





BEDNAR

BEDNAR

# OMEGA OO\_L OO\_FL

Quality Crop Establishment under Any Conditions





## Why OMEGA?



"When designing the OMEGA seed drill, we put a lot of emphasis on a highly precise seed placement and perfect soil consolidation. These two basic objectives, together with the sufficient inter-space for growth, decide on the quality of the established crop with even emergence. Thanks to the coulter section, we managed to increase the quality of seedbed preparation enormously, especially in difficult conditions."

Jan Bednář

The OMEGA seed drills are reliable, versatile seed drills designed for establishing various crops in various conditions, both in relation to soil and moisture. The versatility of the OMEGA seed drill is a great benefit of the machine. Crop establishment is the basic building stone for a successful harvest. A balanced and vital stand with a good growth acceleration is something that every decent farmer wants. And it is what OMEGA provides.

#### The concept of the OMEGA mag drill can be

described easily and simply: it is an efficient mag drill that provides soil preparation, perfect material permeability, variable settings of all working parts with an excellent levelling and consolidation effect in front of two disc drill coulters, and precise mag placement thanks to the efficient, yet simple system of tracing drill coulters installed on a parallelogram. All of that comes with easy control and clear arrangement. This ensures quality maging under any conditions.



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## Why OMEGA?

#### **TECHNICAL ADVANTAGES**

- Hydraulic levelling bar Crushbar in front of the packers-levelling soil and shattering clods
- \_ Frontpack stabilizes the machine, improves surface copying and adherence to the set sowing depth
- Disc section with 460 × 5 mm discs for fine topsoil \_ loosening
- Additional fertilization in inter-row space, behind the disc section or together with the seed (OO\_FL model)
- The pneumatic offset packer significantly improves \_ stabilization of the machine during work and thus enables a higher working speed
- The drill coulters installed on a parallelogram \_ ensure precise seed placement
- Calibration and emptying of the machine are easy and convenient at the rear of the machine
- IsoBus connectivity

#### AGRONOMIC ADVANTAGES

- Inter-row spacing of 12.5 cm (or 16.7 cm)
- Precise seed placement thanks to the drill coulters installed on parallelogram (the PSP system) with high down pressure, resulting in even emergence of seeds over the entire area of the field
- Establishment of seeds in minimum tillage technology, conventional technology, or direct planting in a stubble field
- Planting various crops, from small seeds to beans
- Observance of agronomic deadlines thanks to the \_ high travel speed and high-capacity hoppers
- Crop nutrition at the beginning of vegetation thanks to additional fertilizer



#### DEMONSTRATION OF WINTER WHEAT ESTABLISHMENT

OMEGA OO 6000 Ferti seed drill Location: Panenské Břežany, Praha-východ Operating speed: 14 km/h Seeding depth: 3 cm

Seeding amount: 3.7 MKS/ha



## Why OMEGA?

#### **BENEFITS THAT MEAN SAVINGS**

- Quality soil processing in a single pass with precise crop establishment thanks to the individual working parts of the machine that prepare the field for the quality work of the drill coulters that place seeds at a precisely set depth.
- High operating speed: ensure the observance of the agronomic deadlines for crop establishment. The high operating speed (up to 17 km/h) is possible thanks to the perfect machine stability and a sophisticated seed batching system.
- Possibility to work under difficult conditions: the technical design of the Omega seed drill also allows working \_ under extreme conditions related to high moisture, drought, or a high amount of crop residue on the surface.
- Reduced number of passes: the machine is capable of achieving a high quality of work during the first pass. In many cases, it is possible to omit one of the commonly performed field operations, usually done prior to seeding.

#### **USE OMEGA FOR**

- Establishing crops in minimum tillage technologies with a higher amount of crop residue on the surface.
- Establishing crops in conventional technology (tillage). Seeding is possible directly into the rough furrow thanks to precise levelling and reverse soil consolidation.
- Establishing crops with seeding directly into the stubble field thanks to the two rows of discs.
- Trouble-free crop establishment in heavier and moister soils thanks to the option to deactivate working discs and to use working coulters-no clods. Increases quality of soil cultivation in dry conditions with concurrent use of discs and coulters.
- Planting any seeds, from poppy seeds to beans. \_
- Quality crop establishment, even under very complicated conditions. The Omega seed drill is also designed for highly rugged areas that require perfect tracing.

