DISC GUARD**

MDS SPREADING DISC

Gentle-to-fertiliser

ONE-FINGER AGITATOR

AT HOME ON EVERY FIELD – MDS MODEL VERSIONS

MDS 8.2 – THE NARROW ONE

Equipped with innovative detailed solutions, it is ideal for professional use in fruit, wine and hop cultivation.

- ▶ **Width:** 108 cm
- ▶ **Working width:** 10 – 24 m or row fertilisation
- ▶ **Volume:** 500 l, up to 800 l with extension



MDS 18.2 – THE EFFICIENT ONE

Simple handling for variable use.

- ▶ **Working width:** 10 – 24 m
- ▶ **Volume:** 700 l, up to 1,800 l with extension
- ▶ **Load capacity:** 1,800 kg



RAUCH MDS are precision fertiliser spreaders that combine innovative technology with a unique design. MDS inspires users all over the world with its ingenious single-chamber system and rewards them with precision and economic efficiency in a wide range of applications.

MDS 14.2 – THE SPECIALIST

Perfectly suited for fruit, hop and field cultivation.

- ▶ **Width: 140 cm**
- ▶ **Working width: 10 – 24 m or row fertilisation**
- ▶ **Volume: 800 l, up to 1,200 l with extension**



MDS 20.2 – THE QUITE LARGE SMALL ONE

Efficient work, especially in small structured areas

- ▶ **Working width: 10 – 24 m**
- ▶ **Volume: 900 l, up to 2,000 l with extension**
- ▶ **Load capacity: 2,000 kg**



SPACE FOR FULL PERFORMANCE – UNIQUE SINGLE-CHAMBER SYSTEM



► ONE CHAMBER - COUNTLESS BENEFITS

The RAUCH MDS single-chamber system is a technical masterpiece for efficient working in cropped or small structured areas. No other system offers the farmer this specific performance profile.

► EFFICIENT, GRAIN BY GRAIN

The complete material to be spread in the hopper is available for fertilising, whether it is spread on both sides or on one side (e.g. when many small fields have to be attended to). In contrast to the double-chamber system, there is no one-sided emptying. The material to be spread can be used highly efficiently.

► CAN COPE WITH ANY GROUND PROFILE

Even on slopes, there is always sufficient fertiliser above the metering opening. This ensures that fertiliser is applied evenly and as required on any ground. And because the full amount of fertiliser is available now, time and money are saved.

► IDEAL FOR ANY OPERATING EQUIPMENT

The single-chamber system allows a very compact design. This enables efficient fertilisation even with a small tractor.



Single-chamber system

The development of MDS began with an idea. How can it be possible to design a spreader that is many things at the same time? Always evenly filled, easy to refill, compactly sized with a perfect centre of gravity, narrow enough, even for small-scale crops and enabling the even supply of fertiliser, even with one-sided spreading. The solution soon became clear to the technical teams. There can only be one - one hopper.

New



XCheck

Quick, easy and exact cross-distribution control thanks to foldable collection trays

► CLEAN IN THE TWINKLING OF AN EYE

Fewer spreading material chambers mean less cleaning effort. MDS is clean again in no time and ready for the next task.

► EASY MAINTENANCE

The high proportion of stainless materials and the elaborate powder coating preserve the value and function of MDS for years to come.

► ELEGANT CALIBRATION TEST

Since fertilisers vary enormously, only calibration provides ultimate security. MDS makes it quick and easy: The quick-release fastener on the ejection discs is released in one easy step, without any effort. This also turns the emptying of residual quantities into a very fast action. The calibration test set is supplied as standard.

► GOOD FOR ORGANIC FARMING

All MDS models are also suitable for enabling plant nutrition in organic farming. RAUCH offers spreading charts for approved fertilisers as well as organic fertilisers in pellet or granulated form.



Calibration test

VALUABLE FERTILISER NEEDS HIGH-QUALITY TECHNOLOGY – SPREADING PRECISELY ALL AROUND WITH MDS

► The multi-disc system

The disc makes the difference. MDS spreading discs are true all-rounders for a wide range of applications in very different cultivation phases: precise, reliable and convenient in normal fertilising, late fertilising and for yield-optimised spreading at the right or left field boundary. The two disc types, M1 and M2, cover the working range of 10 – 24 m.

► Adjustment made easy

Thanks to the clearly visible, three-dimensional position display, the spreader vanes can be easily adjusted in length and angle even after long use. This enables precise spreading patterns with high precision with all types of fertiliser (including organic fertiliser), fine seeds and slug pellets.

