

SEEDBED  
CULTIVATOR

**BEDNAR**

# SWIFTER SE, SM

When you just need more

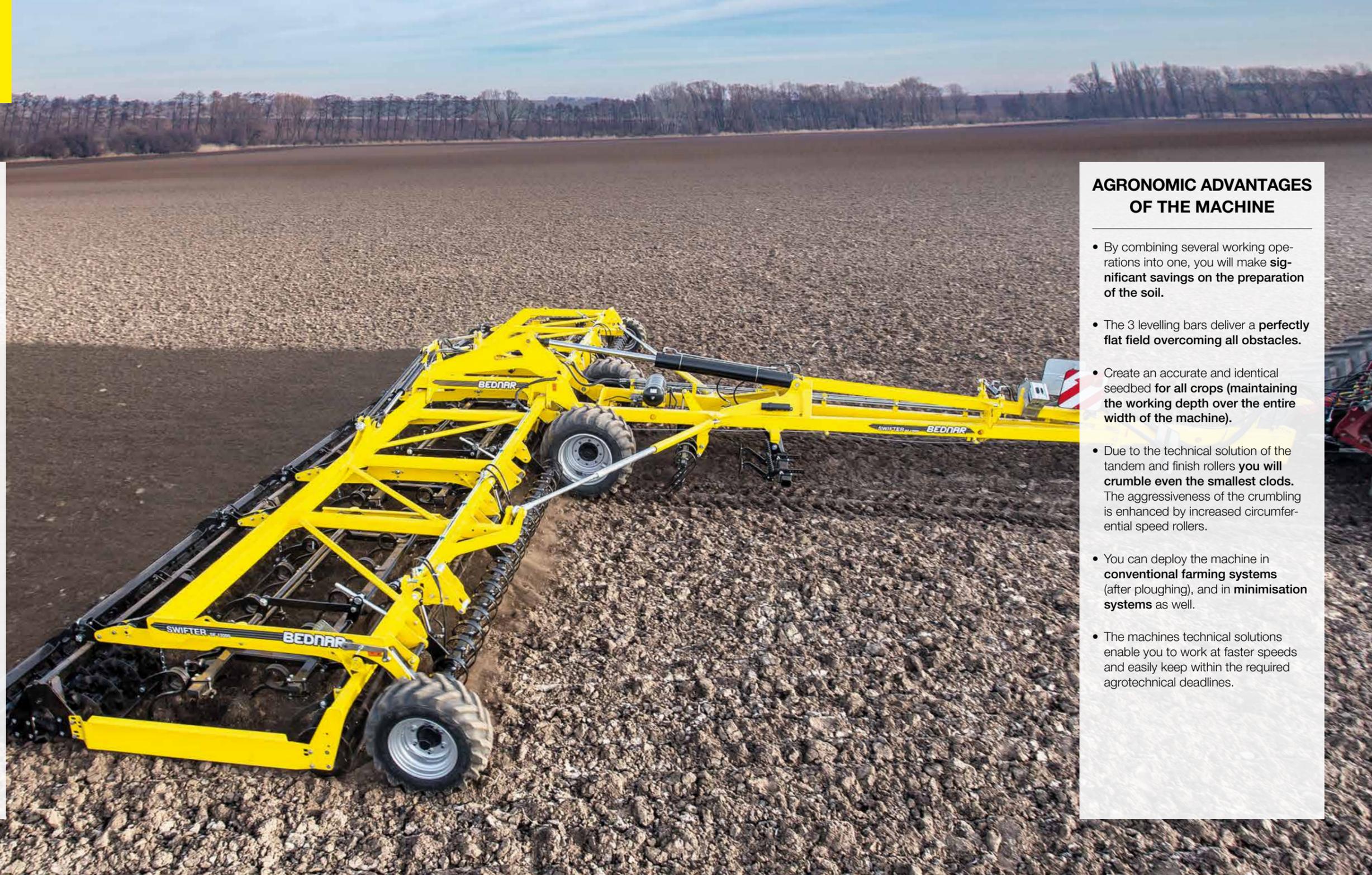


**JOY**  
OF FARMING

SWIFTER  
**General  
description**

### MAIN ADVANTAGES OF THE MACHINE

- **Perfect preparation for seeding** in just one pass.
- **Up to 8 working operations** in one pass.
- **Enormous daily output** due to the working width and speed.
- **High operating speeds** of up to 15 km/h.
- **Interchangeable shares and gamma-tines.**
- Perfect contouring of the surface due to the **independent location of the Wave-Flex sections.**
- **Self-cleaning Tandem crosskill rollers** deliver the perfect crumbling and to finish off consolidation of the soil.
- **“Top quality”** bearings ready for high circumferential speeds which fuels the crumbling effect.
- **Work the headland without the machine lifting.**
- **Hydraulically setting the working depth** guarantees a precise and constant depth across the entire width of the machine.
- **Transport dimensions, width of 3 m.**



### AGRONOMIC ADVANTAGES OF THE MACHINE

- By combining several working operations into one, you will make **significant savings on the preparation of the soil.**
- The 3 levelling bars deliver a **perfectly flat field overcoming all obstacles.**
- Create an accurate and identical seedbed **for all crops (maintaining the working depth over the entire width of the machine).**
- Due to the technical solution of the tandem and finish rollers **you will crumble even the smallest clods.** The aggressiveness of the crumbling is enhanced by increased circumferential speed rollers.
- You can deploy the machine in **conventional farming systems** (after ploughing), and in **minimisation systems** as well.
- The machine's technical solutions enable you to work at faster speeds and easily keep within the required agrotechnical deadlines.

BEDNAR SWIFTER SE and SM are wide-range seedbed cultivators, with which you will achieve enormous daily outputs. The combination of up to 8 various working components guarantees the perfect cultivation of the upper layer, consolidation and the levelling of the surface. In just a single pass, you will prepare the optimum seedbed, even in the furrow made by the plough.

