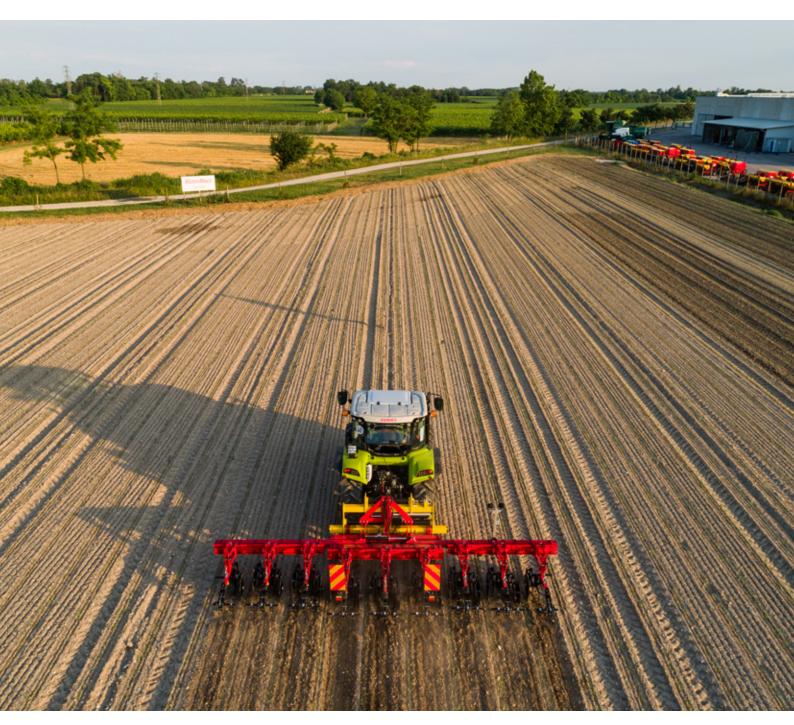
Weeders UNICA

# MaterMacc

# Compact, reliable and versatile



# Compact, reliable and versatile



4-5

The quest for efficiency while respecting the environment.

MaterMacc weeders are designed to be compact and structured, with a centre of gravity close to the tractor, making them "light". Adapting to customers' needs remains a must for our company: to this end, we offer a wide choice of fixed, manual or hydraulically folding chassis. What's more, the weeder can be fitted with special weeding attachments, or existing attachments can be supplemented with a range of accessories to suit your needs.

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#### UNICA - Compact, reliable and versatile

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All specifications, dimensions, weights, power, etc. and images are approximate and non-contractual. The characteristics of the equipment shown are not specific to each country and may also represent equipment which is not available as standard and which is not available in all countries. Your trusted MaterMacc distributor will provide you with all the necessary information.

# The best weeding for soil that pays you back



# One weeder, many strengths

MaterMacc weeders are designed for mechanical inter-row weeding, in-row fertilisation and preparation for irrigation - prepared soil means less water evaporation and consequently greater absorption by the plant root - they are distinguished by:

- Compactness of the machine that reduces the overhanging weight of the tractor.
- The absence of welding points in the structure of the element enhances its strength qualities, which are particularly appreciated in the most difficult soils.
- Robust and efficient parallelogram, the same applied on MS series seed drills.
- Simple and accurate construction and working depth adjustment
- Versatility of usable combinations, special elements and adaptable frames: manual folding, hydraulic folding, fixed and fixed trailed.
- In addition to the possibility of spreading granular fertiliser by means of a volumetric metering unit, it is

- also possible to bury it close to the plant.
- It works with common row spacers and is also available in an EasySet version to manage several crops with one machine.
- Can be applied with a road transport trolley for larger frames.
- Various fertiliser storage systems with mechanical or electric drive as an option.
- Machine suitable for those who choose organic farming.

# Weeders







#### The focus on organic

Organic cultivation involves the use of cultivation practices that do not use herbicides and one of these is mechanical weed control. To this end, weeding is the operation that allows a more extensive control of weeds over time, as it can eliminate them in more advanced stages of growth.