# OMEGA FL SEED DRILLS the variability of application and new agronomic possibilities reflect the current needs



Bednar FMT started to develop the OMEGA seed drill series in 2011, more than ten years ago. The objective was clearly defined from the very beginning: to build a machine that would meet the requirements of the most demanding customers and that would move the current situation in the field of seeding technology forward.

The technical design gradually took shape and the user comfort of the machines increased. Based on the requirements of the professional public, the technical designers designed the OMEGA OO\_FL machine. Their efforts resulted in a universal seed drill for disc soil cultivation and planting. It is a machine that expands the areas of possible application thanks to its sophisticated conception, thus allowing farmers to respond to the climate change, as well as to the changing requirements of modern farming.



At present, the requirements for crop establishment are developing dynamically and a lot of the current seeding technology can no longer respond to these trends fast enough. The development and availability of various navigation systems alone open a huge potential of numerous alternatives and combinations of seeding that the designers of the seed drills available on the market these days could not reckon with at the time of developing the machines.





In addition to the common all-area single-crop planting, the new OMEGA OO\_FL seed drill also provides additional fertilization with an inter-row spacing of 12.5 cm or 16.7 cm, both in the inter-row and by the Ferti and Grain system (mixed seeds and fertilizer). It is also easy to seed a single crop in a system with a larger inter-row spacing.

# New Agronomic Opportunities

#### SOWING THE MAIN CROP TOGETHER WITH THE SECONDARY CROP IN ONE PASS

Secondary crops are crops that support the development of the main crop, either directly or indirectly. At the same time, their long term effect can improve the condition of the soil environment, increase the ratio of organic mass, and thus better work with the limiting factors of the crop, such as moisture and nutrition of the main crop.



Stand of breadseed poppy with spring barley as a secondary crop-early phase (planted in every other row by OMEGA OO\_FL)





Stand of breadseed poppy with spring barley as a secondary crop-later phase



0.6 m

Entry of water into the soil profile in a field without barley seeds as secondary crop



0.6 m Entry of water into the soil profile in a field with barley seeds as secondary crop

When the seed drill is equipped with the additional Alfa seeding unit, it is possible to establish stands combined of up to three crops with the possibility to use drill coulters for seeding, or to do a target seed dispersal, either broad or in strips.

The expert public is starting to demand catch crop establishment in a wide-row culture as it helps to fight erosion, increases the number of harvests on an area unit, or increases the limit load of the field for the autumn harvest for practical reasons.









Combination of wheat and peasseeded every other line

Combination of grass and rye seeded every other line + clover seeded everywhere

Winter rape seeded into double row after Terrastrip soil preparation and fertiliser placement together with vetch intercrop seeded between double rows

Mixture of mustard and phacelia seeded in 25 cm rows—in one operation sown clover in 12.5 rows—every 75 cm ommited two lines of clover for spring maize seeding

# New Agronomic Opportunities



The double-row seeding technology is an interesting alternative for establishing the winter oilseed rape stands. This technology is based on two basic steps. The first procedure is deep cultivation with the placement of attractive fertilizer into the soil profile, using combination of Ferti-Cart FC 3500 and Terrastrip ZN 8/75 machines. It is a chisel plough designed for strip-till soil cultivation with working parts spaced at 75 cm.







Weeding can be a significant intensifying factor of the whole technology, especially when done using a weeding machine with the option of additional fertilizer or strip spraying. Reducing the total amount of chemical substances is another important benefit of the technology as it is only possible to treat the stand with herbicides by strip spraying on one third of the area.

Because it is a two-level technology, it is better to be used on heavier soils where the systems of soil cultivation with concurrent seeding have to deal with a significant clod formation and thus low quality crop establishment, which especially in dry summers prevents achieving a satisfying result.

The soil cultivation using Bednar technology is provided by a disc section and alternatively by a coulter section using the OMEGA seed drill.



