

SEED DRILL FOR STRIP SEEDING

BEDNAR

MATADOR MO

Strip-tillage, fertilisation
and seeding in one pass



JOY OF FARMING



Modern farmer's seed drill



„We developed the MATADOR MO seed drill to help farmers achieve high yields in accordance with new legislative requirements. MATADOR MO brings many options for crop distribution and organisation – wide double rows, narrow double rows, single rows, all-area seeding or wide crop establishment. Crops established with MATADOR MO allow farmers to reduce or completely avoid the use of herbicides. Those are replaced with mechanical weeding.“

Jan Bednář



MATADOR MO is a strip-till seed drill that brings innovative and modern crop organisation. The layout of the loosening tines with 37.5 spacing is based on the new agronomic and legislative trends in withdrawal of herbicides at the expense of mechanical weeding. The distance of 37.5 cm with an option to lift-up every other tine enables crop organisation with an inter-row spacing of 75 cm.

The selected inter-row spacing (37.5 or 75 cm) combined with the row-distance arrangement of seeding bars make MATADOR MO the most versatile one-pass seed drill on the market. The machine offers a wide range of operational tests both for rapeseed where there are two options for double rows with nutrition provided by one fertilised strip and for cereals where all-area distribution of fertiliser is used. The tests prove the correctness of the selected technology.





MATADOR MO

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Why MATADOR MO?

TECHNICAL ADVANTAGES

- Pressurised hoppers for precise fertiliser and seed dosing – application of large doses at high accuracy independently of the seed/fertiliser size.
- Robust hydraulic auto-reset tine protection with a release force of 870 kg (max. lift height 30 cm).
- Hydraulically adjustable disc section behind the shares for cutting plant residues, crumbling and soil reconsolidation, or creating ridges in front of the individual rubber packer.
- Large tyre-packer (280/85 R20) – offset layout for better machine clearance and to prevent wave formation in front of the packer, easy tyre replacement when needed.
- Robust three-point hitch – optional connection to the BEDNAR CORSA CN / GIRONA GN seeding bar or for connection with precision planter.
- Machine control via BEDNAR EASY CONTROL software developed by BEDNAR developers – simple, easy and intuitive control.



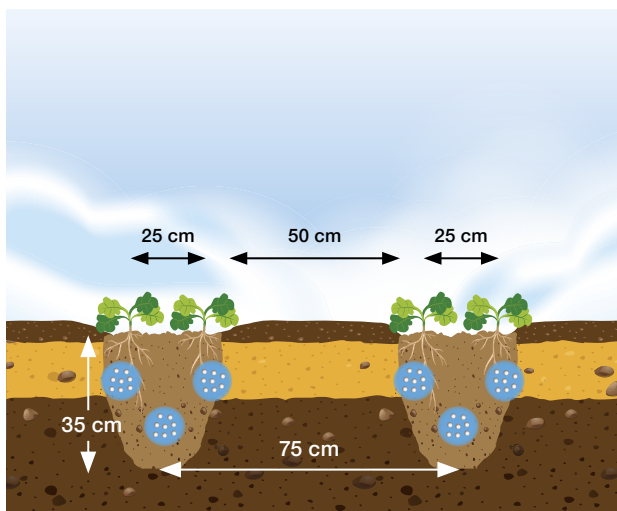
MATADOR MO

AGRONOMIC ADVANTAGES

- Soil loosening only in strips. Seeds have access to soil moisture.
- Plant nutrition at the first growth stages thanks to supplementary fertilisation – placement of mineral fertiliser into prepared strips, onto soil surface or together with the seeds.
- The layout of the loosening tine with 37.5 spacing is based on the new agronomic and legislative trends in withdrawal of herbicides at the expense of mechanical weeding.
- The distance of 37.5 cm with an option to lift-up every other tine enables crop organisation with an inter-row spacing of 75 cm.
- Seeding both main and auxiliary crops in one pass to eliminate weeds in the main crop and reduce herbicides use.
- Optional inter-row spacing of 12.5 cm or 25 cm.
- MATADOR MO can be used for direct drilling into a stubble field, seeding in minimum or conventional soil cultivation technologies.
- Creation of a strong root system capable of overwintering in the case of winter crops. You can still achieve a good yield in the case of long-lasting dry season.

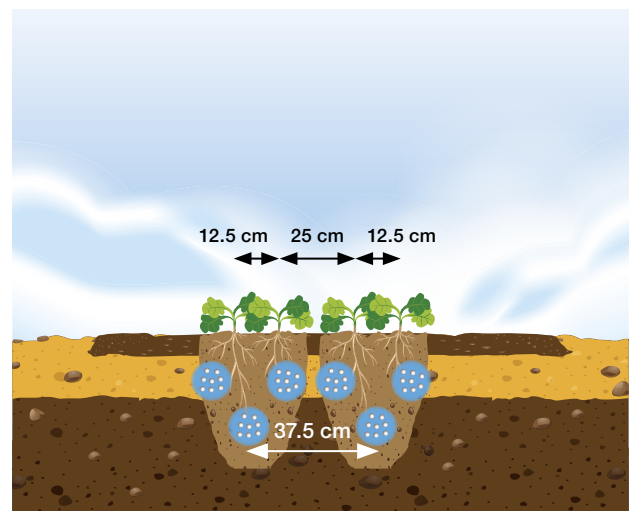
VARIOUS CROP ORGANISATION OPTIONS

The high variability and individual equipment options for the MATADOR MO seed drill allows for establishing crops with the following organisation:



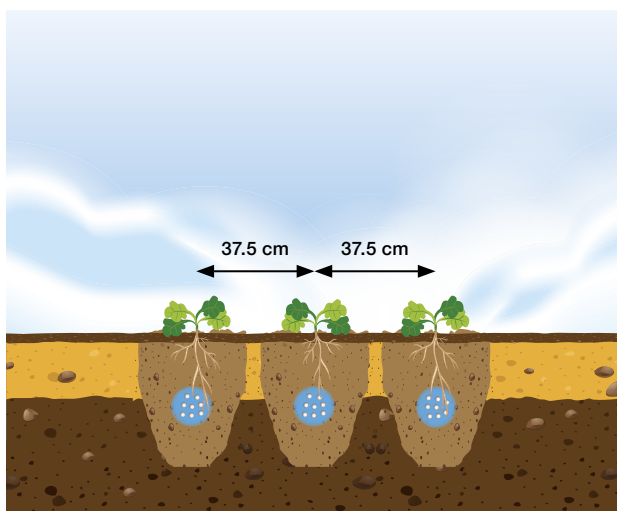
WIDE DOUBLE ROWS

The crop is established in double rows with an inter-row spacing of 25 cm. The double rows get nutrients from the central fertilised strips with a spacing of 75 cm. This crop organisation considerably reduces the power demand. This method allows establishing the main and the auxiliary crop in one pass.



