

High-Accuracy Fertilizer Spreaders



[www.KuhnNorthAmerica.com](http://www.KuhnNorthAmerica.com)

**MDS**

10.1 / 12.1 / 17.1 / 19.1



**Invest in Quality®**

# CONSISTENT AND EFFICIENT SPREADING



The KUHN MDS range of fertilizer spreaders offers a simple and integrated solution for a diversity of operations. This includes specialized crops, such as vineyards, orchards and vegetables, as well as row crop and livestock farms.

## FLEXIBLE DISCS FOR VERSATILE APPLICATIONS

With its adjustable spreading paddles, the Multi-Disc System (MDS) spreading discs are able to spread all types of granular fertilizer with high accuracy and wide spreading patterns. In addition, they will also quickly and accurately spread cover crop seed to tie up valuable nutrients.

## APPLY THE RIGHT DOSE, IN THE RIGHT PLACE

KUHN MDS spreaders provide several features that not only ensure the fertilizer is spread exactly where it should be, they are also simple to operate.

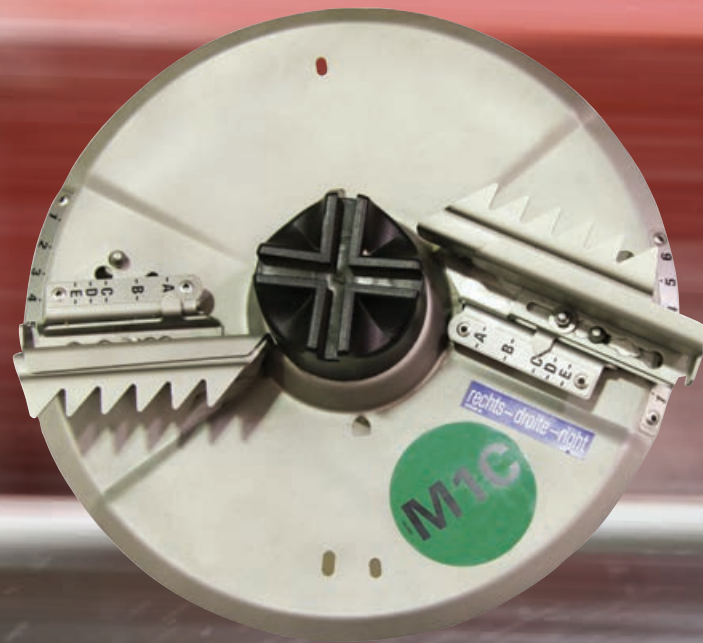
- Easy application rate adjustment with help of the DFC scale
- Multiple agitators for tailoring to specific products
- Different border spreading solutions

## HIGH-ACCURACY FERTILIZER SPREADERS

MDS  
in brief:



	Working Width	Min / Max Capacity	Outlet Controls
MDS 10.1		17.5 cu.ft.	Manual or Hydraulic
MDS 12.1	33' – 59' (60' – 80' with X paddles)	28.25 – 42.25 cu.ft.	
MDS 17.1		24.75 – 55.75 cu.ft.	
MDS 19.1		31.75 – 62.75 cu.ft.	



## THE KEY TO OPTIMAL SPREADING

The MDS spreading discs provide consistent performance during standard spreading, late top spreading as well as yield optimized spreading at field borders. For your comfort, all this is possible at set working widths without removing or changing the discs or paddles.

## DFC SCALE: ACCURATE APPLICATION RATE CONTROL

Nothing could be simpler than changing the application rate from one field to another. It's easily done by positioning an opening stop on the continuous proportional direct flow control (DFC scale). With this, you can modify the application rate without any extra equipment. The principle is quite simple: The opening position is modified by the same percentage as the application rate. This means, for example, that you increase the opening by 10% for a 10% higher application rate. Follow the steps below for the highest application rate accuracy.

