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## MULTI-METERING SYSTEM MD

THE "TRANSFORMER"  
AMONG SEEDERS

**APV**  
[www.apv.at](http://www.apv.at) ®

# CONTENT

## GENERAL



GENERAL

3

## MD MULTI-METERING SYSTEM



MULTI-METERING SYSTEMS MDS 40 M1 & MDS 100 M1

4



MULTI-METERING SYSTEMS MDP 40 M1 & MDP 100 M1

6



MULTI-METERING SYSTEM MDG 40 M1 & MDG 100 M1

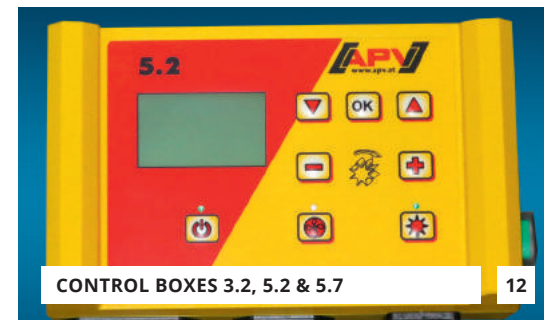
8



MULTI-METERING SYSTEM MDC 40 M1

10

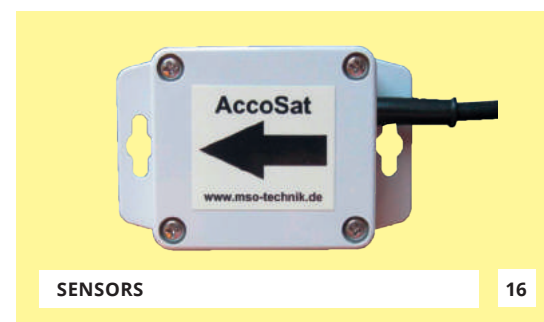
## CONTROL BOX



CONTROL BOXES 3.2, 5.2 & 5.7

12

## SENSORS & ACCESSORIES



SENSORS

16



ACCESSORIES

20



## MORE INFO ONLINE

Our entire product range can also be found online at [www.apv.at](http://www.apv.at)

Our sales staff are happy to advise you and are available if you should have any questions about our products!

# MULTI-METERING SYSTEM MD

## MULTI-METERING SYSTEM - THE PRODUCT INNOVATION

The Multi-Metering System (MD) series arose from the idea of combining the best features of our most popular products. We use the metering unit from our Pneumatic Seeders and combine it with different spreading methods. For us, the "two in one" principle means putting together

excellent product features to make one exceptional seeder or spreader. This results in different types of Multi-Metering Systems - versatile products for diverse farming applications!



As standard, the Multi-Metering Systems are available in four versions. As an option, these versions can be variably upgraded and converted. For example, you can turn your Multi-Metering System with spreading disc into a pneumatic spreading device in just a few quick steps!

**Multi-Metering System MDS:** The "S" stands for "spreader". The seed is precisely metered by a seeding shaft and is then spread by a spreading disc, and is particularly suitable for large working widths, e.g. up to 28 m for slug pellets.

**Multi-Metering System MDP:** The "P" stands for "pneumatic". Its function and use are similar to those of a classic Pneumatic Seeder, the Multi-Metering System offers 6 outlets for a working width of up to 4.5 m.

**MDG Multi-Metering System MDG:** The "G" stands for "gravitation". Its function and use are also si-

milar to those of a Pneumatic Seeder, however, the metered material is only metered and then spread without air (without a fan, only through gravitation). This spreader is particularly suitable for pellets which are metered into an existing air current or can be spread based on gravity (e.g. mouse bait, silage additives, slug pellets, ...).

**Multi-Metering System MDC:** The "C" stands for "chemicals". This product is a special form of the MDG spreader, which has been developed for spreading chemical crop protection pellets. Due to the special seal and the Surefill adapter, the spreader is suitable for spreading pellets that may only be spread in two rows for each metering unit and without air support (e.g. Vydate, Belem, Goldor Bait, Attracap, Mocap, ...)