► Maintenance-free

The heart of the MDS spreader is the maintenance-free oil bath gearbox. All shafts feature dual bearings. The agitator shaft is made of high-quality stainless steel.

► Maximum degree of efficiency

A slowly rotating agitator finger protects the granulate and ensures problem-free fertiliser run-on due to the low rotational speed of only 180 rpm. Due to the special metering slide shape, both the smallest (from 3 kg/ha) and the largest nutrient doses, e.g. 500 kg of CAN at 18 m working width and 10 km/h, are reliably applied. Thanks to a high disc speed of 980 rpm, the spreading material is accelerated to a perfect ejection speed.

► Optimum spreading properties

The granulate is gently transferred to the spreader vane via the metering duct with brushes. Thanks to the special notches on the spreader vanes, even the most pressure-sensitive types of fertiliser retain their spreading properties.

► Border spreading without problems

The European Environmental Standard EN 13739 places strict requirements on the distribution of fertiliser. RAUCH full and limited border spreading systems meet these requirements. Furthermore, the precise RAUCH spreading technology complies with the specifications of the environmental standard and at the same time provides the plants with valuable nutrients up to the field boundary. It saves you money.





BOUNDARY SPREADING WITH RAUCH MDS

The **TELIMAT** is a hydraulic, remote-controlled full and limited boundary spreading device. It allows precise spreading from the first machine track.

- Switch over to border spreading while spreading, without losing any time
- Easily adjustable to different fertiliser types and machine track systems
- Position display in the operating terminal possible (TELIMAT sensor)

GSE 7 is a manually operated full and limited boundary spreading device that enables one-sided (to the left or right) sharp-edged spreading directly from the field boundary. The equipment can be remote controlled on request and can also be combined with TELIMAT.



TELIMAT, boundary spreading from the tracks



GSE 7, boundary spreading from the field boundary



Corrosion free plastic agitator



Simple removing of spreading discs

ECONOMIC EFFICIENCY AND PRECISION HAND IN HAND – RELIABLE METERING WITH MDS

TECHNOLOGY ALSO GROWS

For normal fertilising, MDS always remains at a horizontal and constant mounting height. This simplifies adjustments. Only for late fertilisation the upper link is slightly shortened. In this way, the spreading stream develops above the vegetation protecting the plants. Damage to the ears or leaves is avoided.

PRECISE, SIDE BY SIDE

The metering slides are opened and closed separately on the left and right sides. **Spreading is even possible on wedge shaped surfaces with section width accuracy.**

The clearly visible, quantity-proportional DfC scale, unique from RAUCH, allows reliable quantity corrections after a calibration test run. No further calibration test is therefore necessary, even in the event of changes in quantity during application in the field.

EVERYTHING IS UNDER CONTROL

All settings are provided on the front of the hopper, making them easy to reach, easy to read and outside the dirt area.

Especially the slide position can be checked with the yellow pointer with a view from the tractor cab. That means it is not necessary to get out.



Easily visible DfC scales

SLIDE ACUTATION VERSIONS

► Version K

Hydraulic single slide actuator with 2 single-acting hydraulic cylinders, separated on right/left (2 single-acting valves required)



► Version D

Hydraulic single slide actuator with 2 double-acting hydraulic cylinders, separated on right/left (2 double-acting valves required)



► Version D mono

Hydraulic single slide actuator with 2 double-acting hydraulic cylinders. For tractors with 1 double-acting valve, one-sided spreading with the Version D mono can be performed by using a manually-operated valve (1 double-acting valve required).



► Version C

Electric single slide actuator with E-CLICK (12V connection required)



► Version Q

Electronic, speed-dependent single slide actuator with QUANTRON-A (12V connection required)



► Version W

Electronic, speed- and weight-dependent individual slide actuator control with ISOBUS or QUANTRON-A (weighing spreader)



New

NO MORE CALIBRATION TEST – MDS AS A WEIGHING SPREADER



► 100 HZ WEIGHING TECHNOLOGY

In combination with the RAUCH weighing system, QUANTRON-A checks the application rate 100 times per second during travel. Spreading errors due to varying flow characteristics of the spreading material or changes in forward speed are detected immediately and corrected automatically once per second. Calibration testing is no longer necessary because the spreader automatically controls the fertiliser mass flow.

While spreading, the smart electronic system records all data automatically and ensures error-free documentation. The current remaining quantity is displayed at all times. On steep slopes, the system simply switches to "static weighing".