EXCLUSIVE

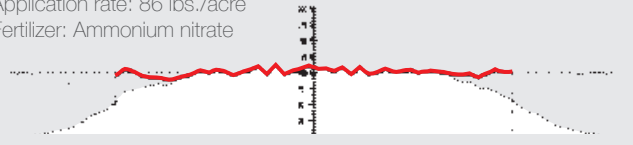
### MDS MULTI-DISC SYSTEM

The MDS provides high application rate accuracy as well as exact spreading patterns for different fertilizers, and common cover crop and forage seeds. Depending on the type of material and the working width, the length and orientation of the paddles can be adjusted precisely with the tool provided. Thanks to their well-marked, three-dimensional position indicator, you can set the paddles quickly and easily.

#### Low Application Rate

Coeff. of Variation (CV): 3.63%  
Application rate: 86 lbs./acre  
Fertilizer: Ammonium nitrate

WORKING WIDTH OF 80'



#### VARYING APPLICATION RATES HAVE NO INFLUENCE

With the MDS system, triangular distribution patterns are consistent and precise with large overlap areas and coefficients of variation (CV) are unbeatably low. This equates to accuracy of around 90%+ depending on material. Different application rates have no negative effect on fertilizer distribution.

CV: A measure of frequency distribution or relative precision.

#### High Application Rate

Coeff. of Variation (CV): 5.42 %  
Application rate: 223 lbs./acre  
Fertilizer: Ammonium nitrate

WORKING WIDTH OF 80'



#### X PADDLES FOR INCREASED WORKING WIDTH

M1 discs are included as standard, for working widths from 33' – 59'. The installation of X paddles allows a working width of 60' – 80' without diminishing the spreading quality.

X paddles supplied as standard with MDS 19.1 along with M1 discs

## READY, SET... SPREAD!

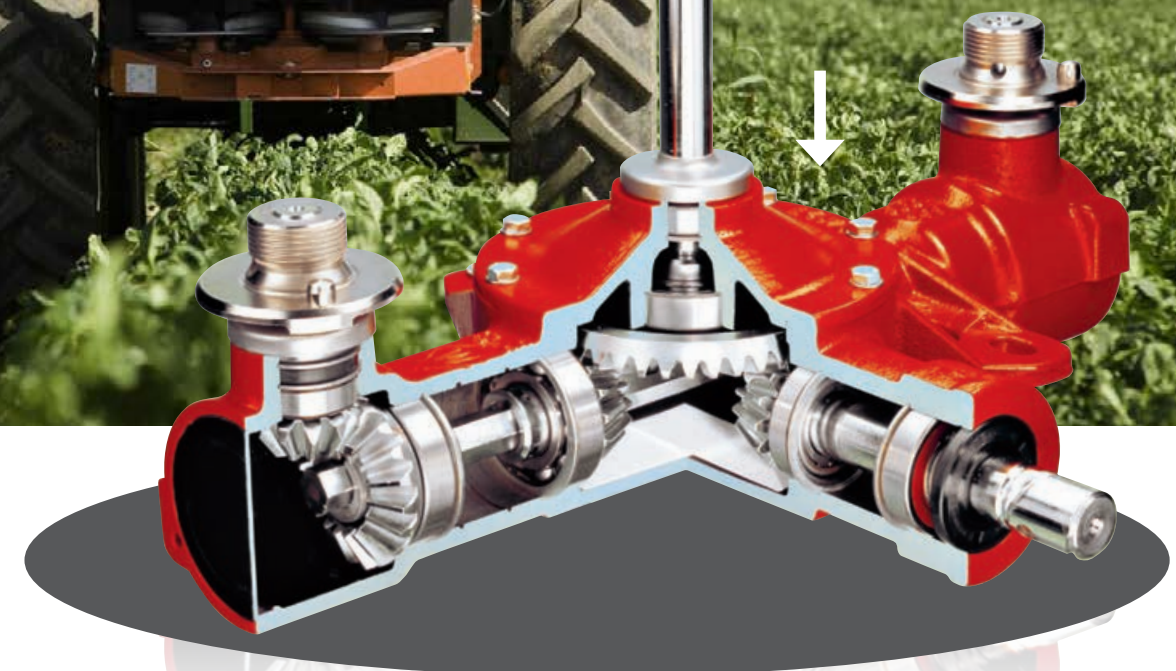


**1.** Remove the disc without tools in a few seconds. **2.** Install the guide channel. **3.** Identify the fertilizer with the identification guide/adjustment chart. **4.** Determine the outlet opening according to the charts. **5.** Set the outlet opening on the machine. **6.** Open the outlet with the agitator in operation. **7.** Weigh the quantity collected and use the charts to calculate the exact setting. **8.** Adjust the outlet opening for higher rate accuracy. **9.** Reinstall the disc. **10.** Now you're ready to spread.