Also to be considered is the advantage of aerating the soil, which preserves humidity and promotes root development.

#### Agronomic advantages

- Weeding the inter-row strip improves growing conditions for crops
- Breaking up the surface crust increases gas exchange at root level to the benefit of crop development
- The slight suckering created on the surface has a mulching function and reduces water loss through evaporation by keeping it in the underlying layers
- In the long run, chemical weeding selects resistant weed populations that can be effectively controlled by weeding

# Weeders





# Construction features and models



Spreader adjustment with volumetric distributor. The VARIOVOLUMEX fertiliser spreader is a system for gravity-fed fertiliser falling onto the rows, usually by scattering, by means of adjustable hoses. It can be supplemented with a pneumatic system for transport over the outer rows. Adjustment is made by turning the knob under the hopper. The distribution is controlled as standard by a toothed wheel on the ground, which drives a mechanical transmission, or by rubberised wheels with counterframe for the PVI version. An electric version is also available.





# Weeding elements

- Mounted on a robust parallelogram
- Simple and convenient depth adjustment for the operator
- Wide range of integration tools





#### Unica PVI

Weeder with vertical hydraulic folding frame, intended for farmers who need to move frequently by road or from one field to another. Road width 2.55 meters.

- 6- to 12-row versions for 45-50 cm row spacing
- 4- to 8-row versions for 70-75-80 cm row spacing
- «Super» version with 12 rows with 70 cm spacing and road size: 4.4 meters

#### Unica PM

Weeder with manual folding frame, intended for small and medium-sized farms. Folding with an appropriate lever allows the element to be brought into transport position without requiring effort from the operator. Road width 2.5 meters.

- 6-row versions for 45-50 cm row spacing
- 4-row versions for 70-75-80 cm row spacing





#### Unica F

Weeder with fixed frame, intended for those farms where road transport is not a problem. This model is appreciated for its simple construction and compactness.

- 4- to 8-row versions for 45 cm row spacing
- 3- to 8-row versions for 75 cm row spacing

#### Unica Super-L

Weeder with double fixed frame, designed for large farms. It can be equipped with a road transport trolley with a road transportation of just over 3 metres.

■ Unica Super-L: 16 rows for 70 cm spacing

# Easy row spacing setting with Easy-Set



#### Several weeders in one!

It is possible to differentiate your weeder with the Easy-Set system that allows easy setting of the desired row spacing and to have several weeders in one. A few simple customisations make it possible to own up to 3 different machines by purchasing one frame. In this way, the machine will be suitable for weeding soya and maize, beet and sunflower.

#### With non-standard row spacings

In recent times they are increasingly practiced due to lack of water. The weeders can also be used at 60 cm in between twin rows (e.g. 15 cm spacing), maintaining the 3-spring hoeing unit. In such way the cultivated area is around 35-40 cm wide. Crops which are suited for twin seeding practice at 60 cm are, for instance: peas, field beans, sunflowers, rape, cotton.

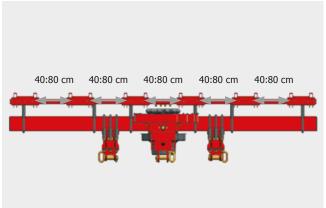
#### Weeding in twin rows

The Easy-Set version is particularly suitable for weeding after a twin-row sowing operation. In this way, the 75 cm weeder can also be adapted with a 3-spring element suitable for the mentioned quincunx and inter-row sowing. In this case the working area of the weeder will be more limited because, although the inter-row spacing is 75 cm, the free field between two twin rows is reduced. It is therefore recommended to use a three-spring element.