With the help of the weighing electronics the contents of the hopper can be read precisely, right down to the kilogram. The area that can still be spread can be clearly seen.



Weighing frame



FERTILISER SPREADING BECOMES A ROUND THING THIS WAY – INDIVIDUAL EQUIPMENT



MDS 18.2

MDS – ACCESSORIES

The spreader fits perfectly to your wishes and requirements. The exclusive standard equipment can be extended as required. The planned task determines the individual equipment.

- ▶ **Hopper extensions for 200 to 1100 l more volume** (depending on model version)
- ▶ **Tarpaulins** for quick and effective protection of the valuable material to be spread made of durable, weather- and weathering-proof material
- ▶ **VXR spreader vanes** with particularly resistant chromium carbide coating for extra long service life for sharp-edged or abrasive material to be spread
- ▶ **Lighting with warning signs** for better protection on public areas and roads
- ▶ **Boundary spreading devices TELIMAT and GSE**

ADJUSTABLE PRECISION

VariSpread V8

4 3 2 1 VariSpread V8



5

TREND-SETTING ELECTRONICS

The QUANTRON-A or ISOBUS metering computer is used in the Q and W variants. The electronic slide valve actuation allows automatic, driving speed-dependent control of the application rate.

► Automatic

The metering electronics regulate the flow rate so that the preselected application rate remains constant even at varying driving speeds.

► Convenient

All functions can be electrically remote-controlled, reliably and safely with just one hand: opening and closing the metering slides, quantity adjustment during travel, quantity reduction during boundary spreading.

► Future-proof

With the ISOBUS version, all functions of an ISOBUS terminal can be used, such as automatic GPS headland and Section Control, task processing and documentation via TaskController, or site-specific fertiliser application via application maps or plant sensors. With QUANTRON-A, this is done via the RS232 serial interface (all functions optional).

► Efficient

Documentation and storage of operating data

► Precise

MDS ISOBUS is precision farming capable and spreads satellite maps with area-specific accuracy.

VariSpread V8

The latest generation of MDS with the **QUANTRON-A** spreading computer is equipped with VariSpread V8 eight-section control as standard. By remotely controlling the metering slide position, four sections per side can be adjusted. This can either be performed manually at the press of a button, or in combination with a separate GPS computer with Section Control as well as with the automatic headland and section control.



QUANTRON-A with GPS control

Section control capable

Documentation via
TaskControl



Graphic colour display with
large, easy-to-read font

Metering slide open/close

Logical menu navigation for
easy operation

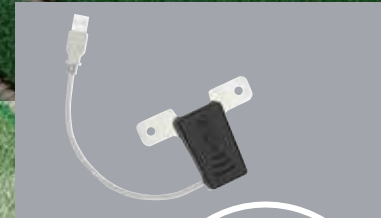
VariSpread functions
left/right

VariSpread V8

6

7

8



Network:

The WLAN module transmits the calibration chart settings from the mobile phone to the QUANTRON-A or the ISOBUS job computer. With the weighing spreader, the remaining quantity is displayed in the mobile phone app – convenient when filling.

ISOBUS for everyone

For non-ISOBUS tractors, MDS-ISOBUS can be easily used with the ISBUS Terminal CCI.60. Operation is manual, similar to QUANTRON-A. Automatic functions such as Section Control are not possible. Connection is simple to the tractor's 12V- and 7-pin speed socket.



FREE SPREADING CHARTS APP

All settings at hand for:

- Mineral fertiliser
- Pellets
- Fine seeds
- Slug pellets



Bluetooth windmeter, wireless wind measuring indicator and spreading recommendation for safer spreading in windy conditions (optional)



FERTILISER APPLICATION TO THE POINT – SAVE FERTILISER WITH MDS



MDS 14.2 with RV 2M

ESPECIALLY IN SPECIAL APPLICATIONS

Due to the slim design of MDS 8.2 with 108 cm or MDS 14.2 with 140 cm, these machines are designed exactly for use in special crops with narrow row spacing. The adjustment device is protected at the front of the container, a standard branch deflector prevents the entangling of vines or branches.

PRECISE METERING

The RV 2M row spreading device enables selective nutrient application in the root area of row crops. No granulate falls on the track. This saves valuable fertiliser and the environment is relieved. RV 2M can be easily and variably adjusted to row distances between 2 and 5 m.