# AT EASE BETWEEN THE ROWS

The MDS 10.1 and 12.1 have narrow dimensions for easier use in orchards and vineyards without the risk of damaging crops. Design features, such as the broken hopper angles of the MDS 10.1, allow use in ultra-narrow row applications.

With their innovative design, these MDS models are well prepared for professional use in vineyards, orchards and vegetable fields.



### SPREADING ON TWO ROWS

The stainless steel banding option, for applications such as orchards and vineyards, has adjustable flaps that apply fertilizer on two rows of variable width with a spacing that is 100% adjustable. This ensures that all nutrients are applied in the root area of the crop, saving valuable fertilizer. It can be quickly and easily adjusted without tools.



### EFFICIENT ALTERNATIVE FOR SHORT ROW CROPS

An attachment is available to accurately supply up to seven rows with fertilizer. It is intended for row crops, such as vegetables or strawberries. The spacing is adjustable to up to 35" between the rows.

### EXCLUSIVE

#### MAINTENANCE-FREE CORE COMPONENTS

A reinforced oil-bath gearbox drives the spreading discs and the agitator. The sturdy heart of the machine stands out with its long service life in difficult conditions. The agitator shaft is made of heat-treated stainless steel.

**This gearbox is designed for 10-year oil service intervals!**



#### ENSURING SMOOTH FERTILIZER DISCHARGE

A slowly rotating agitator (only 180 RPM) provides a regular flow of fertilizer to the spreading discs without damaging the granules and without clogging the outlets. The longevity of the components is ensured with the 100% stainless steel hopper bottom, agitator shaft and outlets. Specialty agitators are available for powdery products or grass seed.

# HIGHER CAPACITIES FOR INCREASED EFFICIENCY

The MDS 17.1 and 19.1 models are intended for diversified farms and have maximum capacities of 55.75 and 62.75 cubic feet, respectively. These high loads, coupled with the flexible hopper extension system, ensure ultimate performance.

## DESIGNED TO LAST

Shielding made of composite materials covers the spreading discs and efficiently protects the painted areas of the frame and the hopper. All painted surfaces are shot blasted; nanotech surface treatment is applied and then powder coated with ultra-high quality powder.



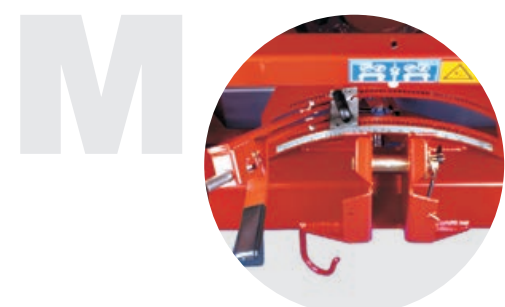
## MDS APPLICATION OUTLET CONTROL VERSIONS

### OPENING AND CLOSING THE APPLICATION OUTLETS

#### VERSION M (MANUAL)

Manual opening of the outlets with levers. An optional hydraulic control allows the operator to open both outlets at the same time, in-cab. Individual side outlet control is only available on D2 versions.