## MODULAR IMPLEMENT EXTENSIONS

Our Multi-Metering Systems have justifiably earned their name. We developed a concept for them that combines the best features of APV spreaders and seeders. And you can expand this concept yourself. The requirements made of today's agricultural technology and the versatile range of use of

products in modern agriculture are an important factor. We support you and for each Multi-Metering System, we offer the conversion kits for the other Multi-Metering Systems as an accessory. You can find more details on page 21.



# MDS 40 M1 & MDS 100 M1

with spreading disc

The Multi-Metering System MDS combines the advantages of a Pneumatic Seeder and a Disc Spreader: Precise metering is performed by a seeding shaft, the seed is spread using a spreading plate - optimal for slug pellets across large working widths as well as for spreading various catch crops. Due to the diverse assembly options and the simple and quick mounting and conversion on different soil tillage implements, the MDS can be used several times a year for a wide range of applications.



## TECHNICAL DATA

↗ Working width .....	Up to 28 m (with "Metarex" slug pellets) <sup>1</sup>
☰ Max. metered quantity .....	Up to 5 kg / min (depending on the seed)
✂ Dimensions .....	H 83 cm, W 47 cm, D 60 cm (MDS 40 M1) H 105 cm, W 55 cm, D 55 cm (MDS 100 M1)
🍷 Tank capacity .....	40 l or 105 l
⚖ Weight .....	28 kg (MDS 40 M1) / 30 kg (MDS 100 M1)
🔌 Tractor power .....	12 V / 25 A

<sup>1</sup> To achieve uniform distribution for a working width under 4 m, we recommend the use of a precision spreading plate.



## ITEMS INCLUDED

- Select between Control Box 3.2 or 5.2 (different price categories)
- Complete spreader with tank, metering unit, frame and spreading plate
- Point of impact adjustment
- Mounting kit for 3-point hitch
- Counter plate for easy mounting
- Calibration bag
- One set of seeding cartridges for 2 seeding shafts (Flex, fine and fine-blind seed seeding cartridges)
- 6 m of cable from the spreader to the control box



## YOUR ADVANTAGES

- The best lateral distribution of slug pellets among single-disc spreaders on the market.
- Adjusting the working width AND the spread rate from the driver's seat
- Precise speed and rate adaptation (using the seeding shaft)
- Ground speed-related seed rate & headland management <sup>2</sup> (with sensors)
- The smallest to the largest quantities can be precisely metered (different seeding shaft shapes and numbers possible)
- Easy calibration (with the spreading plate stationary and folded away)
- Possibility of installing a fill level sensor <sup>2</sup> (optional) and a calibration button <sup>2</sup> (optional)
- Seeding shafts suitable for common applications are included in the Items included
- Can be converted to MDP or MDG



**⚠ The maximum spread rate is around 5 kg / min for slug pellets. This depends on the seed shape and density. The spreader is not suitable for corrosive (fertilising) agents.**



## ACCESSORIES

- Fill level sensor <sup>2</sup>
- Calibration button <sup>2</sup>
- Extension cable PS MX 2 m
- Extension cable PS MX 5 m
- Precision spreading plate 1-4 m working width
- Height-adjustable quad bracket mounting kit
- Quad bracket mounting kit
- Truck bed bracket mounting kit





# MDP 40 M1 & MDP 100 M1

with fan

In terms of the applications and functions, the Multi-Metering Systems of the MDP series are similar to Pneumatic Seeders of the PS series. Due to the compact design and the diverse mounting possibilities, this type covers a large range of applications. The MDP is perfectly suited for spreading all common types of small seeds, seed mixtures, and slug pellets as well as for new seeding or re-seeding of grassland. Due to the simple mounting and conversion on various soil tillage implement, the MDP can be used several times a year for a wide range of applications.