Mode of operation of the RV 2M row spreading device

SPOTSPREADING – PRECISE FERTILISATION, PLANT BY PLANT

New

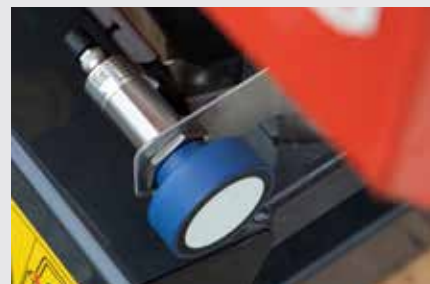
Targeted nutrient application for individual trees such as fruit, olive and oil palm trees. With the new SpotSpreading dosing system, RAUCH is setting new standards in precision fertiliser application. The sensor-based innovation recognises each individual plant and fertilises exactly where it is needed: in the root area.



SPOTSPREADING

SpotSpreading enables precise fertilisation of individual trees using ultrasonic sensors and intelligent control. The machine detects each plant in real time and applies the fertiliser precisely to the root area. The fertiliser radius can be individually adjusted to suit the tree species and requirements.

This saves up to 44% fertiliser, protects the environment and increases efficiency in special crops. Ideal for fruit trees, olives, oil palms and other individual plantings.



Ultrasonic sensors detect every tree – fully automatically. Ultrasonic sensors mounted on both sides scan the terrain in real time up to eight metres to the side. As soon as a tree is detected, the machine automatically opens the metering slide – precisely and only for the respective plant.

THE PRECISE ALL-ROUNDER –

THE UKS SPREADS FERTILISER, LIME, SEEDS, SAND, and much more



QUANTRON-A

PRECISE METERING

The patented agitator shaft with its flexible and wear-resistant agitator blades continuously supplies the spreading material to the metering slide openings and ensures smooth sliding of any kind of granulated, floury or organic spreading material as well as seeds, sand, compost and organic fertiliser, and even powdery spreading materials like Basamid. More advantages: Change spreading material without having to make conversions or use additional equipment.



Agitator shaft with wear-resistant plastic components and metering slide opening

PRECISION AND COMFORT WITH QUANTRON-A

► Automatic metering at any speed

The automatic QUANTRON-A spread metering regulates the metering slide independent of the speed of the vehicle.

► Simple, menu-guided operation

Convenient to operate using the logically structured, multilingual menu interface.

► Significant savings and noticeably reduced workload

Constant spreading volumes when the driving speed is changing save valuable fertiliser, increase economic efficiency and reduce the driver's workload.

► Conveniently vary and document

During operation, the driver can adjust the application rate remotely by pressing a button. Operating data for 200 fields can be stored.

The UKS is an all-rounder that is at home on any field. It is perfect for vegetable, wine, fruit and special crop cultivation as well as arboretums, gardening and landscaping. It demonstrates its strengths in each domain and is simple and convenient to operate while offering a high level of precision.



Electrical remote control



Foldable stainless steel base

▶ OPTIONAL ELECTRICAL REMOTE CONTROL

Optimum adjustments

With 4 basic models with working widths between 1.0 and 3.0 m, the UKS can be optimally adjusted to the respective field width or the required track width.

Variable use

Thanks to its mechanical and hydraulic drive options and manual (standard), mechanical or electrical remote control of the metering slides, the UKS can be perfectly combined with a wide range of tractors as a front as well as rear-mounted unit.

▶ MAINTENANCE MADE EASY

Comfortable emptying of residual material

The stainless steel spreading base can be conveniently folded down in no time. This provides sufficient space for convenient emptying of residual material and cleaning.

Retains its value for a long time

The high-quality powder coating as well as the high proportion of stainless steel components preserve the value of this investment for many years.

UKS AT A GLANCE

- ▶ Universal fertiliser spreader for all kinds of spreading material like fertiliser (granular or floury), seeds, compost, organic fertiliser, sand and much more
- ▶ Spreading material can be changed without adjustment/conversion work
- ▶ Spreading widths of 100, 120, 150, 230, 300 cm
- ▶ Smooth sliding of damp spreading material thanks to steep container walls
- ▶ Uncomplicated metering, manually or remotely controlled
- ▶ Stainless steel spreading base, which can be folded without tools, for quick and easy emptying of residual material and cleaning of the spreader
- ▶ Hydraulic motor drive; UKS 100 and 120 also available with PTO drive
- ▶ High proportion of stainless materials
- ▶ Front and rear mounting
- ▶ Optional high-precision and forward speed-dependent QUANTRON-A metering system