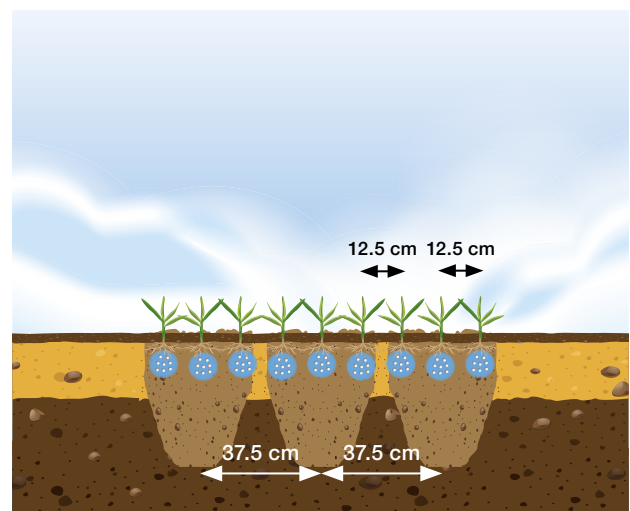
NARROW DOUBLE ROWS

The crop is established in double rows with an inter-row spacing of 12.5 cm. The double rows get nutrients from the fertilised strips with a spacing of 37.5 cm. This organisation allows for mechanical weeding.



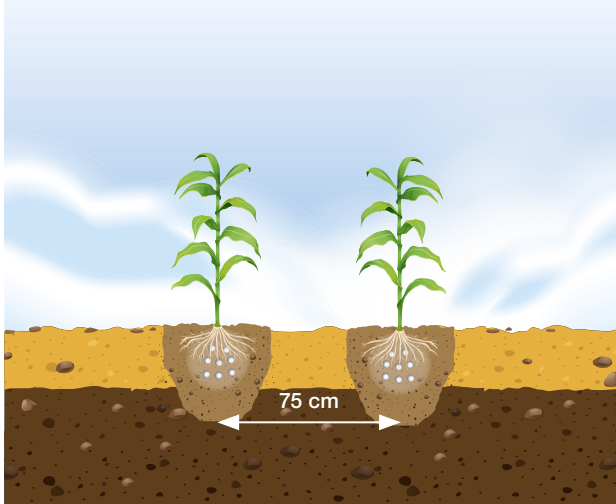
SINGLE ROWS

The crop is established in wide single rows with an inter-row spacing of 37.5 (35) cm. Each row gets nutrients from the fertilised strip with a spacing of 37.5 (35) cm.



ALL-AREA SEEDING

All-area seeding with an inter-row distance of 12.5 cm or 25 cm with the CORSA CN seeding bar and simultaneous fertilisation of the soil profile.



WIDE-ROW CROPS

The MATADOR MO seed drill can be equipped with a precision planter, e.g., for corn. The tine section offers the option of fertilising the soil profile in strips with a spacing of 75 (70) cm.



Crop weeding (e.g., rape established in double rows) can be a considerable intensifying factor of the entire technology, especially when executed with a weeding cultivator that allows for supplementary fertilisation or strip spraying.

Reducing the chemicals use is another significant positive feature of the described technology, since the crop can be protected with herbicides only in one third of the field using strip spraying.

VARIOUS CROP ORGANISATION OPTIONS



EXAMPLE OF WINTER RAPE ESTABLISHED IN STUBBLE FIELD AFTER WINTER WHEAT HARVEST

- Winter rapeseed yield 3.6 t/ha
- Seed drill: MO 6000
- Seeding depth: 2 cm
- Working speed: 12 km/h



EXAMPLE OF WINTER RAPE ESTABLISHED IN PREPARED SOIL

- Winter rapeseed yield 4.2 t/ha
- Seed drill: MO 6000
- Seeding depth: 2 cm
- Working speed: 12 km/h



EXAMPLE OF WINTER WHEAT ESTABLISHED IN PREPARED SOIL

- Winter wheat yield 8.4 t/ha
- Seed drill: MO 6000
- Seeding depth: 3 cm
- Working speed: 12 km/h



EXAMPLE OF DIRECT DRILLING OF MAIZE FOR SILAGE

- Silage corn yield 52 t/ha
- Seed drill: MO 6000
- Seeding depth: 4 cm
- Working speed: 8 km/h

IMPORTANT WORKING PARTS



FRONT SUPPORT WHEELS

Support wheels are used to stabilise the seed drill. They enable the side frames to be stabilised and the set working depth to be maintained. Hydraulically or mechanically adjustable support wheels are available.



HYDRAULICALLY ADJUSTABLE DRAWBAR

The hydraulically adjustable drawbar makes it easy to connect the machine to various tractor hitch types while keeping the ability to perfectly contour terrain.

For example, when the K80 hitch, the function of terrain contouring is preserved despite the fixed point on the tractor.