## TECHNICAL DATA

↗ Working width .....	Up to 4.5 m (6 outlets)
✂ Dimensions .....	H 83 cm, W 47 cm, D 60 cm (MDP 40 M1) H 105 cm, W 55 cm, D 55 cm (MDP 100 M1)
☞ Tank capacity.....	40 l or 105 l
⚖ Weight .....	28 kg (MDP 40 M1) / 30 kg (MDP 100 M1)
🏆 Tractor power .....	12 V / 25 A



## ITEMS INCLUDED

- Select between Control Box 3.2 or 5.2 (different price categories)
- Complete spreader with tank, metering unit, frame and fan
- Mounting kit for 3-point hitch
- Counter plate for easy mounting
- 6 dispersion plates, 3 hexagonal bars & 25 m of hose
- Calibration bag for easy execution of a calibration test
- One set of seeding cartridges for 2 seeding shafts (Flex, fine and fine-blind seed seeding cartridges)
- 6 m of cable from the spreader to the control box



## YOUR ADVANTAGES

- Precise lateral distribution due to individual seeding shafts for each outlet
- Compact and simple construction of the seeder
- Quantity adjustment while driving
- Possibility of speed and tractor linkage sensors <sup>1</sup> (optional)
- Possibility of installing a fill level sensor <sup>1</sup> (optional) and a calibration button <sup>1</sup> (optional)
- Control box with power connection using 3-pin socket
- Wind-independent and precise spreading of the seed
- Opening for residual emptying
- Stainless steel seeding shaft
- Easy calibration
- Can be converted to MDS or MDG



**⚠ This seeder (MDP in the standard version with 6 outlets) is not suitable for large seeds such as field beans, spelt, ...**  
**The spreader is not suitable for corrosive (fertilising) agents.**



## ACCESSORIES

- Fill level sensor <sup>1</sup>
- Calibration button <sup>1</sup>
- Extension cable PS MX 2 m
- Extension cable PS MX 5 m



<sup>1</sup> For use with Control Box 5.2



# MDG 40 M1 & MDG 100 M1

airless, without fan

With its compact design and precise metering, the Multi-Metering System MDG is ideally configured for spreading seed or pellets without air. For this reason, the MDG model series is especially well-suited as an additional metering unit on an existing seeder, for the placement or metering of pellets, mouse bait or slug pellets in one field pass alongside soil tillage. Silage additives can be directly metered in with the grass harvest.

## TECHNICAL DATA

Max. metered quantity .....	7.5 kg / min (depending on the seed / pellets)
Dimensions .....	H 83 cm, W 47 cm, D 60 cm (MDG 40 M1) H 105 cm, W 55 cm, D 55 cm (MDG 100 M1)
Tank capacity.....	40 l or 105 l
Weight .....	22 kg (MDG 40 M1) / 24 kg (MDG 100 M1)
Tractor power .....	12 V / 10 A

## ITEMS INCLUDED

- Select between Control Box 3.2 or 5.2 (different price categories)
- Complete implement with tank, metering unit and frame
- Mounting kit for 3-point hitch
- Counter plate for easy mounting
- 2 dispersion plates, 1 hexagonal bar & 8 m of hose
- Calibration bag for easy execution of a calibration test
- One set of seeding cartridges for 2 seeding shafts (Flex, fine and fine-blind seed seeding cartridges)
- 6 m of cable from the spreader to the control box



## YOUR ADVANTAGES

- Precise lateral distribution due to individual seeding shafts for each outlet
- Compact and versatile metering unit
- Quantity adjustment while driving
- Possibility of speed and tractor linkage sensors <sup>1</sup> (optional)
- Possibility of installing a fill level sensor <sup>1</sup> and a calibration button <sup>1</sup> (optional)
- Control box with power connection using 3-pin socket
- Seeding shafts suitable for common applications are included in the Items included
- Opening for residual emptying
- Stainless steel seeding shaft
- Large filling opening
- Easy calibration
- Can be converted to MDS or MDP



**⚠ The spreader is NOT APPROVED for metering pesticides, such as Belem, Goldor Bair, etc.**  
**The spreader is not suitable for corrosive (fertilising) agents.**

## ACCESSORIES

- Fill level sensor <sup>1</sup>
- Calibration button <sup>1</sup>
- Extension cable PS MX 2 m
- Extension cable PS MX 5 m



<sup>1</sup> For use with Control Box 5.2



# MDC 40 M1

airless, for chemicals

The Multi-Metering System MDC 40 M1 (C for "chemicals") is a special form of the MDG 40 M1. It is specially sealed and its concept is perfectly suited for pellets (e.g. Vydate, Belem, Goldor Bait, Attracap, Mocap, ...), which are only spread in **2 rows without air support**. Due to the included **Surefill adapter**, you do not come into contact with the agents while filling. The pellets are reliably metered by our well-tested seeding shaft. The agent is conveyed through 2 hoses directly to the **fishtail coulters**, which deposit the pellets safely and precisely in the row.