# **EASY-SET**







# Vertical folding frame with Easy-Set. Conversion example with 255/670 frame

|         | Inter-row | No. of springs for unit | Transformation | E. g. of application   | Fertilizer<br>adaptability |
|---------|-----------|-------------------------|----------------|------------------------|----------------------------|
| 8 rows  | 65-80 cm  | 5                       | Standard       | Corn                   | Suited                     |
| 8 rows  | 60 cm     | 4                       | Optional       | Sunflower or twin rows | Suited                     |
| 12 rows | 45-50 cm  | 3                       | Optional       | Soybean                | Suited                     |

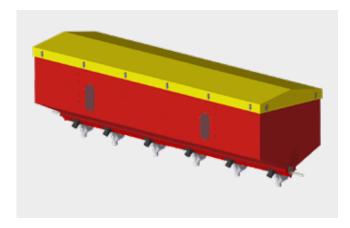
# Weeding and fertilization combined for the best control



#### Fertilizer tank

The Easy-Set versions with fertilizer, are supplied as standard with a pneumatic stainless steel MIDI tank. This system, in addition to being high-performing thanks to the pneumatic flow for each row, facilitates the transformation of the row cultivator when, for example, one passes from an 8x75 cm to a 12x45 cm one; as it is sufficient to add the hoses to the distribution heads and locate the drop point of the fertilizer on the plants.

#### **TANKS**





#### **VARIO** tank

Normally our fertilizer tanks are supplied with the variovolumex system. It means volumetrical dosers that, by gravity, brings the granular fertilizer above the crops in spreader action.

#### Pneumatic tank MIDI

The most professional is supplied with the MIDI tank completely build in stainless steel and with 2 volumetrical dosers who bring the granular fertilizer by a pneumatic system to each rows. This is more reliable in terms of distribution and omogeneity of the product distribution.





# Blow for external rows only

The 7 and 8 rows versions (70-80cm) supplied with the Vario tank above, have as standard a special fan who serve pneumatically the external rows to be sure that every rows get the right portion of fertilizer.

# Pneumatic transport on all rows

For the MIDI is used the biggest fan to get the best performance for each single row blowed.

# Accessories for every need



Every farmer has different needs. Our mission is meet this needs and solve them with the minimum sacrifice from the farmer in timing and economics terms. To do this is mandatory to offer various types of accessories that can satisfy those needs. Directly from the order, or fast to adapt after the order.







# Subframe with wheels

To improve the reliability of contact between the drive wheel and the ground.

# Crampon element

Recommended for very tenacious soils and a particularly tough surface crust.

#### Hoes and discs

For more restrained and controlled weeding while still being recommended for tenacious soils.

# **ACCESSORIES**







# **Protection discs**

Slight crust-breaking effect at plant edges. Not recommended where there is an extensive leaf wall on the surface.

# Side protectors

Swinging plant protector bulkheads to prevent soil from being deposited on top of the newly planted crops during cultivation.

# Adjustable divider

The effect is the opposite of the guards: it moves the earth towards the plants.







#### Tine harrow

Spring device to level the ground and expose the weeds to the sun.

# Weeding on the plant

Weeds the soil right up to the edge of the plant and is attached to a flexible apparatus to adapt to changing soil contours.

#### Fertiliser on furrow

It is mounted in alternating pairs - one element on and one element off - for even traction. It buries the fertiliser in a precise predetermined line.

# Systems for perfect fertilizer control



#### Fertilizer control system with MiPlus

The MiPlus distribution control system can also be used for fertilizer management. The system is very similar to that used for MS planters. The difference lies in the management of the electric motor (one or more) via a wheel sensor designed to distribute according to the set speed (DPA included). Optionally, it can be implemented with a GPS system instead of the wheel sensor. It is also possible to subscribe to the MM Connecta portal for remote data reading and information download. MaterMacc is one of the few companies in the world that can upgrade a weeder to be suitable for Agriculture 4.0, despite not being Isobus.

Requires wireless connectivity. Compatible with Android 7 and iOS 12 or higher. Tablet available as an option.