HYDRAULIC AUTO-RESET TINE PROTECTION

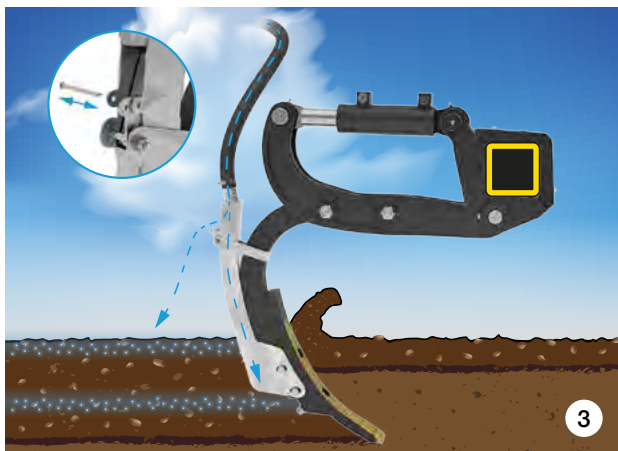
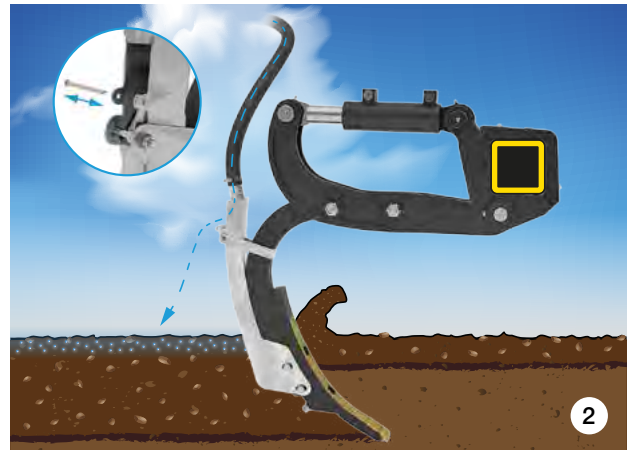
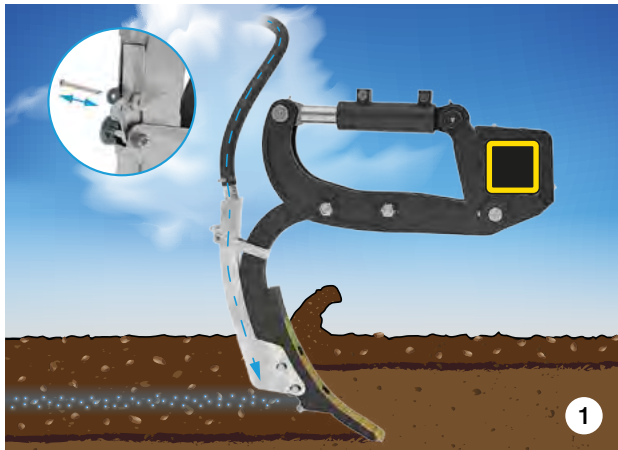
The basic equipment of the machine includes hydraulic AUTO-RESET tine protection (max. release force 870 kg, max. lift height 30 cm).

The protection uses massive cast-iron mounting on the seed drill frames.

IMPORTANT WORKING PARTS

SUPPLEMENTARY FERTILISATION SYSTEM

Each tine is fitted with applicator spouts pieces for fertiliser distribution. The applicator spout makes it possible to place fertiliser in the soil profile or onto the soil surface.



1 – Fertiliser placement in soil profile

2 – Fertiliser placement onto soil surface

3 – Fertiliser placement onto soil surface and in soil profile

LONG LIFE POINT 40 MM

For deeper loosening (up to 35 cm) with lower mixing intensity, the MATADOR seed drill can be equipped with LONG LIFE points with a width of 40 mm.



LONG LIFE POINT 80 MM

For standard loosening depth between 20 and 30 cm with higher intensity, the seed drill is equipped with LONG LIFE points with a width of 80 mm.



REAR ACCESSORIES

The rear accessories are hydraulically adjustable. The set depth is secured using spacers. Discs/coulters are used to cut plant residues, crumble and perform soil reconsolidation, or create ridges in front of the individual rubber packer. A wide range of discs/coulters blades allows the machine to be adapted to any conditions.



Levelling discs (smooth)

Used for levelling the surface before the individual rubber packer or for ridging (depending on the setting) The working depth of the section is adjusted hydraulically from the tractor cab. The disc spacing is 35 or 37.5 cm.



PROFI coulters

PROFI coulters are specially shaped discs with a diameter of 400 mm, offering an excellent crumbling effect. They are suitable for high-quality tillage of heavy soils. The spacing of PROFI coulters is 12.5 or 16.7 cm.



TURBO coulters

TURBO coulters are sharp discs with a diameter of 400 mm. The function of TURBO coulters is to cut through plant mulch and soil. The coulter spacing is 12.5 or 16.7 cm.



„I have been using **BEDNAR** machines for ten years. They have always excelled in functionality, durability and excellent work in the field. I purchased **MATADOR MO 6000** after a demonstration at my farm and having ten-year-long experience with the **OMEGA 3000 L** seed drill; I seeded about 4.000 hectares with that machine over the time.

Łukasz Miłoszewski, the owner
GR Miłoszewscy | Poland

IMPORTANT WORKING PARTS



SOIL CONSOLIDATION

The MATADOR MO seed drill is equipped with a unique tyre-packer arranged in two rows (offset layout). The tyre dimensions are 280/85 R20. The design is based on excellent experience with the offset packer used in OMEGA seed drills.

The offset tyre-packer perfectly consolidates, levels the soil and provides a smooth and stable passing of the machine across the field and on roads.

The independently mounted wheels are an advantage – each wheel has its own hub that lets it turn independently at its own speed. This design improves manoeuvrability of the machine when turning at headland.

UNDISPUTED ADVANTAGES OF THE OFFSET LAYOUT VERIFIED IN PRACTICE:

1. Significantly higher off-road capability compared to tires arranged in a single row.
2. Reduction of rolling resistance = reduction of power demand.
3. Independent wheel mounting = easy replacement in case of puncture.
4. Double row arrangement = excellent self-cleaning effect.