## THE FLATNESS OF THE SURFACE IS THE BASIC PREREQUISITE FOR A SUCCESSFULLY ESTABLISHED STAND

Perfect soil levelling in front of the drill coulters is an important part of seeding. Soil has to be levelled before the transport rubber-tyred packer, especially when farming medium-heavy or heavier types of soil. Slight unevenness is levelling by the combination of the front Crushbar and Frontpack.



#### CRUSHBAR

Crushbar is a front, hydraulically-controlled levelling paddle bar that levelling soil and shattering clods. It is mounted in front of the disc section.



#### FRONTPACK

The Frontpack, a rubber-tyred packer, stabilizes the machine, improves surface copying and adherence to the set sowing depth. The Frontpack is made of tyres with a diameter of 710 mm.

The Frontpack keeps the whole machine perfectly level. The seed drill works on the Frontpack and transport rubbertyred packer. That makes the machine maximally stable and improves soil levelling and consolidation. The quality of seed placement is high quality thanks to the work with both packers.





The Frontpack is also very good for placing seeds in a higher quantity of the crop residue that stays on the surface after the maize. The packer presses the crop residue into the ground, thus significantly improving material permeability through the seed drill.

The Frontpack also works very well when seeding into a rough furrow.



#### HYDRAULICALLY ADJUSTABLE DRAWBAR

Increases the comfort of lifting and lowering the machine at headlands. The hydraulically adjustable tiller also allows the machine to be connected to various types of tractor linkage. For example, with the K 80 hitch, the machine's terrain copy function is maintained despite the fixed point on the tractor. Standing control is then easier—with only one hydraulic circuit.



## THE MAINTENANCE-FREE DISC WORKING SECTION ENSURES A HIGH QUALITY SOIL CULTIVATION BEFORE THE SEED PLACEMENT

The OMEGA seed drills are equipped with two rows of discs. The discs cut and mix crop residue with soil and prepare the topsoil so that the soil is properly aerated before reverse consolidation and precise seed placement. The discs also have a positive effect on levelling the field. The individual discs are placed independently and work on maintenance-free bearings.



HYDRAULIC CONTROL OF THE DISC SECTION

The disc working sections are hydraulically adjustable with the possibility to work with discs completely disengaged.



#### MASSIVE TRACK ERADICATORS

The new generation of the OMEGA machines is equipped with massive adjustable tractor track eradicators.



#### A-DISCS: A NEW LABOUR-QUALITY DIMENSION

A specifically shaped disc with a diameter of 460 mm and a wall thickness of 5 mm with a substantially higher cutting and mixing effect when compared with standard cutting discs. A-discs have a large number of edges along the circumference to make incorporation of crop residue easier. It is very efficient in cutting crop residue thanks to the sharp edges. Moreover, the profiled shape allows to get more soil up than standard notched discs. Each time the disc emerges, it takes soil and brings it towards the plant mulch where it is mixed. The result is excellent.

#### X-PRECISE-PRECISE TRACK

The precise tractor track guidance is very important as it is something that a lot of larger seed drills with disc cultivation lack, causing "drifting" (the machine moves outside the tractor tracks).

The first row of the discs processes soil in a way that does not give enough support to the second row in the soil profile. This causes the machine to move out of the tractor tracks. The disc thus cover soil that has already been processed and do not work according to the GPS entry.

#### **X-PRECISE IS THE SOLUTION**

The OMEGA seed drills have disc sections arranged in the shape of X. This arrangement balances the forces and the seed drill follows the tractor tracks or navigation precisely. You do not need to spend hours adjusting the mag drill—X-precise is the solution.



#### TWIN-DISC PROVIDES BETTER PERMEABILITY

The discs work in pairs on one tine. Thanks to this solution, the distance between the individual disc arms is longer (49 cm). That means more space for material permeability through the machine. The seed drill can work smoothly, even though there is a larger quantity of crop residue on the surface.





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## The PROFI COULTER WORKING SECTION solves the issue of large soil particles

## Important Working Parts



#### SEED DRILL FOR HEAVIER SOILS-CROP ESTABLISHMENT HAS ITS DIFFICULTIES

If you farm on medium-heavy or heavier soils, then you will definitely appreciate the possibility to equip the seed drill with a profi coulter section. Thanks to this equipment, based on leading farmers' experience, you will achieve optimal soil structure, even in heavier soil types, without forming any "tongues" and other parts that are created by the disc section. When you leave the disc section lifted and only work with the profi coulters, you will achieve a loosened topsoil without any formation and loosening of wet particles. On the other hand, you can use both discs and profi coulters in the dry season.



