

MDCM





Main aim

DCM's main aim is to listen to farmers' needs and satisfy them with machines that simplify their everyday work.

RESPECT FOR THE ENVIRONMENT

From an environmental point of view, it is becoming increasingly more difficult for traditional fertiliser spreaders (e.g. single disc) to comply with national regulations as they have limited management in the use of fertilisers.

Proper fertiliser spreading means obtaining an ideal distribution with a correct supply of nutrients to the plants thus avoiding unnecessary overlaps and overdoses.

The LINE M fertiliser spreaders with the LIMIT-C KIT (optional border system) comply with the current environmental standard EN 13739-1.

FERTILISING BETTER TO PRODUCE MORE!

Proper fertilisation of the crop is essential to ensure an effective vegetative response.

However, incorrect applications can compromise one's harvest, both in quantitative and qualitative terms. (TAB. A)

(TAB. A)







DCM has been working closely with the world's leading fertiliser producers for years to offer you the best possible adjustment values in the fastest times possible.

The spreading TESTS carried out both at recognised university test centres and by DCM are very important for calculating the coefficient of variation (CV).

Distribution can be considered:Up to 25% no differences are visible to the naked eye, but the

⊘ EXCELLENT CV less than 10%

⊘ GOOD CV less than 15%

⊘ POOR CV less than 25%

⊘ NOT ACCEPTABLE CV over 25%

Up to 25% no differences are visible to the naked eye, but the differences are extremely notable in crop yields. The charts, always updated, are available on the DCM APP for IOS and ANDROID.

EXAMPLE (on WHEAT):

In this example (TAB. A) we can see that, in the case of 50% CV, we can have losses of up to 10 q/ha or 12-13% of production.

TAB. A

Coefficient of variation (CV) %	Yield q/ha	Production losses q/ha
0	83,7	-
10	83,3	- 0,4
20	82,0	- 1,7
30	79,9	- 3,8
50	73,2	- 10,5





For all models

Painting and components in STAINLESS STEEL

The ultra-modern painting process combined with synthetic materials, which have UV protection, guarantees compliance with the strictest standards and protects the machine from corrosion.

The TESTS carried out in salt spray (for more than 1000 hours), with no signs of blistering (bubbles) nor paint detachment after tearing, guarantee an optimal paint performance.







ALL the components in direct contact with the fertiliser (bottom of the hopper, safety grilles, opening and closing shutters, spreading discs, spreading vanes, protective casing, nuts & bolts and agitators) are in STAINLESS STEEL.

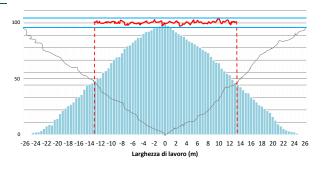


All the frames of our models have been designed in such a way that there are no product accumulation points, thereby making them completely accessible for accurate cleaning and easy maintenance.



From 18 to 36 metres with a single disc

The simple and fast extension of the distribution vanes allows a rapid adaptation to the different products and to the different working widths. With the standard spreading discs it is possible to go from 18 to 36 metres without having to change the type of disc or vanes. The 4 working sections guarantee an optimal, precise and unrivalled transverse distribution.







Accurate adjustment via APP



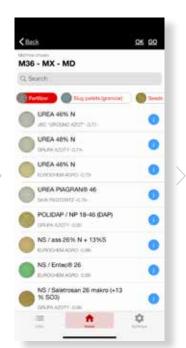




To adjust the desired quantity, simply look at the spreading chart provided or download the free APP for IOS or ANDROID.

Download the APP, select the model, the type of fertiliser, the working width, the kg/ha and the speed and you're all set to go! The APP will show all the values to correctly adjust your machine.





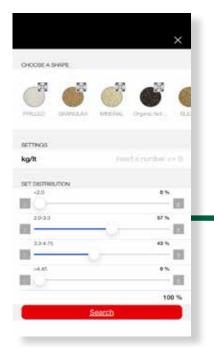








In the GO section of the APP it is possible to find the fertiliser that most closely resembles the one you want to distribute (if the fertiliser is not available in the APP list) by shape, particle size and specific weight.