## TECHNICAL DATA

☰ Max. metered quantity .....	7.5 kg / min (depending on the seed / pellets)
✂ Dimensions .....	H 83 cm, W 47 cm, D 60 cm
🍷 Tank capacity .....	40 l
⚖ Weight .....	22 kg
🏎 Tractor power .....	12 V / 10 A



## ITEMS INCLUDED

- As an option with Control Box 3.2 or 5.2 (for 1x MDC) or 5.7 (for 2x MDC) (different price categories)
- Complete implement with tank, metering unit and frame
- Surefill adapter installed in the tank cover
- Mounting kit for 3-point hitch
- Counter plate for easy mounting
- 2 fishtail coulters incl. 2 hinge bolt clamps and 5 m of hose
- Calibration bag for easy execution of a calibration test
- One set of seeding cartridges for 2 seeding shafts (Flex, fine and fine-blind seed seeding cartridges)
- 6 m of cable from the spreader to the control box



## TIP

Install 2x MDC 40 M1 to equip a 4-row planter. The two Multi-Metering Systems are operated using just one controller (Control Box 5.7 + adapter cable), with full functionality and setting options on both spreaders!



## YOUR ADVANTAGES

- Sealed spreader for safe spreading of your granulated crop protection products
- Precise lateral distribution due to individual seeding shafts for each outlet
- Compact and versatile metering unit
- Quantity adjustment while driving
- Possibility of installing speed and lifting unit sensors <sup>1</sup> (optional)
- Possibility of installing a fill level sensor <sup>1</sup> (optional) and a calibration button <sup>1</sup> (optional)
- Control box with power connection using 3-pin socket
- Seeding shafts suitable for common applications are included in the Items included
- Stainless steel metering unit
- Large filling opening
- Can be converted to MDS, MDP or MDG

⚠ The spreader is not suitable for corrosive (fertilising) agents.



## ACCESSORIES

- Fill level sensor <sup>1</sup>
- Calibration button <sup>1</sup>
- Extension cable PS MX 2 m
- Extension cable PS MX 5 m



## YOUR ADDITIONAL BENEFIT

You can upgrade and convert your Multi-Metering System at any time - From a spreader without air support to a pneumatic catch crop seeder or a slug pellet spreader with spreading disc. We ensure the usefulness of your investment and enable a wide range of applications with low conversion effort!

Listed by the Julius Kühn Institute



2-row use



4-row use, e.g. for planting potatoes



## CONTROL BOX 5.2



Control Box 5.2 is the most popular version of our control boxes and features an extensive range of functions.

The following functions make our bestseller special: precise speed calibration, exact regulation of the fan as well as easy calibration.



### FUNCTIONS

- Ground speed-related regulation of the spread rate
- Headland management (in combination with tractor linkage sensor)
- Option of using implement sensors (pressure monitor, fill level sensor)
- Electronic adjustment of the spread rate (during operation)
- Automatic calibration function (only weighing!)
- Emptying function
- Total hours and daily hours counter
- Calibration of the speed
- Total hectares and daily hectares counter
- Selection of different languages
- Choice between different measuring units (metric, imperial)
- Calibration & display in kg/ha, seeds/m<sup>2</sup>
- Calibration of the speed
- Pre-metering function
- Possibility to install a calibration button
- Possibility to regulate the electric fan (on the MDP) or the spreading plate (on the MDS)
- Display of the operating voltage and the amperage



### ITEMS INCLUDED WITH ACCESSORIES KIT

- Control Box 5.2
- 1.5 m cable for the power supply from the 3-pin plug to the control box
- Module holder / bracket
- Operating manual

## CONTROL BOX 3.2<sup>1</sup>



Control Box 3.2<sup>1</sup> is the basic version of the control box for Pneumatic Seeders from APV and offers the most important basic seeding functions. The spread rate and the speeds of the electrical drive can be electronically adjusted.