#### **Features**

- Distributed quantity control system with DPA
- Prestart/prestop included
- Job-adjustable dosing
- Partial and total counters
- Working speed and instantaneous productivity indicator
- Remaining productivity indicator (fertiliser reserve)
- Possibility of sequential exclusion of motors (manual function)
- Fan alarm (rpm control) for pneumatic versions
- Customer management (statistics)
- Motor overload alarm

#### Setting distribution

Some information on how to set up distribution with the new MiPlus fertilizer system:

- a) Setting granule size (or choice of existing product from list)
- b) Specific weight
- c) Setting dosage Kg/ha



# Technical data

| UNICA F           | 3 ROWS   | 4 ROWS      | 5 ROWS      | 6 ROWS      | 8 ROWS      |
|-------------------|----------|-------------|-------------|-------------|-------------|
| Row spacing       | 70-75 cm | 45-80 cm    | 45-75 cm    | 45-75 cm    | 45-75 cm    |
| Working width     | 250 cm   | 250-350 cm  | 300-400 cm  | 350-480 cm  | 450-630 cm  |
| Weight base       | 320 kg   | 355-375 kg  | 395-420 kg  | 450-480 kg  | 530-630 kg  |
| Weight with ferti | 450 kg   | 500-520 kg  | 550-570 kg  | 600-630 kg  | 680-1400 kg |
| Power request     | 30 hp    | 40 hp       | 40 hp       | 50 hp       | 50 hp       |
| Capacity ferti    | 215 l.   | 430-1000 l. | 430-1000 l. | 430-1000 l. | 860-1000 I. |

| UNICA PM          | 4 ROWS      | 6 ROWS     |
|-------------------|-------------|------------|
| Row spacing       | 70-75-80 cm | 45-50 cm   |
| Working width     | 250-330 cm  | 250-330 cm |
| Weight base       | 450 kg      | 470 kg     |
| Weight with ferti | 600 kg      | 620 kg     |
| Power request     | 50 hp       | 50 hp      |
| Capacity ferti    | 430-930 I.  | 430-930 l. |

| UNICA PVI         | 4 ROWS     | 6 ROWS     | 7 ROWS     | 8 ROWS     | 12 ROWS    |
|-------------------|------------|------------|------------|------------|------------|
|                   |            |            |            |            |            |
| Row spacing       | 70-80 cm   | 45-80 cm   | 45-75 cm   | 45-80 cm   | 45-50 cm   |
| Working width     | 255-350 cm | 255-510 cm | 255-555 cm | 255-670 cm | 255-670 cm |
| Weight base       | 650 kg     | 750 kg     | 810 kg     | 880 kg     | 1000 kg    |
| Weight with ferti | 820 kg     | 950 kg     | 1020 kg    | 1165 kg    | 1190 kg    |
| Power request     | 60 hp      | 70-80 hp   | 80 hp      | 90-100 hp  | 100 hp     |
| Capacity ferti    | 1000 I.    | 1000 l.    | 1000 l.    | 1000 l.    | 1000 I.    |

# **UNICA**

| UNICA SUPER-L     | 16 ROWS |
|-------------------|---------|
| Row spacing       | 70 cm   |
| Working width     | 1150 cm |
| Weight base       | 1980 kg |
| Weight with ferti | 2350 kg |
| Power request     | 150 hp  |
| Capacity ferti    | 2400 l. |

| UNICA PVI SUPER   | 12 ROWS    |
|-------------------|------------|
| Row spacing       | 70 cm      |
| Working width     | 440-860 cm |
| Weight base       | 1480 kg    |
| Weight with ferti | 1670 kg    |
| Power request     | 120 hp     |
| Capacity ferti    | 1280 I.    |

# MaterMacc





#### Our history

- MaterMacc was born in 1983 from the passion for agriculture and the constant search for new solutions for the agricultural world
- It specializes in the design and manufacture of pneumatic precision seed drills for traditional crops, as well as pneumatic and mechanical-pneumatic seed drills, no-till seed drills and weeders
- It also produces electronic equipment for the control and management of agricultural machinery and irrigation management tools
- Made in Italy technology and quality at the service of agriculture

#### Quality in weeding

- MaterMacc cultivators are created for inter-row mechanical weeding, fertilization on the rows and preparation for irrigation
- Maximum versatility with the patented Easy-Set system which gives the possibility of quickly changing row spacing. In this way the cultivator becomes practical to use even in case of crops with non-standard spacing
- We believe that the performance of our products and services means above all offering the customer the economic growth of his company over time, because his success is our success
- MaterMacc, Smart precision planters

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