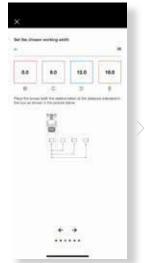
Spread test kit on the field

This KIT is used to carry out a fast transversal test directly on the field and to check the quality of distribution. It is made up of 4 collection trays (compliant with EN-13739), durometer/hardness tester for checking the quality of the fertiliser and particle size analysis KIT.

It is possible to make all the adjustments via the FREE APP for IOS and ANDROID (DCM) in the TRANSVERSAL KIT ON THE FIELD section.











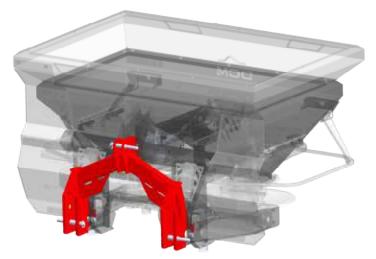
ISOBUS and weighing TECHNOLOGY

The M36 E, M36 S and M42 ISO version fertiliser spreaders have ISOBUS technology which allows automatic adjustment of the dosing shutter opening according to the tractor's speed of travel (DPAE) and the actual flow characteristics of the fertilisers used in the fertilisation. The pre-selected dose remains the same even if the speed of travel changes.



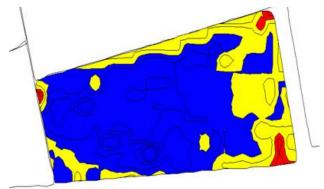
The 2 weighing cells, thanks to the automatic filtering, calculate the different characteristics of the fertiliser with maximum precision and reliability even during movement. The distribution is extensively checked in regulating the flow, regardless of changes in quantity, speed of travel or working width, through the use of a PATENTED counterframe. The system automatically compares the quantity of product actually distributed with that set in the terminal thus avoiding any need for manual calibration.





Variable Rate

By entering the prescription maps (directly on the ISOBUS monitor) it is possible to vary the dose of fertiliser according to the real needs of the plants (VARIABLE RATE).





Flow factor calculation

The flow factor is calculated automatically through the constant measuring of the LOAD CELLS.

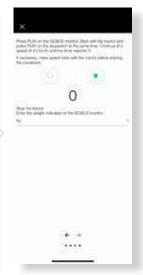
Alternatively, you can test the flow factor via the free APP for IOS and ANDROID in the FLOW FACTOR CALCULATION section (only ISOBUS version).







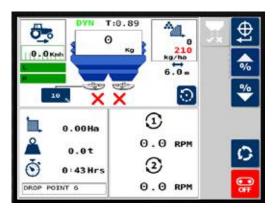




ISOBUS control unit



The isobus control unit (standard on M36 E, M36 S and M42 ISO), created in collaboration with TOPCON, allows you to connect to any compatible monitor via the ISO 11783 connector. The main screen, in addition to having a range of other options, allows you to increase the dose to the RIGHT, LEFT or on both sides as a percentage even during movement. By clicking on the SET button, you can immediately return to the initially pre-selected dose.



Inclinometer

The inclinometer (standard on M36 E, M36 S and M42 ISO) is able to detect the change of inclination (longitudinal and transverse) and is able to automatically correct any resulting weighing errors. Thanks to this system it is possible to work without problems even in hilly areas.



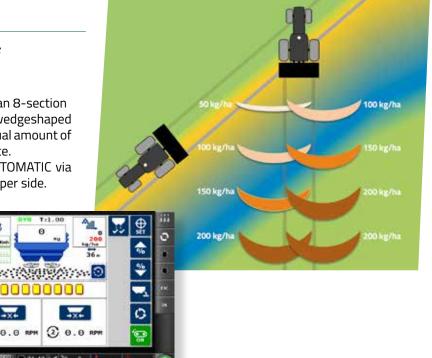


SECTION CONTROL 1.0

Working width control through 8 sections (on M36 S model)

The M36 S model is equipped as standard with an 8-section working width control through dose variation. In wedgeshaped areas the spreading is more uniform and the actual amount of fertiliser remains constant over the entire surface.