The main benefits of wide-range SWIFTER compactors are their enormous daily outputs, first class work, comfort and smoothness when handled, speed and last but not least it's easy to use when deployed in the field and during transportation. All this makes the SWIFTER an efficient tool for keeping the agrotechnical deadlines. If you compare the working widths of 6 m and 10 m working at the same average speed of 12 km/h, a 6m machine prepares **5.4 ha/h** for sowing while the 10m machine prepares **9.6 ha/h**. It means that during an 8-hour shift you will increase the performance of the seedbed preparation from **43.2 ha** to **76.8 ha**, a difference of **33.6 ha** per working shift. In percentage terms you will have gained **77 %**.

## A single pass is enough

A perfectly even field is a basic presupposition of seed placement at a constant depth across the whole width of the seeding machine. A lot prepared in such a way guarantees an even equable growth. Seedbed preparation is often a very demanding operation in terms of energy, especially after a mild winter or a dry summer. Levelling the lot and crumbling the clods in these conditions is time and fuel consuming. Preparing a lot at the first attempt in such a way that even germination is guaranteed, is what makes the difference in your pocket. The field is loosened, even and without clods. This lot will work for you and your seeding machine.



*“SWIFTERS have been at the forefront of seedbed preparation for almost 10 years. The composition of the working components of the machine and their working widths are what make the SWIFTERS stand out. The quality of work and performance already significantly lowers costs in plant production at many major farms in Europe and Asia.”*

SWIFTER  
Benefits



SWIFTER  
Utilisation



Savings are inevitable thanks to:

- **The wide working widths** = greater daily performance.
- **The integration of up to 8 operations in a single pass** = one pass instead of several.
- **The high working speeds** = less time required, easy to reach agronomical deadlines.
- **Fewer passes** = help eliminate the compaction of the soil.
- **Thoroughly prepared seedbed** = better quality and faster work of seed drills, the basis for high quality crop germination.

You can use the SWIFTER for seedbed preparation in:

**Conventional farming systems with a plough** – the plant residues are incorporated by ploughing to greater depths and by winter processed furrows are easily cultivated in a single pass. Two passes are recommended in tougher conditions, which will literally turn your field into a 'garden'.