SPRING-LOADED CENTRAL PART OF THE TYRE PACKER

The central part of the tyre packer is suspended using a spring (patented design). This design increases the comfort when transporting the machine on roads and reduces the pressure on the frames when the hoppers are full.



THREE-POINT HITCH

The rear part of the seed drill is equipped with a three-point hitch, category III. This hitch is used for connecting the MATADOR MO seed drill to the BEDNAR CORSA CN / GIRONA GN seeding bar or precision planter.

Maximum three-point hitch lifting capacity: 4.000 kg.

To maintain the required spacing when establishing double row crops, the three-point hitch hooks can be moved to the sides by 6.25 cm.



IMPORTANT WORKING PARTS



DOUBLE-CHAMBER PRESSURISED HOPPERS FOR ALL MATADOR MO MODELS

The first BEDNAR seed drill models used non-pressurised hoppers. However, practice has clearly shown the advantages of the pressurised hoppers over non-pressurised ones. Today, all seed drills, mounted hoppers and BEDNAR carts are equipped with pressurised chambers. And the same applies to the MATADOR MO strip-till drill.

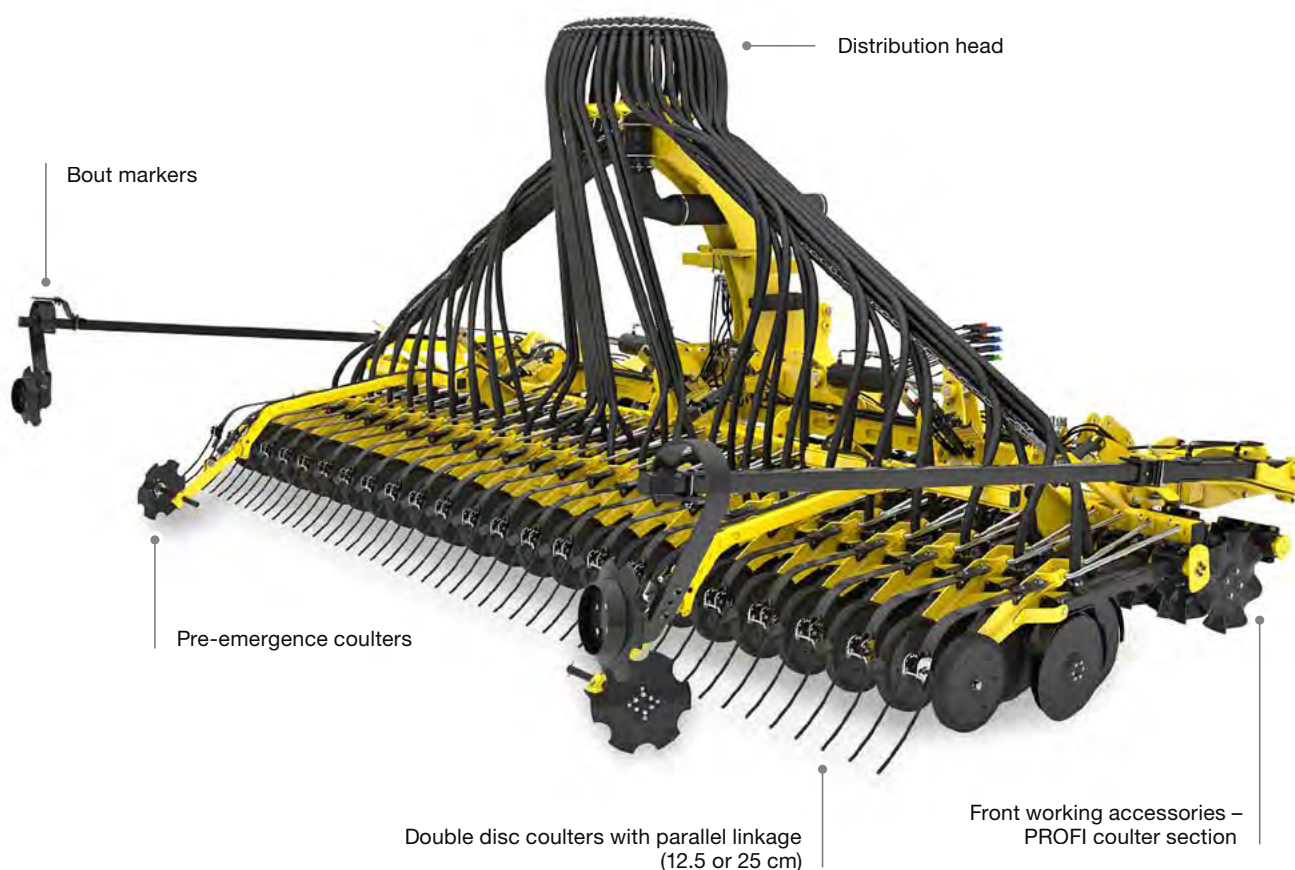
Main advantages of pressurised systems (hoppers):

1. Air pressure in the pipeline below the metering units does not need to be reduced to the atmospheric pressure level – in non-pressurised systems, it is done using a diffuser, or pipeline narrowing that reduces air flow and decreases the maximum seed (fertiliser) quantity that can be „blown“ through. It is thus possible to dose larger quantities with a higher precision with pressurised hoppers.
2. It does not require resolving the changes in the dosing air system layout – e.g., by closing a half of the outlets when seeding every other row – the unpressurised hopper is very sensitive and seeding every other row may cause incorrect dosing (pressure under the metering unit changes).