Available on MDS 10.1, 12.1, 17.1, 19.1



#### VERSION D2 (HYDRAULIC)

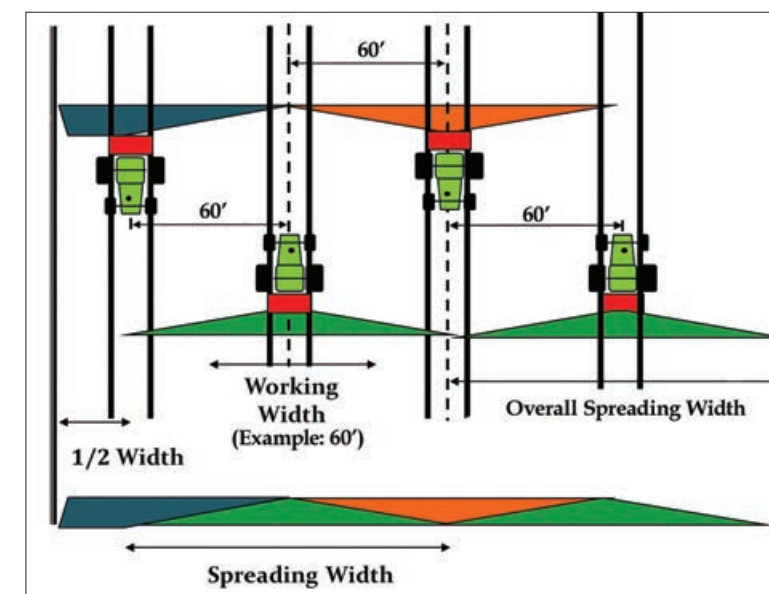
Individual left/right hydraulic opening controlled via two hydraulic valves.

Available for MDS 12.1 and 19.1



### SPREADING TECHNIQUE FOR TWIN-DISC BROADCAST SPREADERS: THE DOUBLE-OVERLAP METHOD

The double-overlap method doubles your protection against over or underapplying product by taking advantage of the natural spread pattern created by KUHN twin-disc fertilizer spreaders. The triangular spread pattern provides consistent distribution, which reduces the impact of driving error or improper adjustments. Utilizing this method, KUHN spreaders provide high-accuracy spreading.



# CUSTOMIZE YOUR SPREADER ACCORDING TO YOUR NEEDS

## ADAPT THE HOPPER CAPACITY TO YOUR OPERATION

**Extensions with 4'6" width**  
**MDS 12.1**

**M 21** (7 cu.ft.)

**M 41** (14 cu.ft.)



**Extensions with 6' width**  
**MDS 17.1 / 19.1**

**M 430** (14 cu.ft.)

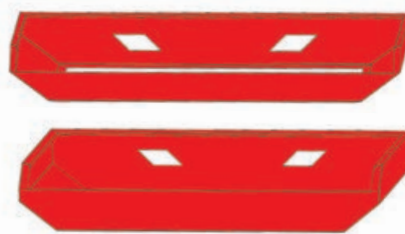
**M 630** (21 cu.ft.)



**Extensions with 7'10" width**  
**MDS 17.1 / 19.1**

**M 633** (21 cu.ft.)

**M 873** (31 cu.ft.)



CLIP FIX

Extensions can be fitted quickly on your machine thanks to the Clip Fix system.

## THREE SOLUTIONS FOR SPREADING AT FIELD BORDERS



### 1. ADJUSTING DISC PADDLES ON THE BORDER SIDE

The spreading paddles allow for easy adjustment to both the right and left side for simple adaptation at the edge of fields. After spreading field borders, the disc must be reset for normal spreading.

### 2. TELIMAT T1

This hydraulically controlled deflector is easily adjustable from the tractor cab, guiding the trajectory of the fertilizer from the disc. This option provides maximum simplicity for the operator.



### 3. BORDER SPREADING LIMITER

If spreading directly at the edge of the field, this limiter prevents spreading fertilizer outside the field. The distance to the border can be adjusted between 0' and 10'.