The soggy clods that are formed by the disc section in spring, usually in heavier soils, are not processed by the rubber-tyred packer. The seed drills cannot place the seeds well. The spring crop emergence is thus affected negatively!



This results in uneven emergence. The clods (soil tongues and so on) formed by the front rows of discs in heavier soils make it impossible to place seeds well in the soil profile, and thus worsen emergence.



The OMEGA seed drill can work with the discs completely disengaged in spring. The disc section can pull out undesirable moist compact clods in the spring. The PROFI coulters can do the disc work, i.e. warming up, aeration of the topsoil. This results in a high-quality established crop with excellent and uniform emergence rate in the whole plot of land.



and mix it with soil. The profi coulters increase the disc efficiency! They process clods after the discs, cut up and press the remaining crop residue back into the soil. This results in a high-quality established stand with excellent and uniform emergence rate in the whole plot of land.



In summer, the intense work of the front working discs is very important. The discs aerate soil, cut up the crop residue

#### **PROFI COULTERS BEHIND THE DISC SECTION**

Independently-mounted coulters with a self-cleaning effect.

The coulters are hydraulically controlled. Therefore, the operator can respond quickly to the current conditions.

Important equipment of the seed drills for heavier soils.



## THE OMEGA SEED DRILL IS CAPABLE OF ESTABLISHING CROP DIRECTLY IN THE STUBBLE FIELD OR IN THE CATCH CROP\*

The OMEGA seed drills can be equipped with turbo coulters. TURBO coulters are sharp discs mounted behind the disc section. These coulters work in the same line as the rear drill coulters. The function of the turbo coulters is to cut the plant mulch and soil. Then, the drill coulters place the seeds precisely in the same line. Such a prepared seedbed is ideal for the emergence of the newly planted crop.



TURBO COULTERS BEHIND THE DISC SECTION

**Important equipment of the seed drills** for seeding directly in the stubble field or in the catch crop.

\* The OMEGA seed drill is a conventional sowing machine, not a direct sowing machine



The independently mounted coulters work in the same line as the rear drill coulters.









#### SOIL CONSOLIDATION BEFORE SEEDING

The large (a diameter of 900 mm) and wide wheels (425 mm) mounted in the offset system under the hopper create perfect soil compaction and levelling and provide a smooth and stable passage of the entire machine in the field and on the road. THE WHEELS ARE MOUNTED INDEPENDENTLY – EACH WHEEL IS ON ITS HUB SO EACH WHEEL CAN ROTATE INDEPENDENTLY OF THE OTHERS AT ITS SPEED. THIS SOLUTION IMPROVES THE manoeuvrability of the machine the wheels do not collect the soil at headlands; it allows rotation at 90°.

The offset arrangement of the wheels increases the soil and crop residue permeability, which reduces the rolling resistance and thus reduces the need for tensile force.

There are rubber blocks between the wheels for spreading the ridges formed between the wheels.



#### SQUARE TYRE DESIGN

The rear packer tyres have a perfect square profile that guarantees an even soil consolidation along the entire tyre width.

The profile with the grooved design crushes clods and creates a fine soil structure.

#### **HEADLAND TURNS**

Experience has shown that when turning on headlands, it is necessary for the entire pneumatic packer to work, except for the middle two wheels, which remain raised.

"I like that the seed drill really levels the soil before planting. The levelling paddle bar does a lot of work. You cannot really see that here because the soil is too dry now. But where the soil is moister, it nicely crushes and levels the clods. I use all the working sections for soil cultivation and I am pleased with the result. I drive without navigation at a speed of 15 km/h and I use markers that show me the precise track."

Ondřej Sigl, machine operator

"Bratranců Veverkových" Farming and Trade Cooperative Živanice, district of Pardubice, Czech Republic 1 471 ha OMEGA OO 6000L



#### PRESSURIZED HOPPERS FOR ALL OMEGA MODELS

The first generation of the OMEGA machines had unpressurized hoppers. BEDNAR decided to only offer pressurized hoppers to the farmers after carefully testing the pressurized and unpressurized hoppers. WHY?