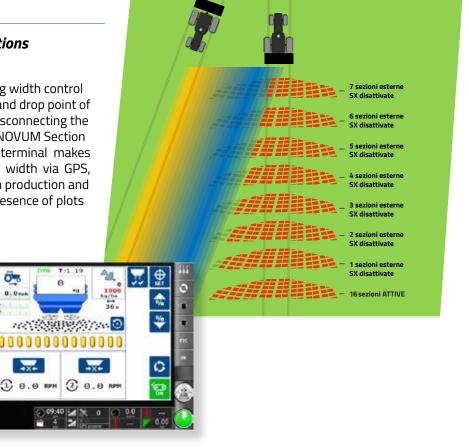
It is possible to adjust the working width in AUTOMATIC via GPS from the outside to the inside in 4 sections per side.



SECTION CONTROL 2.0

Working width control through 16 sections (on M42 ISO model)

The M42 ISO model has a 16-section working width control as standard (8 RIGHT and 8 LEFT). The dose and drop point of the fertiliser are automatically adjusted by disconnecting the sections from the outside to the inside. The NOVUM Section Control system connected to the ISOBUS terminal makes it possible to adjust the dose and working width via GPS, allowing a perfect overlap with an increase in production and savings in terms of costs, especially in the presence of plots with irregular shapes.





ISOBUS monitors

The various types of compatible ISOBUS monitors offer the most modern technologies available today. Regardless of whether you use a compatible DCM or ISOBUS control terminal on your tractor, you can decide to what extent you want to utilise the potential of this technology, e.g. SECTION CONTROL, VARIABLE RATE, etc.

This means that, by connecting the fertiliser spreader to the ISOBUS TERMINAL, the usual user interface is already displayed on the monitor in the cab without having to connect multiple TERMINALS or to continuously change the MONITOR depending on the tool.

MONITOR 7" DCM

With the 7" colour TOUCH SCREEN monitor complete with GPS antenna (to detect speed) it is possible to view the fertiliser spreader control and data recording.



MONITOR 8" DCM

In order to use the PARALLEL GUIDE, the SECTION CONTROL and the VARIABLE RATE, in addition to the fertiliser spreader control and data recording, it is necessary to use the 8" colour TOUCH SCREEN MONITOR. With this MONITOR, a non-ISOBUS tractor is transformed into a 100% ISOBUS tractor (it is possible to connect any other type of ISOBUS compatible tool in addition to the fertiliser spreader).



A SINGLE MONITOR FOR A NUMBER OF SOLUTIONS



Adjustable vanes on M36 M, M36 E and M36 S models

MT-vanes can be accurately adjusted in length and orientation from 18 to 36 metres according to the type of fertiliser, seeds and snail/slug pellets.

The operator, thanks to the clearly visible graduations, can adjust quickly without the need for tools.





Maximum distribution uniformity

The shape of the exit hole has been studied so that the opening angle changes according to the flow rate, guaranteeing a proportional dose and a uniform distribution, solving any overdose issues, which makes the distribution irregular due to the different behaviour of the fertiliser on the vanes.

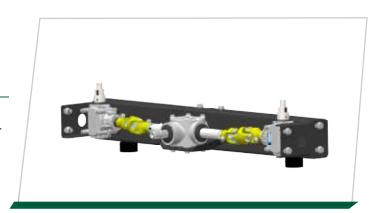
Accurate distribution

The drop of the fertiliser inside the spreading disc where the peripheral speed is lower limits the breaking, the pulverisation and the heating of the granules. The continuous flow of the product is gently brought to the spreading vanes ensuring a constant distribution regardless of changes in quantity, feed rate or working width.