### FUNCTIONS

- Regulation of the seeding shaft
- Electronic adjustment of the spread rate
- Seeding shaft monitoring via electronics
- Emptying function
- Calibration function
- Monitoring of the electrical drives
- Possibility to regulate the electric fan (on the MDP) or the spreading plate (on the MDS)



### ITEMS INCLUDED WITH ACCESSORIES KIT

- Control Box 3.2<sup>1</sup>
- 1.5 m cable for the power supply from the 3-pin plug to the control box
- Module holder / bracket
- Operating manual



# CONTROL BOX 5.7



Control Box 5.7 enables separate control of two Multi-Metering Systems in conjunction with an adapter cable. The full functionality and all setting options for each unit are maintained.

## FUNCTIONS

- Seeding shaft regulation & monitoring (separately for each seeding shaft)
- Electronic adjustment of the spread rate (separately for each seeding shaft)
- Emptying function (separately for each seeding shaft)
- Automatic calibration function
- Total hours and daily hours counter
- Total hectares and daily hectares counter
- Selection of different languages
- Calibration & display in kg/ha, seeds/m<sup>2</sup>
- Calibration of the speed
- Headland management (in combination with lifting unit sensor)
- Use with different speed sensors (optional)
- Possibility to install fill level sensors (on each implement separately)
- Pre-metering function
- Possibility to install a calibration button

## ITEMS INCLUDED WITH ACCESSORIES KIT

- Control Box 5.7
- Power supply cable AP 8 m
- Hinged support arm (RAM)
- C ball (RAM)
- Spare fuse
- Operating manual

## TIP

To be able to operate two Multi-Metering Systems with Control Box 5.7, an adapter cable (available as an accessory) is required.

"Together with my cultivator, the MDP is the perfect combination for the cultivation of catch crops."

*Martin Doninger, farmer*





# SENSORS



## GPSa SENSOR (ACCESSORIES KIT)<sup>1</sup>



The GPSa sensor transmits the current vehicle speed to the control module. The current speed is measured through the combination of a GPS and a 3D acceleration sensor.  
Cable length: 5 m



## RADAR SENSOR MX 35 (ACCESSORIES KIT)<sup>1</sup>



The radar sensor sends information on the speed of the vehicle to the control box. The control box automatically regulates the rotational speed of the seeding shaft and therefore the spread rate.  
Cable length: 5 m



## WHEEL SENSOR (ACCESSORIES KIT)<sup>1</sup>



The wheel sensor records the forward speed. The sensor is firmly attached to the frame and can detect both the supplied magnets and bolt heads, wheel studs, etc. on the rim of the wheel.  
Mounting examples: Spike wheel on seeders, depth control wheels, tractor wheels.  
Cable length: 5 m



## 7-PIN SIGNAL CABLE<sup>1</sup>



With proper tractor cabling for the signal socket, the forward speed and the lifting unit signal are taken from the tractor and displayed on the control box.  
Cable length: 1.5 m



## TRACTOR LINKAGE UPPER BAR SENSOR (ACCESSORIES KIT)



Ideally suited for 3-point hitch implements. For mounting in a second top link hole.  
Function: Mechanical actuation of a sensor spring.  
The rotation of seeding shaft is then automatically started or stopped (reversible).  
Cable length: 3 m



## TRACTOR LINKAGE LOWER BAR SENSOR (ACCESSORIES KIT)



For mounting on moving parts on the headlands.  
Operating mode: Contactless with a magnet. The rotation of seeding shaft is then automatically started or stopped (reversible).  
Cable length: 5 m



## TRACTOR LINKAGE PULL SWITCH SENSOR (ACCESSORIES KIT)



For mounting on the 3-point linkage or on moving parts on the headlands.  
Function: Actuation by pulling a spring. The rotation of seeding shaft is then automatically started or stopped (reversible).  
Cable length: 5 m



## INDUCTIVE TRACTOR LINKAGE SENSOR (ACCESSORIES KIT)



For mounting on moving parts on the headlands.  
Operating principle: contactless, can detect metal. The rotation of seeding shaft is then automatically started or stopped (reversible).  
Cable length: 12 m

<sup>1</sup> This sensor is also available as a set with the APV lifting unit sensors (top link, running gear, pull switch and inductive).