**Minimisation systems** – the preparations with the plant residue play an important role at this point, their length, depth of incorporation and the degree of decay. To get the most out of your SWIFTER the plant residue in the soil should have a maximum length of 5 cm (easily reached by previous mulching) and evenly incorporated at a depth greater than 7 cm. This will ensure that the tines of the SWIFTER don't bring up any plant residue to the surface while working.

INTERCHANGEABLE  
WORKING SECTIONS

The machine design enables the simple exchange of the internal frame of the working sections for either shares or gamma-tines and vice versa. This way you can easily customise the machine to the variable conditions throughout the course of the year.



INDEPENDENTLY  
ATTACHED WAVE-FLEX  
SYSTEM SECTIONS

The individual sections are independent of one another and are attached to the side frame with rugged draw shoulders and the front (the lubricated rotary bearing is protected by dustlers) and rear contouring arms.



CONTOURING THE SURFACE

The smart method of the free and independent attachment of the individual parts of the working sections (2 or 3 m) enable the machine to perfectly contour in even the most precipitous terrain. So there will be no unprocessed unevenness in the machine's wake.



A DEMONSTRATION ON  
A PLOUGHED FIELD

Furrows are easily levelled by a SWIFTER in a single pass to an almost perfect flatness. Hence you create a uniform seedbed for the planting of corn, sugar beet or barley/wheat etc.



A DEMONSTRATION IN  
A MINIMUM TILLAGE SYSTEM

After a good incorporation of plant residue in plough-free systems of farming SWIFTERS make a superb job.



A DEMONSTRATION OF WORK  
IN SUMMER SEASON

Seedbed preparation during the summer is very demanding due to hard clods caused by the sharp sun and drought. The system of 2 to 3 rollers guarantees the crushing quality and the soil preparation e.g. for sowing oilseed rape.



"The perfect seedbed after a single pass"

SWIFTER

## Spring and summer seedbed preparation



**Spring seedbed preparation** – inappropriate soil preparation damaging the soil structure and its moisture content can result in damage to spring cropping, which significantly impacts final harvest yields. Preparing the soil too early results in soil stickiness, while late preparations result in reduced water stores for spring crops. As such, you should choose the fewest number of passes and suitable soil maturity for preparation. The BEDNAR SWIFTER sequence of working parts is able to prepare the soil and its surface structure fast and at high quality without loss of starting moisture. If you're preparing soil for, e.g. sowing sugar beet, you should choose an SB-section which undercuts through the soil over the whole working width without any vertically mixing. This preserves moisture and creates a solid base for precisely placed seeds. For maize, fast aeration and warming should be done with gamma tines without transferring wet particles to the surface.