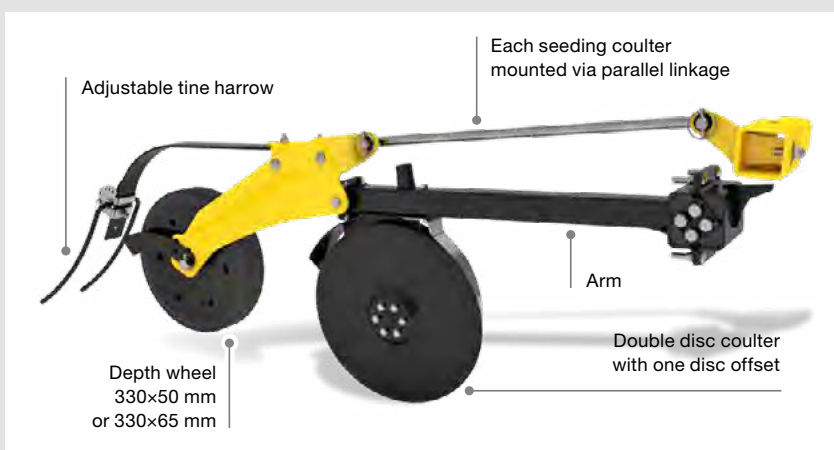
CORSA CN DISC SEEDING BAR

The BEDNAR CORSA CN seed bar is a versatile seed bar with a working width of 4.5 m or 6 m, which is attached to the three-point hitch of the MATADOR MO seed drill for connection to the seed drill. The seed bar is fitted as standard with double disc seeding coulters featuring the PSP system (parallel linkage) for each coulters, ensuring high-quality and uniform crop establishment. The seed bar can be fitted with one of four types of front working attachments.



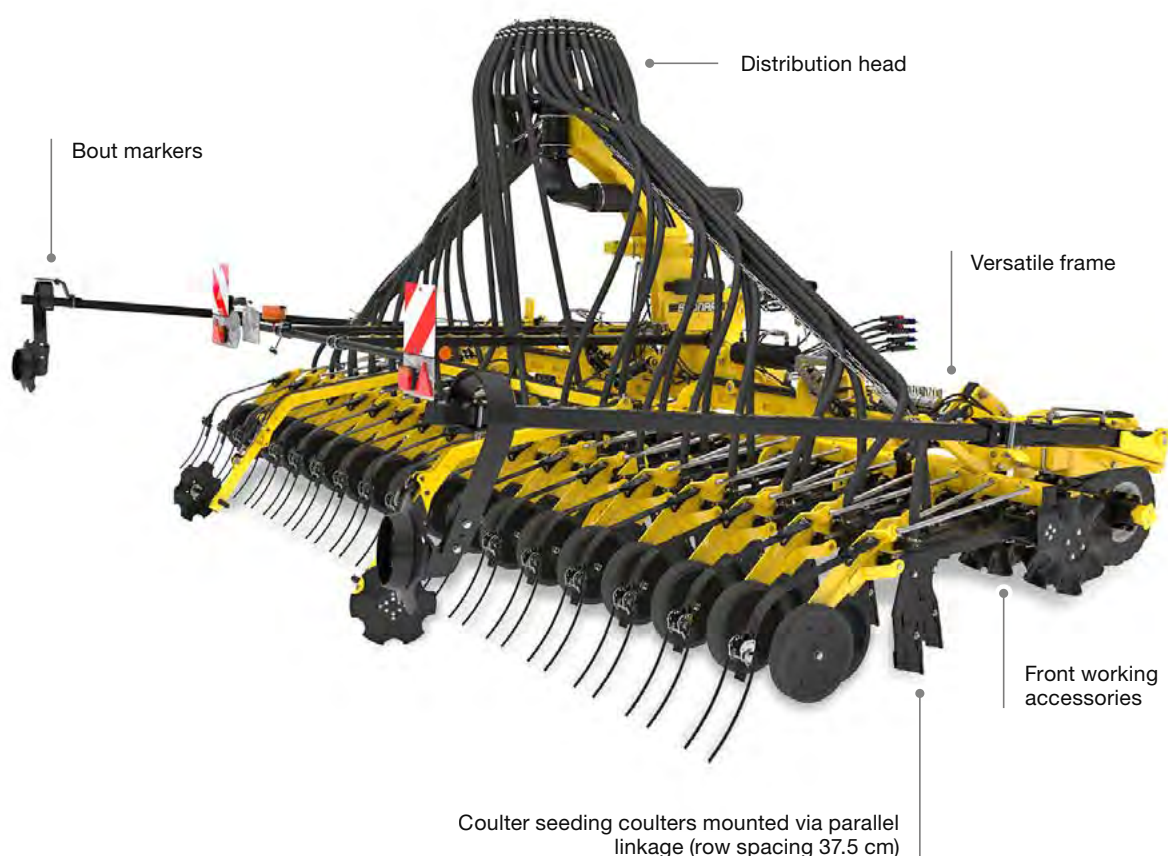
ROW SPACING OF SEEDING COULTERS

The CORSA CN offers a wide range of row spacing options. Standard row spacings of 12.5 cm, 25 cm and 37.5 cm can be used. With the MATADOR MO machine, crops can also be reliably seeded in two rows with a spacing of 12–25 cm or 25–50 cm.



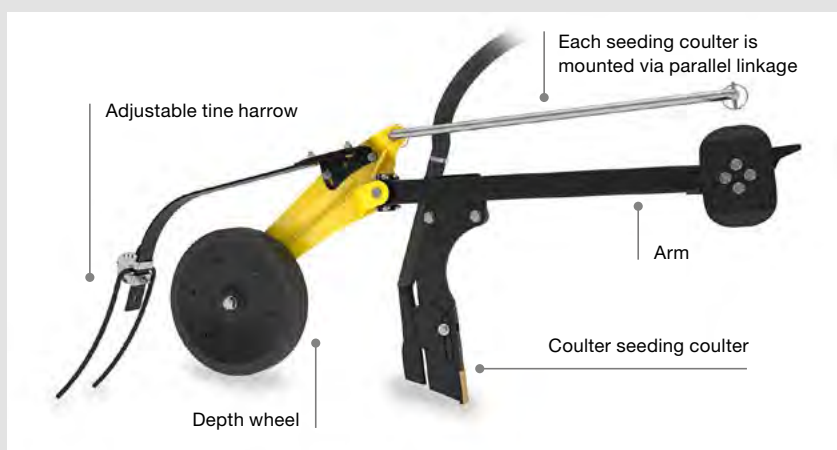
GIRONA GN SEED BAR

The BEDNAR GIRONA GN seed bar is a versatile seed bar with a working width of 4.5 m or 6 m, which is attached to the three-point hitch of the MATADOR MO seed drill for connection. The coulters are fitted as standard with seeding coulters featuring the PSP system. The coulters are suitable for conditions with a large amount of crop residues and heavier soils. The coulters bar can be fitted with one of four types of front working attachments.