Main advantages of pressurized systems (hoppers):

- It is not necessary to reduce the air pressure in the piping below the seeding mechanism to the level of atmospheric pressure—this is done by a diffuser in the unpressurized system, which is always a narrowed pipeline that reduces the air flow and thus decreases the maximum quantity of seeds (fertilizer) that can be "blown". Therefore, it is possible to batch higher quantities with more precision!
- 2) It is not necessary to deal with the effect of changes on the arrangement of the air system for batching—e.g. closing a half of the ducts when seeding in every other row (winter oilseed rape) etc.—the low-pressure system (unpressurized hopper) is very sensitive to this, and for example, seeding in every other row can cause inaccurate batching (the pressure below the seeding mechanism changes).



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# Machine Control and Settings

#### SIMPLE CONTROL INCLUDING ISOBUS

The OMEGA seed drill can be controlled via the IsoBus system. If the tractor is not equipped with an IsoBus system, the machine can be controlled using the following terminals:



#### **ME TOUCH 800 TERMINAL**

- Terminal with the latest touch technology.
- The terminal is equipped with a dual touch TFT display, 8" diagonal.
- The touch film is installed behind the protective glass and makes this terminal suitable for the rough work in farming.
- This solution allows the display to show the "main window" and the "heading window" at the same time thanks to the high resolution.
- The TOUCH 800 terminal supports the functions of precise farming, such as SECTION-CONTROL, TRACK-Leader, FieldNAv (easy navigation of the machine to the field)\*.
- To make life easier for the operator, the TOUCH 800 terminal can be expanded with a series of accessories, such as cameras etc.\*







#### ME TOUCH 1200 TERMINAL

- It can be used both vertically or horizontally, according to the customer's requirements.
- Terminal with the latest touch technology, with a display of 12.1".
- Up to five applications at the same time (no other terminal provides this).
- The touch film is installed behind the protective glass and makes this terminal suitable for the rough work in farming.
- It is equipped with Tractor-ECU that allows getting data directly from the tractor.
- The TOUCH 1200 terminal supports the functions of precise farming such as SECTION-CONTROL, TRACK-Leader, TRACK-Leader AUTO\*.
- To make life easier for the operator, the TOUCH 800 terminal can be expanded with a series of accessories, such as cameras etc.\*





# EFFICIENT AND PRECISE METERING MECHANISM

The metering mechanism of the OMEGA seed drills is made of stainless steel and driven by an electromotor, equipped with a radar sensor or IsoBus system directly from the tractor.

The metering system is able to batch the seeding amount very precisely in a range from 0.6 to 350 kg/ha.

The system is equipped with a discharging slide for perfect emptying of the hopper. This slide is also for easy replacement of the seed roller.

A fluffer is part of the metering system for better mag permeability.

#### SEEDING ROLLERS

The basic equipment of the OMEGA seed drills includes two types of seeding rollers (one type for fine seeds such as oilseed rape, one type for the cereals).

The extended BEDNAR offer includes a total of 14 seeding rollers from 7 cm<sup>3</sup> to 790 cm<sup>3</sup> (see page 50).

## Machine Control and Settings



#### **PRE-EMERGENT MARKERS**

Several options for marking rail tracks can be configured in OMEGA machines according to your needs for the use of navigation and sprayers:

- Navigation + switching off 2×2 flaps
- Navigation + switching off 2×3 flaps
- Preemergent markers + switching off 2×2 flaps
- Preemergent markers + switching off 2×3 flaps

Any unused seeds are automatically deducted to ensure a high accuracy of seeding.





#### EASY AND COMFORTABLE CALIBRATION WITH HOPPER DISCHARGE

The calibration is performed in the back part of the seed drill (behind the drill coulters) where the distribution from the seeding mechanism leads. It is very comfortable and well-accessible for the operator.

You can also comfortably empty any unused seeds from the hopper back into the big bags in the back of the machine.



In cases of work without navigation, it is possible to equip the OMEGA seed drill with side, hydraulicallycontrolled markers.