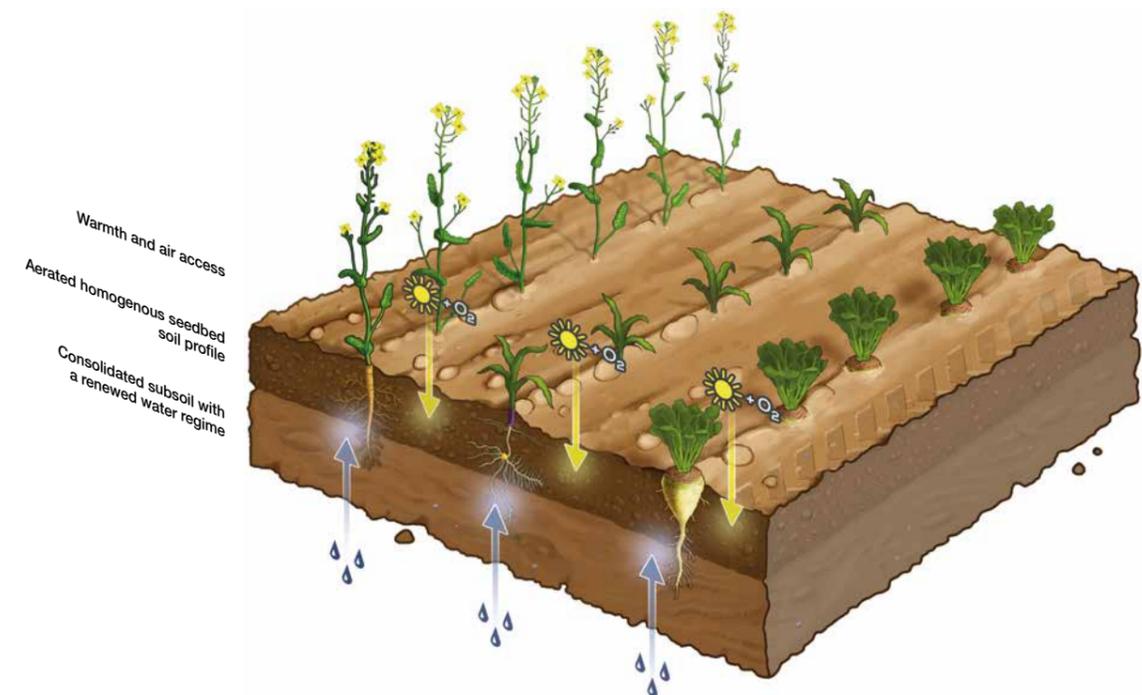
**Summer seedbed preparation** – similar complications as in spring preparation occur in summer, when it is often necessary to prepare the soil when harvesting is still going on so that sowing can begin, generally winter rapeseed followed by other crops. In summer, frost and snow doesn't help till the soil into a suitably disintegrating structure as occurs in winter before spring preparation. Intensive seedbed preparation is needed in summer, for which the SWIFTER ploughshare section is suitable, made up of two rows of arrow-shaped shares (270 mm) with overlapping. The aggressive angle means the soil is tilled and mixed. The final part of seedbed preparation is secured by the rear crosskill rollers which can be completed with a finish roller. This combination, required for smaller seed types (e.g. rapeseed seeds), creates the necessary fine structure even in a very dry summer.



SWIFTER

## Uniform crop germination

### UNIFORM CROP GERMINATION IN IDEAL CONDITIONS



#### Creating the ideal seedbed structure

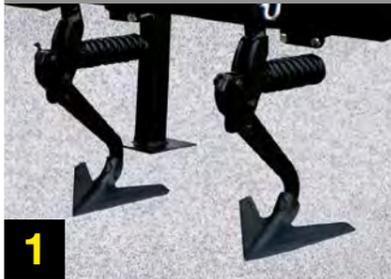
- **Thorough soil relief levelling** of the prepared land so that it is perfectly level after the previous working operations, is an essential and a key part of seedbed preparation.
- **A warm and aerated soil profile** is the foremost requirement for fast, uniform germination of all crops planted.
- **Creating a precise level throughout the whole of the prepared area** secures a precisely set depth for the seedbed cultivator on the basis of the agro requirements of the future crop.
- **The ideal structure and proportion of soil particles** helps crop germination. Suitably sized soil particles throughout the land are an integral part of thorough seedbed preparation.
- **Consolidated subsoil** under the prepared surface layer renews the soil water regime, which is absolutely essential to start seed growth.

The BEDNAR SWIFTER is a seedbed cultivator which creates a seedbed in just the way intensive farming systems require with the focus on maximising yield potential.



**ERADICATORS**

Massive eradicators with spring securing which are used for cultivating pressed soil after the narrow tyres of tractors.



1

**FRONT LEVELLING BAR MECHANICAL**

Mechanically adjustable front slide bar levels coarse unevenness, through which it enhances the work effectiveness of the subsequent parts.



2

**CRUSHBAR – FRONT HYDRAULICAL PADDLE LEVELLING BAR**

Flattens coarse unevenness in front of the subsequent bodies. The hydraulic control initiates an immediate reaction to the terrain unevenness directly from the driver's seat.



2

**FRONT CRUMBLING ROLLER**

The bar roller made of coil shaped rods crushes the clots along the surface of the field. Its design gives it an excellent crumbling effect, even in the coarse furrow.