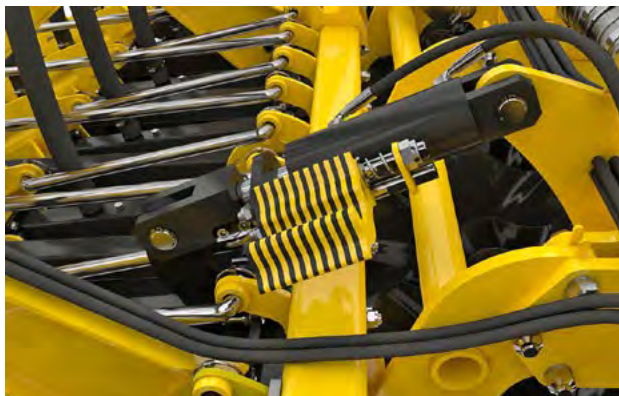


ROW SPACING OF SEEDING COULTERS

The coulters bar allows seeding in rows with a spacing of 37.5 cm. Thanks to the coulters seeding coulters, seeding is possible even in heavier soils or in soils covered with a large amount of crop residues.



IMPORTANT WORKING PARTS



HYDRAULIC SETTING OF THE DRILL COULTER PRESSURE

The drill coulters pressure is set using hydraulic cylinders that are connected to the machine frame and drill coulters. The hydraulic cylinder position is secured with hydroclips.



HYDRAULIC SETTING OF THE SEEDING DEPTH

The seeding depth is set by pressurising the respective hydraulic circuit. The shorter the piston rod is, the deeper the drill coulters work. On the other hand, the drill coulters are lifted when the piston rod extends. The hydraulic cylinder position is secured with hydroclips.



OPTIONAL FRONT EQUIPMENT



FRONT CRUSHBAR LEVELLING BAR

The Crushbar paddle levelling board is used for initial levelling of the coarse furrow and terrain unevenness. The levelling board angle can be changed hydraulically during work from the tractor cabin.



TYRE FRONTPACK

The Frontpack with a diameter of 390 mm ensures even soil profile levelling and reverse soil consolidation before the drill coulters.



TURBO COULTER WORKING SECTION

TURBO coulters are sharp discs with a diameter of 400 mm. The TURBO coulter cuts crop mulch and soil. TURBO coulters work in the same line as the rear drill coulters. The coulter spacing is 12.5 cm.

The TURBO coulter pressure can be changed hydraulically during work from the tractor cabin.



PROFI COULTER WORKING SECTION

PROFI coulters are specially shaped discs with a diameter of 400 mm, offering an excellent crumbling effect. They are suitable for quality cultivation of heavy soils. The coulter spacing is 12.5 cm.

The PROFİ coulter pressure can be changed hydraulically during work from the tractor cabin.



MACHINE CONTROL AND SETTINGS



SIMPLE CONTROL, INCLUDING ISOBUS

Seed drills can be controlled by the ISOBUS system. If the tractor is not equipped with ISOBUS, the machine can be controlled using the following terminals.

Own control software – created on the basis of experience and requirements of operators and users. The MATADOR MO seed drill is equipped with control software developed by BEDNAR developers.

The software offers a well-arranged, easy and intuitive seed drill control. If the seed drill is equipped with the ALFA 400 seeding unit, the seeding unit control is completely integrated into one system (no other monitors are needed).



SMART 570 TERMINAL

- Economical and easily controllable option for controlling seed drills.
- Easy and fast installation of the terminal in the tractor cabin.
- The terminal is equipped with a 5.7" coloured display that provides all the information in a well-arranged manner.
- Functions can also be controlled with the keys on the right side of the display or with a rotary control.

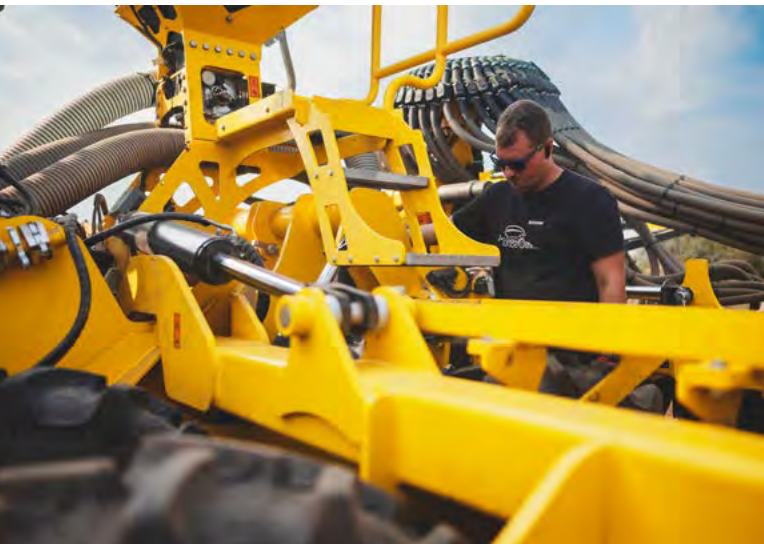


ME TOUCH 800 TERMINAL

- A terminal equipped with a touch display.
- The terminal is equipped with a dual 8" TFT touch display.
- The touch film is placed behind protective glass, which makes this terminal perfect for the rough agricultural environment.
- This alternative allows displaying the „main screen“ and the „header screen“ at the same time thanks to the high resolution.
- The TOUCH 800 terminal support the functions of precise farming, such as Section Control, Variable Rate Control, Task Controller, FieldNAV (easy machine navigation in the field)*.
- To make it more convenient for the operator, the TOUCH 800 terminal can be extended with a series of accessories, such as cameras etc.*

* Some functions are available for an additional charge and may require additional accessories. If interested, contact your dealer.