## Precise Seed Placement



drill coulter with one of the discs offset cuts crop residue and creates a clean and prepared groove for an even placement of the seeds. The seeds are then covered with fine soil and pressed into the soil with a deep wheel. The rear tine harrow is adjustable according to the current soil and moisture conditions. The leveller creates an optimal soil structure for seed germination.



#### DRILL COULTER DOWN PRESSURE

The down pressure of the drill coulters can be set using hydraulic cylinders. The down pressure can be set at up to 130 kg.



SEEDING DEPTH SETTINGS

The seeding depth settings can be done very easily using a ratchet mechanism









Inter-row spacing of 12.5 cm for majority of the stubble cultivation with a higher ratio of cereals in the seeding procedure. Possibility to plant winter oilseed rape in every other row with an inter-row spacing of 25 cm, or every two rows with a spacing of 37.5 cm.

Inter-row spacing of 16.7 cm for stubble cultivation with higher precipitation or an unusually large amount of crop residue on the surface.



"When designing the OMEGA seed drill, inter-row spacing was one of the main issues for us. When talking with leading farmers, in a majority of cases we agreed on a distance of 12.5 cm. This was based on years of experience and on the possibility of comparing the distance of 12.5 cm with a wider inter-row spacing. At 12.5 cm, grain crops usually germinate better."

Ladislav Bednář

# Precise Seed Placement

#### **DOUBLE DRILL COULTERS**

The pulled vehicle deviates from the perfect pass to pass track during sowing. That creates increased gaps, or so-called "misses" between the individual passes in the field (with the standard arrangement of the drill coulters). The double edge drill coulters eliminate all those deficiencies. When there is a deviation from the ideal line, the growth is only thinned locally without any significant gaps or eyes.

#### STANDARD SEEDING METHOD



of travel

#### DOUBLE EDGE DRILL COULTERS-THE SEED FLOW IS DIVIDED IN TWO PARTS IN THE **EDGE COULTERS**



#### EVEN AND ODD COULTERS ALLOW FOR VARIABLE SEEDING DEPTHS

If you sow two crops in a row with the OMEGA FL seed drill (see page 12), you can sow each crop to a different depth. A drill coulter support wheel that can be set at various positions with increments of 20 mm. Adjusting every other support wheel sets a different seeding depth in the even coulters compared to in the odd coulters.

- If the crop requires a deeper seeding depth-move the support wheel upwards
- If the crop requires a deeper maging depth-move the support wheel downwards





"We are now interested in using the catch crop. That was one of the main reasons why we decided to purchase the OMEGA OO 8000 L seed drill, equipped with the ALFA DRILL 400 seeding unit. Other reasons included the eight-metre-width of the machine with the Frontpack that evenly distributes the machine weight and the working sections for soil cultivation. The configuration of our machine lets us seed directly into the tilled soil, as well as into a perfectly prepared seedbed. That's what we like, as well as seeding at least 80 hectares per day."

Václav Richter, Agronomist

Žichlínek Farming and Trade Cooperative Žichlínek | Czech Republic 6300 ha OMEGA OO 8000L

## **Basic Description**



#### MAIN CHARACTERISTICS OF THE BEDNAR OMEGA OO L MODEL

- A robust seed drill prepared for highly demanding conditions. Robust main and side frames.
- Working discs with a diameter of 460×5 mm, capable of processing larger quantities of crop residue. Disc sections arranged in the shape of X.
- Very good material permeability through the seed drill thanks to the larger distances between the individual working parts.
- Excellent consolidation effect thanks to the weight and width of the packer tyres.
- Excellent for working in heavier soils thanks to the option to only use the coulter section in spring. The front disc section does not work, only the coulters.
- Perfect surface tracing thanks to drill coulters installed on a parallelogram-the PSP system.
- ISOBUS connectivity, simple and easy control.

#### THE OMEGA OO L SEED DRILL IS RECOMMENDED FOR THE MORE DEMANDING CONDITIONS **OF HEAVIER SOILS**

Variability that allows working in heavier soils using only the coulter section-warming up and aerating soil without creating sticky soil parts that are usually made by the front discs: this is a great advantage of the OMEGA OO model with a direct effect on the spring crops.