Oil bath gearbox

The central gearbox (completely watertight) built directly at our factory, is the cornerstone of these double disc fertiliser spreaders.





Simple and intuitive adjustment

The fertiliser spreaders must adapt to a variety of different products and doses.

One of DCM's priorities is ease of use.

The adjustment of the spreading quantity is composed of two independent indicators applied on a simple and clearly visible graduation scale (only on version M36 M).

Smart agitators

The eccentric agitators entirely made of STAINLESS STEEL, at reduced speed (10-50 rpm) convey the fertiliser in a measured and homogeneous way, also carefully emptying the tips of the hopper. When an outlet nozzle remains closed the agitator does not rotate, but performs a small oscillation thus avoiding breaking the fertiliser, seed or snail/slug pellet. This function is extremely useful especially when performing extended spreading on half the side (for example on the borders).





Extensions

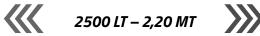
In two widths and various sizes

width 2,20 MT











3000 LT – 2,20 MT



Width

2,80 MT



3200 LT – 2,80 MT



3700 LT – 2,80 MT



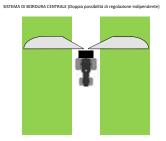
4200 LT – 2,80 MT

KIT BORDER-X e LIMIT-C

Central border system BORDER-X

For the fertilisation of special crops (or on the border of the field) where there is the need to spread LEFT or RIGHT or on both sides of the row, DCM offers the BORDER-X border system.

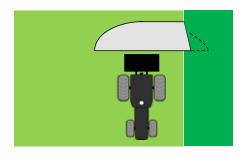
This OPTIONAL extra keeps the row free from fertiliser





Border system KIT LIMIT-C

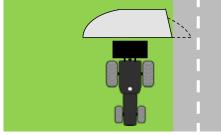
(in accordance with environmental law EN 13739-1)





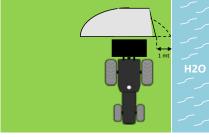
BRD

Distribute the fertiliser equally on the field borders. With this system, a small part of fertiliser will be distributed even beyond the boundary of the field. In this case it is not necessary to reduce the dose.



CNF

The fertiliser, in accordance with regulations on fertilisation, must not fall beyond the boundary of the field (especially in the presence of roads or land of another property). In this case it is necessary to reduce the dose.

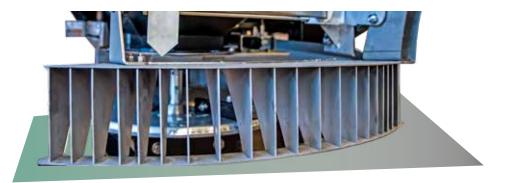


H20

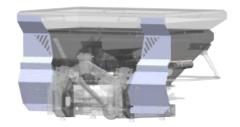
If there is a ditch or waterway on the border of the field, the fertiliser, in accordance with regulations on fertilisation, must fall more than 1 metre away from the border of the field (if the OPTIONAL border system is used) and more than 3 metres away from the border of the field (if using the SPECIAL OPTIONAL vane).

Consequently, a lateral strip of about

2 - 6 metres (based on the distance of the first track from the border) will remain poorly fertilised. In this case it is necessary to reduce the dose.



Optional equipment



DCM MIN



STAINLESS STEEL SPLASH GUARD KIT

THE STAINLESS STEEL SPLASH GUARD KIT protects the fertiliser spreader from materials that the tractor wheels could throw against the spreading discs.

Being in STAINLESS STEEL, durability is ensured even in the event of stress or impact.

LED LIGHTING KIT

The WHITE/RED markings for road safety and the LED lighting system guarantee greater visibility in traffic.

INSPECTION LADDER

The INSPECTION LADDER, made entirely of STAINLESS STEEL, is extremely practical for optimal hopper access, even from the outside. Its CENTRAL position is extremely handy for correct cleaning of the fertiliser spreader. You can easily access the RIGHT or LEFT part of the fertiliser spreader without having to enter the hopper



OPENABLE COVER MANUALLY OR HYDRAULICALLY

The hopper cover with manual control or with hydraulic remote control is available for all models of the Line M. It guarantees maximum filling opening when open and fits perfectly, securely covering the hopper when closed.