MACHINE CONTROL AND SETTINGS



EASY AND CONVENIENT CALIBRATION WITH HOPPER EMPTYING

The seeding/fertiliser calibration is done in the rear part of the seed drill, in an easily accessible place – there is no need for complicated calibration under the metering unit. A highly convenient and well accessible place for the operator.

Also, any unused seeds or fertiliser can be emptied in the rear part from the hopper back into big bags.



EFFICIENT AND PRECISE METERING UNIT

The metering unit of the MATADOR MO seed drills is made of stainless steel and driven by an electric motor. The stainless configuration guarantees a very long service life when compared with the frequently used plastic version.

The metering unit is capable of dosing the seeds precisely within the range from 0.6 to 350 kg/ha.

The system is equipped with a discharge gate for thorough emptying of the hopper. The gate is also used for easy replacement of the seeding roller.

The metering unit includes an agitator for better seed throughput.



SEEDING ROLLERS

The basic equipment of the MATADOR MO seed drills includes two types of seeding rollers (one for fine seeds, such as rapeseed, the other for cereals).

The extended BEDNAR portfolio includes a total of sixteen seeding rollers from 7 cm³ to 890 cm³ see p. 30.



FARM LINK MOBILE APPLICATION

BEDNAR developers designed a mobile application that provides easy and simple calibration of the seed drill from your mobile phone. The mobile application includes a guide that helps with the right selection of the seeding roller based on the type of seeds/fertiliser, working speed and the required seeding amount.

The seed drill is connected with the mobile phone via a Wi-Fi module.



MACHINE CONTROL AND SETTINGS

PRE-EMERGENT MARKERS AND TRAMLINE

FLAPS:

- Symetric
- Asymetric

TRAMLINE FLAPS (SEEDS)

- Deactivation: asymetric 2×2 / 3×3
- Deactivation: symetric 2×2 / 3×3
- Deactivation: special 4×4 / 6×6

TRAMLINE FLAPS (FERTILISER)

- Deactivation: asymetric 2×1
- Deactivation: symetric 2×1



The MATADOR MO seed drill can be equipped with hydraulically controlled side markers when working without GPS.



ALFA SEEDER



ALFA 400 AS A PART OF MATADOR MO

The MATADOR MO seed drill can be equipped with the ALFA ALFA-DRILL 400 seeding unit. The ALFA seeding unit is pressurised. It can be controlled:

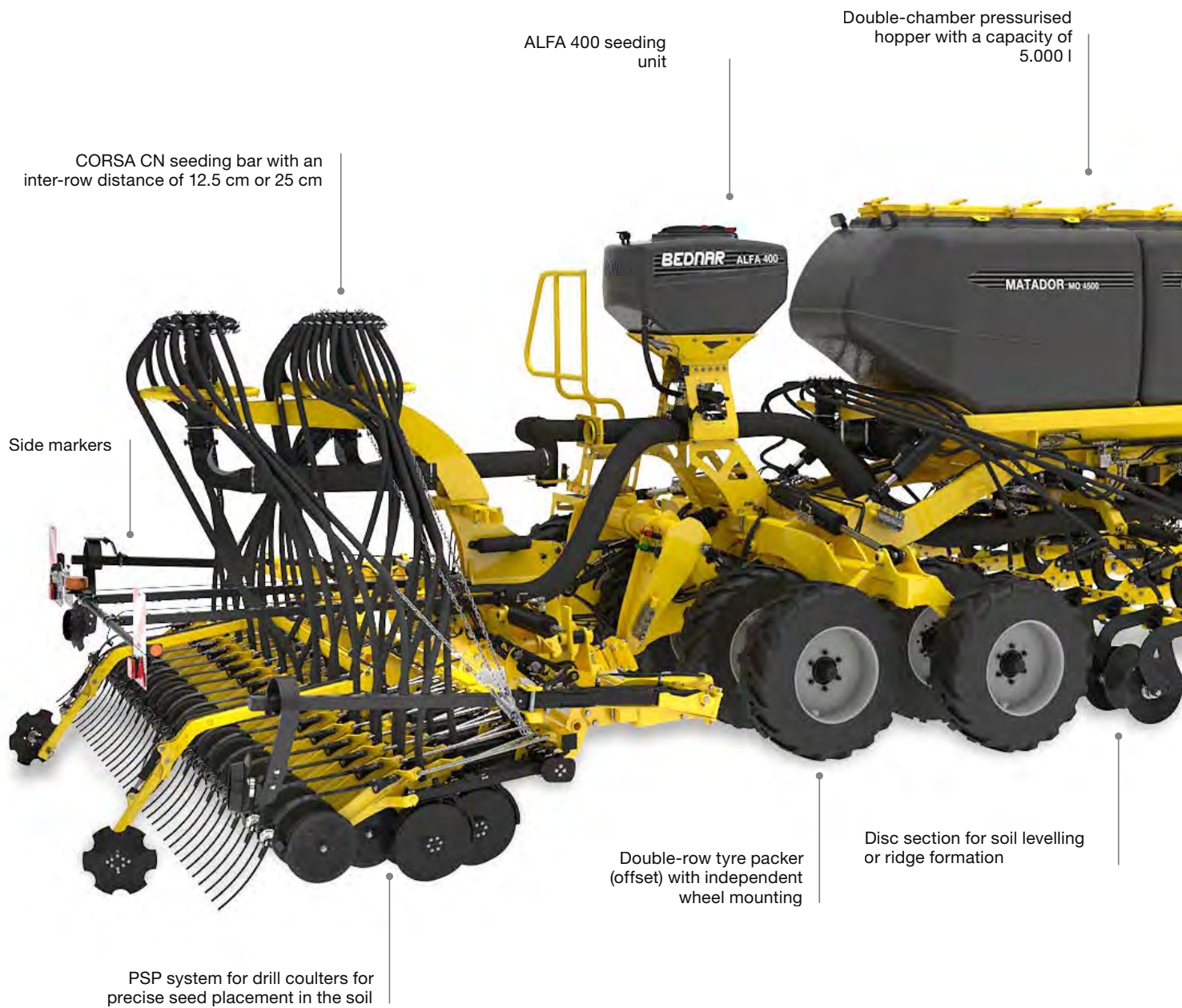
- via ISOBUS
- via terminal

The ALFA seeding unit can be controlled with the software available for the MATADOR MO seed drill. There is no need for another control monitor separate for the seeding unit in the tractor cabin.