UKS

Machine type	UKS 100*	UKS 120*	UKS 150 GB	UKS 230 GB	UKS 300** GB
Spreading width (cm)	100	120	150	230	300
Hopper capacity (l)	200	240	300	440	580
Capacity with extension (l)	200	240	300	440	830
Filling height	75 cm, with extension 93 cm				
Overall width (cm)	118	138	168	248	318
Max. load capacity (kg)	500		700		1000
Empty weight (kg)	120	130	160	210	260
Drive	PTO shaft 540 rpm Hydraulic, min. 12 l/min		Hydraulic, min. 30 l/min with flow control valve for the agitator shaft speed		
Upper link	Cat. I + II				Cat. II
Lower link	Cat. I		Cat. II		Cat. II
Machine triangle	Cat. I		Cat. II		Cat. II

* With orange paintwork as standard ** Not road-legal

Standard equipment	• High-capacity spreader shaft • Stainless steel metering slide • Foldable stainless steel base • Filling grid • Flow control valve for changing the spreader shaft speed • Cat I or cat II
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Accessories	• Mechanical remote control • Electrical remote control • Hopper extension • Row spreading system • Area spreading system • Tarpaulin • Lighting with warning signs • Windscreen for dusty spreading material • Machine triangle • Removable parking feet
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TECHNICAL DATA

MDS

Machine type	Max. capacity		Container size cm	Filling level cm	Filling width cm	Hopper capacity approx. l	Weight kg
	Cat. I*	Cat. II					
MDS 8.2	800	800	108 x 108	92	98	500	200
MDS 14.2	800	1400	140 x 115	104	130	800	210
MDS 18.2	–	1800	190 x 120	93	180	700	250
MDS 20.2	–	2000	190 x 120	101	180	900	250

* not for weighing spreaders

Spreading discs	M1	M1 VXR	M2	M2 VXR
Working width	10 - 18 m	10 - 18 m	18 - 24 m	18 - 24 m
	Normal fertilising, late fertilising and boundary spreading with one spreading disc			

Hopper extensions**		Hopper size cm	Filling height cm	Filling width cm	Hopper capacity approx. l	Weight kg
M 30	for MDS 8.2	108 x 108	+ 28	98	+ 300	+ 25
M 21	for MDS 14.2	140 x 115	+ 12	130	+ 200	+ 20
M 41	for MDS 14.2	140 x 115	+ 24	130	+ 400	+ 30
M 430	for MDS 18.2 and 20.2	190 x 120	+ 18	178	+ 400	+ 31
M 630	for MDS 18.2 and 20.2	190 x 120	+ 30	178	+ 600	+ 42
M 800	for MDS 18.2 and 20.2	240 x 120	+ 32	228	+ 800	+ 49
M 1100	for MDS 18.2 and 20.2	240 x 120	+ 42	228	+ 1100	+ 59

** with the Clickfix quick mounting system

Slide actuator variants - required control valves	
Version K	Hydraulic slide actuator with 2 single-acting control valves, separated on right/left
Version D	Hydraulic slide actuator with 2 double-acting control valves, separated on right/left
Version D mono	Hydraulic slide actuator with 1 double-acting control unit, manually separated on right/left
Version C	Electric single slide actuator with E-CLICK, 12V, separated on right/left
Version Q	Electronic fertiliser metering QUANTRON-A or ISOBUS, separated on right/left
Version W	Electronic fertiliser metering QUANTRON-A or ISOBUS, separated on right/left with completely automatic metering through weighing technology

Standard equipment
• Slowly rotating, gentle-to-fertiliser agitator finger • Maintenance-free oil bath gearbox • Hopper bottom, spreading discs, spreader vanes and slides made of chromium-nickel steel (V2A) • Quick release spreading disc lock for tool-free removal of the spreading disc for easy calibration test and emptying of residual quantity • MDS 8.2/14.2 Cat. I or II, (version W only Cat. II) • MDS18.2/20.2 Cat. II • Cardan shaft • Calibration test set • Protective grille • Spreading disc guard protects against fertiliser application and meets the safety standard.

Benefits
• 1 pair of spreading discs for normal and late fertilising and boundary spreading • Single-chamber hopper, no one-sided emptying of the hopper • Safe triangular spreading pattern with large overlapping zones • Horizontal and constant mounting height • Simplest adjustment to all types of fertiliser, fine seeds and slug pellets • Slowly rotating, gentle-to-granulate stirring finger (180 rpm) • Simple metering via the quantity-proportional DfC scale • Standard, elegant calibration test set • Half-side control (manual, hydraulic, electric) • Value retention due to elaborate powder coating • Suitable for organic farming • Slide position visible from tractor



RAUCH Homepage

For more useful information,
visit the RAUCH website

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