2-WAY UNIT

If the tractor has only one double-acting hydraulic distributor (1 delivery and 1 oil return), this solution is very useful for connecting up to 4 hydraulic hoses (2 delivery and 2 oil returns). You can close the right or left section by moving the lever provided.



HYDRAULIC ENGINE KIT FOR INDEPENDENT DRIVE OF SPREADING DISCS

The hydraulically operated KIT allows you to keep the spreading plates steady (540 rpm) even if the engine rpm of the tractor is lower. This system ensures fuel economy.



FERTILISER SPREAD TEST KIT ON THE FIELD

This KIT is used to carry out a fast transversal test directly on the field and to check the quality of distribution. It is made up of 4 collection trays (compliant with EN-13739), durometer/hardness tester for checking the quality of the fertiliser and particle size analysis KIT.

It is possible to make all the adjustments via the FREE APP for IOS and ANDROID (DCM) in the TRANSVERSAL KIT ON THE FIELD section.



TROLLEY KIT FOR SPREADER MOVEMENT

The TROLLEY is very useful when the fertiliser spreader is not being used and it must be moved manually from one place to another.



DCM research centre

DCM's R&D laboratory collaborates with numerous universities in the sector thereby ensuring a profitable twoway link between business and academia.

If we analyse the last few decades, we discover that the most productive and fruitful sectors of innovation and progress are those characterised by the ability to make the two main incubators of ideas, projects and applications in society the

academic and industrial worlds-ommunicate in a constructive and effective way.

DCM staff support dealers with specific courses on site or in the company's training room ensuring constant industrial and technological input to current agricultural issues.











Choose and customise the fertiliser spreader according to your needs

■ Standard
□ Optional
N.D. Not Available

CHARACTERISTICS M36 M M36 E	M36 M	M36 E ISOBUS	M36 S ISOBUS	M42 ISO ISOBUS
Standard working width (mt)	18 - 36	18 - 36	18 - 36	18 - 36
Standard hopper capacity (It)	1500	1500	1500	1500
Max hopper capacity (lt)	4200	4200	4200	4200
Hopper width(cm) for models from 1500 to 3000 lt	220	220	220	220
Hopper width (cm) for models from 3200 to 4200 lt	280	280	280	280
Load height (cm) for 1500 lt model	125	125	125	125
Load height (cm) for 2000 It model	140	140	140	140
Load height (cm) for 2500 lt model	155	155	155	155
Load height (cm) for 3000 lt model	170	170	170	170
Load height (cm) for 3200 lt model	154	154	154	154
Load height (cm) for 3700 lt model	164	164	164	164
Load height (cm) for 4200 lt model	174	174	174	174
P.T.O. driveshaft with shear bolt for models from 1500 to 3000 lt		•	•	
O. driveshaft with shear bolt, TORSIONAL DAMPER and FREE WHEELS for	•	•	•	•
models from 3200 to 4200 lt		•	•	•
Spreading charts and free APP for IOS and ANDROID		•	•	
Powder painted WEARPROOF frame and hopper				
Adjustable MT-vanes (patented). From 18 to 36 mt. with a click (without changing the type of vanes)	•	•	•	
Openable STAINLESS STEEL protection grids		•	•	
STAINLESS STEEL inspection ladder				
FBottom of the hopper, opening/closing sliders, spreading discs, spreading vanes, protection housing, nuts and bolts and agitators of STAINLESS STEEL	•	•	•	•
Reflex reflectors and retro-reflective tape white/red for road safety	•	•	•	
Independent DOUBLE-ACTING HYDRAULIC openings		N.D.	N.D.	N.D.
Oil bath reduction gear (fully sealed) (Made in DCM)	•	•	•	
ELECTRIC opening according to the feed speed and the real characteristics of the fertilizer (DPAE)	N.D	•	•	•
Additional frame with self-calibrating and continuous weighing system (with 2 LOAD CELLS)	N.D	•	•	•
ISO 11783 cable	N.D			
Auto-correction on slopes (until 25°)	N.D			
SECTION CONTROL 1.0 8-section working width control (4 RH and 4 LH) through dose variation	N.D	N.D	•	N.D