The coulter section behind the discs has also been proved to work in dry conditions. The coulters substantially increase the quality of seedbed cultivation.

## Basic Models



OMEGA OO 6000 L



OMEGA OO 4000 L



## OMEGA OO\_L

		OO 8000 L	OO 4000 L	00 4000 RL	OO 6000 L	OO 8000 L	OO 9000 L
Working width	m	3	4	4	6	8	9
Transport width	m	3	3	4	3	3	3
Transport length*	m	8.3	8.5	9.8	8.5	8.8	9.7
nter-row distance	cm	12.5/16.7	12.5/16.7	12.5/16.7	12.5/16.7	12.5/16.7	12.5/16.7
Number of seeding coulters	pcs	24/18	32/24	32/24	48/36	64/48	72/54
Disc spacing	cm	25	25	25	25	25	25
Number of discs	pcs	24	32	32	48	64	72
Disc diameter	cm	46	46	46	46	46	46
Hopper capacity	L	2,800	2,800	2,800	3,500	4,000	4,000
Total weight*	kg	5,920	7,200	6,500	9,300	11,300	12,300
Recommended output**	HP	100–150	100–170	100–170	180–290	290–360	320-400

\* acc. to the equipment \*\* depends on soil conditions



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## **Basic Description**



#### MAIN CHARACTERISTICS OF THE BEDNAR OMEGA OO FL MODEL

- A robust seed drill prepared for highly demanding conditions. Robust main and side frames.
- Working discs with a diameter of 460×5 mm, capable of processing larger quantities of crop residue.
- Very good material permeability through the seed drill thanks to the larger distances between the individual working parts.
- Excellent consolidation effect thanks to the weight and width of the packer tyres.
- Excellent precision in fertilizer batching, even in higher amounts, thanks to the pressurized hopper. The fertilizer is placed by the coulters in the inter-rows.
- Perfect surface tracing thanks to drill coulters installed on a parallelogram-the PSP system.
- ISOBUS connectivity, simple and easy control.

OMEGA OO\_FL is a robust seed drill capable of precise seeding and fertilizer application. OMEGA OO\_FL is recommended for demanding conditions with a large ratio of spring crop in the seeding procedure (inter-row spacing of 12.5 cm or 16.7 cm).

The crops established in spring respond to precise interrow fertilization very positively. It substantially increases the crop growth acceleration and the overall vitality of the plants. Precise fertilizer batching is important, provided by the pressurized hopper which is capable of precise, as well as high batches of the fertilizer thanks to the positive pressure.

## Basic Models

## OMEGA OO 4000 FL





# 

## OMEGA OO\_FL

		OO 4000 FL	OO 4000 RFL	OO 6000 FL	OO 8000 FL	OO 9000 FL
Working width	m	4	4	6	8	9
Transport width	m	3	4	3	3	3
Transport length*	m	9.2	9.5	9.7	9.7	9.7
Inter-row distance	cm	12.5/16.7	12.5/16.7	12.5/16.7	12.5/16.7	12.5/16.7
Number of seeding coulters	pcs	32/24	32/24	48/36	64/48	72/54
Disc spacing	cm	25	25	25	25	25
Number of discs	pcs	32	32	48	64	72
Disc diameter	cm	46	46	46	46	46
Hopper capacity (ratio)	I	4,000 (50:50)	4,000 (50:50)	5,000 (40:60)	5,000 (40:60)	5,000 (40:60)
Total weight*	kg	7,400	6,700	9,500	11,500	12,500
Recommended output**	HP	130–180	130–180	200–280	320-400	400–470

\* acc. to the equipment \*\* depends on soil conditions

# Seed Drill with Additional Fertilization



#### PRECISE BATCHING THANKS TO THE PRESSURIZED HOPPER

The OMEGA OO\_FL seed drills have large-capacity double-chamber hoppers with positive pressure, created by closing the hopper. This technical solution increases the quality of fertilizer batching precision by multiple times, even for higher batches at higher working speed of up to 350 kg of fertilizer per hectare at a working speed up to 17 km/h. Other advantages:

- Stainless seeding/fertilizer metering system.
- The fertilizer batch and the seeding amount are independent of one another.
- The whole machine can be controlled using one terminal.