## Model Specifications

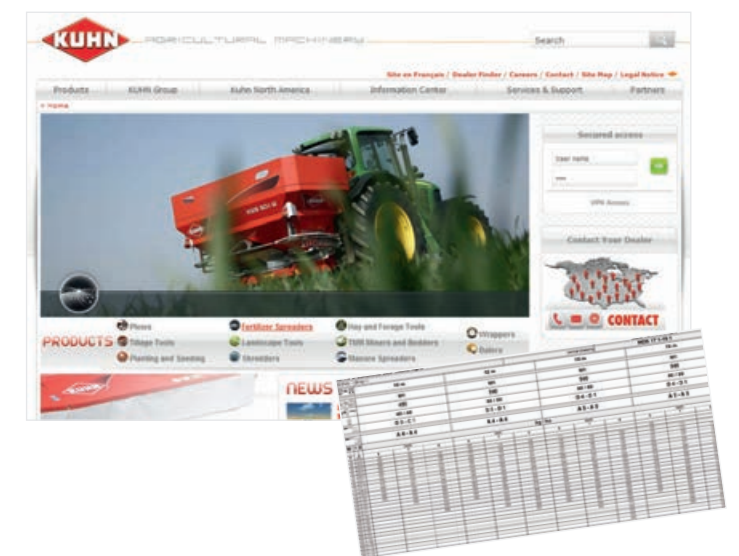
	MDS 10.1	MDS 12.1	MDS 17.1	MDS 19.1
<b>DIMENSIONS</b>				
Hitch Type	3-Point Cat 1 & 2			
Basic Capacity	17.5 cu. ft. (500 L)	28.25 cu. ft. (800 L)	24.75 cu. ft. (700 L)	31.75 cu. ft. (900 L)
Maximum Capacity	17.5 cu. ft. (500 L)	49.5 cu. ft. (1,400 L)	55.75 cu. ft. (1,600 L)	62.75 cu. ft. (1,800 L)
Maximum Load Weight	1,760 lbs (798 kg)	3,080 lbs (1,397 kg)	4,000 lbs (1,814 kg)	
Standard Working Width	33' – 59' (10 – 18 m)			
Spreading Width with X Paddles	60' – 80' (18.3 – 24.4 m)			
Application Rate	From 2.6 lbs/acre (3 kg/ha) and up			
Proportional DFC Scale	Standard			
Guide Channel	Standard			
Agitator Rotation Speed	180 RPM			
Available as Version	M	M/D2	M	M/D2
Outlet Opening/Shut-off Control	Manual or Hydraulic			
Stainless Steel Hopper Base / Outlets / Discs	Standard			
Hopper Cover	Optional			
Fertilizer Identification Guide	Imperial and Metric			
Unloaded Weight	419 lbs (190 kg)	441 lbs (200 kg)	463 lbs (210 kg)	506 lbs (230 kg)



### THE KUHN ADVANTAGE

#### IDENTIFY YOUR FERTILIZER FOR PROPER SPREADING

For fertilizer of unknown origin, the identification guide classifies the different varieties of fertilizer by category, helping you recognize the product and determine the optimal setting.



#### COMPLETE SPREADING CHARTS

Charts are supplied with the machine. They can also be found on the Kuhn North America website, [www.KuhnNorthAmerica.com](http://www.KuhnNorthAmerica.com), under **Online Services**. This section is continuously updated with new fertilizers and seeds.

# COMPLEMENTARY PRODUCTS

## MORE PRODUCTS TO MEET YOUR NEEDS

With over 690 models of equipment, we have the most complete implement line in the industry. Whether you have a small or large operation, we have a broad range of models and options to help fit your diverse needs.




1. Power Tillers
2. Power Harrows
3. Shredders
4. Rollover Plows
5. Primary Tillage – Dominator®
6. Vertical Tillage – Exceleator®

For more information about your nearest KUHN dealer and other KUHN products, visit our website at

[www.KuhnNorthAmerica.com](http://www.KuhnNorthAmerica.com)



Visit our YouTube channel to watch our latest product videos.

 <p><a href="http://www.KuhnNorthAmerica.com">www.KuhnNorthAmerica.com</a></p>	<p>Your KUHN dealer</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------

### KUHN NORTH AMERICA, INC.

Corporate Headquarters  
1501 West Seventh Avenue - Brodhead, WI 53520

Information given in this document is only for informational purposes and is non-contractual. Our machines are in compliance with North American safety standards. In our literature, and for improved illustration of certain details, some safety devices may not be in operating position. When operating these machines, these devices must be operated in accordance with the requirements indicated in the operator's manuals and assembly manuals. We reserve the right to change any designs, specifications or materials listed without further notice. Machines and equipment in this document can be covered by at least one patent and/or registered design. Trademarks cited in this document may be registered in one or several countries.

Find us on