■ Standard □ Optional N.D. Not Available

CHARACTERISTICS M36 M M36 E	M36 M	M36 E ISOBUS	M36 S ISOBUS	M42 ISO ISOBUS
SECTION CONTROL 2.0 16-section working width control (8 RH and 8 LH) through dose variation and automatic drop point adjustment	N.D	N.D	N.D	
7" COLOUR TOUCH SCREEN monitor complete with GPS ANTENNA (only for speed detection), ISOBUS 11783 cable and supports. Views on the MONITOR: MACHINE CONTROL and DATA REGISTRATION			N.D	N.D
8" COLOUR TOUCH SCREEN monitor ISOBUS TOPCON X23 complete with GPS ANTENNA, ISOBUS 11783 cable and supports. Views on the MONITOR: MACHINE CONTROL, DATA REGISTRATION, PARALLEL GUIDE and VARIABLE RATE				
Hydraulic LIMIT-C kit RIGHT or LEFT				
Hydraulic engine kit for independent drive of SPREADING DISCS				
QUANTITY control kit			0	
Plastic vinyl cover – manually or hydraulically opening				
LED lighting kit				
Two-ways control				
Adapter for cardan shaft (1-3/8" z6_1-3/8"z8)				
STAINLESS STEEL SPLASH GUARD KIT				



Technical specifications



M36 MEs













Model	Liters	Maximum capacity	r.p.m.	b a cm Machine dimension				KG Weight Kg	
	lt	Кд	r.p.m.	М	E-S	ст	M	E-S	
M36 M-E-S 1.500	1.500	4.200	540	A=160	A=178/B=220/ C= 125	125	530	590	
M36 M-E-S 2.000	2.000	4.200	540	A=160	A=178/B=220/ C= 140	140	570	630	
M36 M-E-S 2.500	2.500	4.200	540	A=160	A=178/B=220/ C= 155	155	610	670	
M36 M-E-S <i>3.000</i>	3.000	4.200	540	A=160	A=178/B=220/ C= 170	170	650	710	
M36 M-E-S <i>3.200</i>	3.200	4.200	540	A=160	A=178/B=280/ C= 154	154	610	670	
M36 M-E-S <i>3.700</i>	3.700	4.200	540	A=160	A=178/B=280/ C= 164	164	652	712	
M36 M-E-S 4.200	4.200	4.200	540	A=160	A=178/B=280/ C= 174	174	694	754	



M42 ISO













Model	Liters	Maximum capacity	r.p.m.	b a cm Machine dimension	Loading height	KG Weight Kg
	lt	Kg	r.p.m.	ISO	ст	Кд
M42 ISO 1.500	1.500	4.200	540	A=178 /B=220 /C=125	125	610
M42 ISO 2.000	2.000	4.200	540	A=178 /B=220 /C=145	140	650
M42 ISO 2.500	2.500	4.200	540	A=178 /B=220 /C=155	155	690
M42 ISO 3.000	3.000	4.200	540	A=178 /B=220 /C=170	170	730
M42 ISO 3.200	3.200	4.200	540	A=178 /B=280 /C=154	154	690
M42 ISO 3.700	3.700	4.200	540	A=178 /B=280 /C=164	164	732
M42 ISO 4.200	4.200	4.200	540	A=178 /B=280 /C=174	174	774



NOTES



LINE M

MDCM



H-7522 Kaposújlak, 095/3 hrsz. Tel: (+36)30/500-2050, (+36)30/336-9804

E-mail: bedenek@kapos-net.hu

WEB: www.bedenek.hu