#### **DOUBLE-CHAMBER HOPPER**

The double-chamber hopper is divided in the 60:40 ratio with two options: 60 seeds : 40 fertilizer, or 60 fertilizer : 40 seeds. The hopper can also be used for seed at 100 %, for example when establishing winter crops.



#### INTER-ROW FERTILIZER APPLICATION

The fertilizer is dispensed from the pressurized hopper via stainless dispenser to the application coulters (a diameter of 380 mm). The depth of fertilizer placement is adjustable. The coulters are designed in a way that makes them highly passable, with a spacing of 25 cm (12.5 inter-row spacing of seeds) and 33 cm (16.7 cm inter-row spacing of seeds).

#### ADVANTAGES OF COMBINED SEEDING (SEEDS + FERTILIZER)

- Demonstrably higher yield of spring crops.
- Reduced number of passes (seeding and fertilization are done at the same time).
- More efficient use of nitrogen.



The inter-row fertilizer placement at a depth of 2–3 cm below the seeds allow the roots to absorb the nutrients faster without getting burnt.

- Quick start of the growth and thus shading weeds.
- Precise fertilizer placement in the space where it is quickly used by the crop roots.



The deeper placement provides access to water even in case the topsoil dries up, which provides the plant roots an easy access to the nutrients.

## Seed Drill with Additional Fertilization



with the auxiliary crop, planted deeper, but in the same quality, as standard all-area seeding. Or seeding of other combinations of up to three crops in a single pass. This machine has the potential to move your farming business forward! Buy a new seed drill that will enable you to be the best and farm with joy.

Take a look at the animation of using the OMEGA OO\_FL seed drill in practice.



**PROFI COULTERS** 



**TURBO COULTERS** 

"I like the packer a lot, the large diameter provides high throughput and has a low rolling resistance. This technical design also contributes to lower fuel consumption, by about 1 litre per hectare, when compared with a seed drill that has a small diameter and width of the packer wheels. As far as the disc and coulter sections are concerned, I chose the standard serrated discs, and I didn't need the coulter section or the front equipment. I believe that discs on a seed drill are only for the finalization of work and shouldn't replace a soil cultivator. Thanks to quality cultivation, I can achieve high hourly and daily outputs. I can seed up to 70 hectares with the six-metre-long machine in a day, it always depends on the actual conditions."

Czech Republic OMEGA OO 6000 FL Vladimír Pavlíček, farmer and service provider

# **Overview of Seeding Rollers**







Pea, Barley, Wheat, Grass, Rye



Pea, Barley, Oat, Wheat, Grass



Pea, Barley, Oat, Wheat, Grass



Barley, Wheat, Grass,

KM420890

Pea, Bean, Wheat

22 cm<sup>3</sup>

KM420022

KM420100

KM420305

Mustard, Oil seed rape

Wheat, Grass, Sunflower

100 cm<sup>3</sup>

305 cm<sup>3</sup>

Rye

KM420014

KM420075

KM420290



the type of the seed drill or hopper, the type of seeds (wheat, barley, beans, winter rapeseed, etc.), or the type of fertilizer, and the required working speed and seeding amount. The BEDNAR Rollers App will recommend a suitable seeding roller based on the entered quality seed and fertilizer batching.





# I did my best, for maximum yield this year



SWIFTERDISC **Disc Cultivators** 



VERSATILL Versatile Cultivators



TERRALAND **Chisel Plough** 



OMEGA Seed Drills





**ROW-MASTER** Inter-row Cultivator

## soil cultivation



ATLAS **Disc Cultivators** 



SWIFTER Seedbed Cultivators



ACTROS **Combined Cultivator** 

## seeding and fertilizing



ALFA DRILL Seeding Unit



**COMBO SYSTEM Double-Chamber Storage** 



FENIX Versatile Cultivators



KATOR Rotary Harrow



CADDY Universal Carrier



FERTI-BOX Hopper for Fertilizer

inter-row/line cultivation mulching



Your Authorized Dealer

STRIP-MASTER Line cultivator



STRIEGEL-PRO Harrows



MULCHER **Rotary Cutters** 

European Regional Development Fund Operational Programme Entreprise

d Innovations for Competitiveness

EUROPEAN UNION

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