MAIN ADVANTAGES OF THE ALFA 400 SEEDING UNIT

The combination of a seeding unit as a third hopper on a seed drill offers a bigger versatility in the use of the machine. Also, the seeding unit allows to respond to new agronomic trends in crop establishment, where it enables you to establish up to three types of crop, to apply fertiliser, micro-granulate, and to seed the catch crop.

BASIC DESCRIPTION



ALFA 400 seeding unit

Double-chamber pressurised hopper with a capacity of 5.000 l

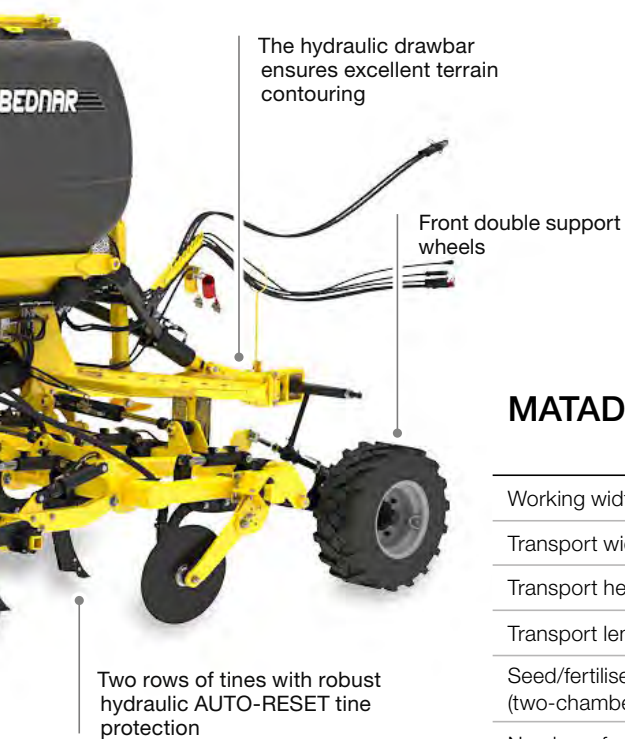
CORSА CN seeding bar with an inter-row distance of 12.5 cm or 25 cm

Side markers

PSP system for drill coulters for precise seed placement in the soil

Double-row tyre packer (offset) with independent wheel mounting

Disc section for soil levelling or ridge formation



MATADOR MO

		MO 4500	MO 6000
Working width	m	4.5	6
Transport width	m	3	3
Transport height	m	3	3.3
Transport length*	m	10.3	10.3
Seed/fertiliser hopper capacity (two-chamber hopper)	l	3.000/2.000	3.000/2.000
Number of coulters	pcs	12/6	16/8
Coulter spacing	cm	37.5/75 (35/70)	37.5/75 (35/70)
Roller diameter	cm	98	98
Tire size		280/85 R20	280/85 R20
Number of CORSA seeding coulters	pcs	36/26/18/12 – (24/12)	48/36/24/12 – (32/18)
Spacing of CORSA seeding coulters	cm	12.5/25/37.5 – (12.5-25-12.5/25-50-25)	12.5/25/37.5 – (12.5-25-12.5/25-50-25)
Number of GIRONA seeding coulters	pcs	12	16
Spacing of GIRONA seeding coulters	cm	37.5	37.5
Seeding coulter pressure	kg	130	130
Power demand *	HP	210–280	280–400
Total weight without the seeding section **	kg	7.800	8.900

* depending on equipment ** depends on soil conditions ** weight including (Alfa 400 to 350 kg)

Overview of Seeding Rollers

7 cm³



KM420007

Poppy seed, Rape

11 cm³



KM420011

Poppy seed, Rape,
Mustard

14 cm³



KM420014

Mustard, Rape

22 cm³



KM420022

Mustard, Rape

30 cm³



KM420030

Mustard, Rape,
Sunflower

50 cm³



KM420050

Mustard, Wheat, Grass,
Sunflower

75 cm³



KM420075

Wheat, Grass, Sunflower

100 cm³



KM420100

Wheat, Grass, Sunflower

145 cm³



KM420145

Wheat, Grass

150 cm³



KM420150

Barley, Wheat, Grass,
Rye

290 cm³



KM420290

Barley, Wheat, Grass,
Rye

305 cm³



KM420305

Barley, Wheat, Grass,
Rye

395 cm³



KM4204395

Pea, Barley, Wheat,
Grass, Rye

580 cm³



KM420580

Pea, Barley, Oat, Wheat,
Grass

790 cm³



KM420790

Pea, Barley, Oat, Wheat,
Grass

890 cm³



KM420890

Pea, Bean, Wheat



CHOOSE WHAT YOU NEED

tillage



SWIFTERDISC
Disc Cultivator



ATLAS
Disc Cultivator



FENIX
Tine Cultivator



VERSATILL
Tine Cultivator



SWIFTER
Seedbed Cultivator



KATOR
Rotary Harrow



TERRALAND
Chisel Plough



ACTROS
Combined Cultivator



GALAXY
Roller

seeding and fertilisation



OMEGA
Seed Drill



MATADOR
Seed Drill



DIRECTO
Seed Drill



FERTI-BOX
Front Hopper

inter-row cultivation / strip-till mulching



ROW-MASTER
Inter-row Cultivator



STRIP-MASTER
Strip-till Cultivator



STRIEGEL-PRO
Straw-harrow



MULCHER
Rotary Mulcher

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Your Authorized Dealer



EUROPEAN UNION
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Operational Programme Enterprise
and Innovations for Competitiveness



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