# SENSORS



## CABLE EXTENSION SENSORS MX



If the length of the sensor cable is not sufficient, this can be used to extend it.  
Cable length: 2 or 5 m



## SPLITTER CABLE



Required for the combined use of the speed sensor and lifting unit sensor!  
Cable length: 1 m

"I seeded 140 ha of catch crops with the catch crop seeder from APV. The precise spreading and distribution accuracy was great and the germination of the catch crops was excellent."

*Torsten Prael, farmer*



"The ground speed-related operation of a disc spreader is a huge relief for me with the precise spreading of my slug pellets."

*Michael Wiesbeck, farmer*





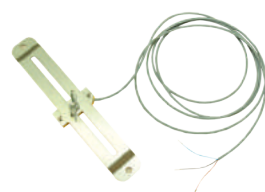
# ACCESSORIES

## + CALIBRATION BUTTON



The calibration button makes the calibration procedure much easier and can be attached to the implement in almost any position due to the integrated magnets. Residual emptying of the implement can also be performed using the calibration button.  
Cable length: 1 m

## + FILL LEVEL SENSOR



The fill level sensor triggers an alarm on the control box when there is not enough seed in the hopper.  
Cable length: 2 m

## + CABLE EXTENSION PS MX 2 M OR 5 M



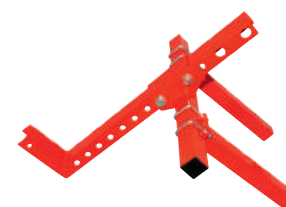
Cable extension for connecting the implement to the control box.  
Cable length: 2 m or 5 m

## + PRECISION SPREADING PLATE FOR MDS



The precision spreading plate is used to effectively limit the spreading width to 1-4 metres.

## + MOUNTING KITS



Various mounting kits for quad bikes, trailer coupling and tailboard (pick-up) are available upon request.

## + MODULAR IMPLEMENT EXTENSIONS



To convert the Multi-Metering System from one type to another, we offer the following modular implement extensions.

- Disc spreader accessories kit (on MDS)
- 2 outlets accessories kit (on MDG)
- 6 outlets accessories kit (on MDP)
- Electric fan accessories kit (on MDP)

**"Due to purchasing the MDP and the disc spreader kit, I saved myself the purchase of an additional slug pellet spreader. The conversion from one version to the other just takes a few minutes. The distribution is great for both types, and the calibration settings are really simple and quick to perform."**

*Gerhard Toifl, farmer*





# PRODUCT OVERVIEW

## GRASSLAND



GRASSLAND HARROW



GRASSLAND PRO HARROW



GRASSLAND COMBINATION

## SNOW AND ICE REMOVAL



GRASSLAND ROLLER



SNOW AND ICE REMOVAL



## Company history

### From user to entrepreneur

It has been clear to Jürgen Schöls right from the start that he loves agriculture. This is why he took over the family farm and is still working it today. As a farmer and handyman, he continued developing his single-disc spreader in 1997. He recognised that his optimisation had potential and founded APV - Technische Produkte GmbH.

The first APV implements were hand-made by the young entrepreneur himself, and today he has 100 employees. The entire company works under the motto: EVERYTHING IS POSSIBLE! Giving, and then giving some more, and good things will come back! The dynamic company questions everything, takes nothing for granted, and optimised good existing concepts.

**"Every modern farmer uses APV technology on his farm".**

*The Managing Director's vision:*

More information on our homepage at [www.apv.at](http://www.apv.at).

## SOIL TILLAGE AND SEEDING



SINGLE DISC SPREADER



PNEUMATIC SEEDER



MACHINE CARRIER



ROTARY HOE



TWIN DISC SPREADER



MULTI-METERING SYSTEM



TINED WEEDER



# *Innovations for the Future*

*- Since 1997 -*



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