3

**CRUMBLING BAR BEHIND THE FRONT ROLLER**

Holds the clots next to the rollers, through which better crushing is achieved. This solution is perfect for very dry soils with a number of hard parts.



4

**2 ROWS OF SHARES WITH FLEXI TINE**

Overlapping 270 mm width shares ensure the perfect undercut and loosening along the entire width of the machine. They work on a flexible tine, with 3-sided mobility ("3D effect").



5

**4 ROWS OF SUSPENDED GAMMA-TINES**

Ensure the perfect loosening and warming of soil without the loss of moisture. The gamma-tines are positioned at a negative angle, so there is no humidity released to the soil's surface.



5

**4 ROWS OF SPRING SHARES (SB-SECTION)**

Spring shares are designed to undercut the profile without vertical mixing of the soil, thus ensuring the destruction of weeds and preventing the loss of moisture.



5

**LEVELLING BAR**

Evens the surface making life easier for the rear rollers. Working height is easily set by positioning the chain in shape eye with a latch.



6

**REAR LEVELLING BAR**

Creates the perfectly flat field which is 100% ready for seeding for even the smallest seeds such as spring barley, poppy seed, rape etc.



8

**FINISH ROLLER OF 270 MM DIAMETER**

Thanks to the high circumferential speeds intensive crumbling is guaranteed ("soil cutter effect"). In combination with the crosskill rollers you will reach optimum soil crumbling.



8

**REAR CRUMBLING ROLLERS**

Ensure the clots are crumbled to fine grain, which remains on the surface after the work of the previous working components. Simultaneously its pressure finely tightens the surface.



7



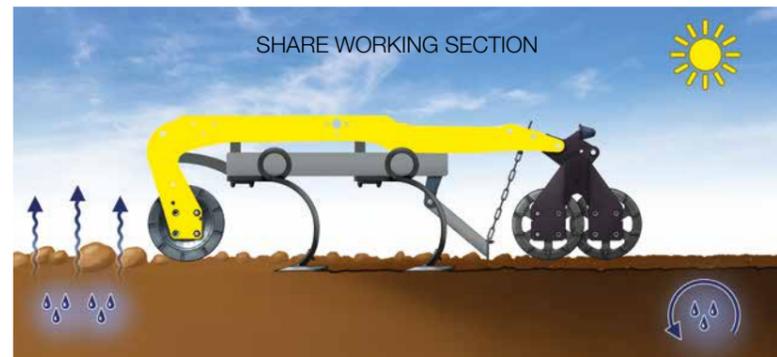
"Up to 8 working operations in a single pass"

SWIFTER

## Choose the suitable working section

### Interchangeable working sections

The machine design allows the easy replacement of the working sections internal frame (2 rows of ploughshares / 4 rows of gamma tines / 4 rows of SB-tines with shares). Thus you can easily adjust the machine to the changing conditions over the course of the year.



**Usage** – Summer and autumn preparation when the soil needs to be loosened and mixed after the harvest.

2 rows of overlapping 270 mm shares guarantee the undercut of the soil profile across the entire range of the machine by which a solid base of the machine is formed. At the same time the soil, thanks to the working angle of the shares, is aggressively cultivated and thus a loosened upper layer is formed. Each share is attached to a flexi tine, which enables the “3D effect” (horizontal and vertical movement), which protects the share.



**Usage** – Spring seedbed preparation, for maintaining winter moisture in the soil.

4 rows of gamma-tines under a negative angle safely loosen, air and warm the soil without bringing wet parts up to the surface preserving the winter moisture. It is particularly important to start the growth of spring crops. The individual suspension of each tine enables you to work fast at speeds of up to 15 km/h. This saves valuable time that you cannot spare come spring.



**Usage** – Spring sowing preparation while maintaining moisture. Especially suitable for sugar beet.

Spring shares placed in 4 rows of S-tines ensure quality tillage in the spring. The shares' angle does not produce the vertical mixing of soil, retaining the moisture in spring, which is a key factor for the quality and speed of the germination process. Moreover, the required horse power is reduced.



SWIFTER

## Choose the suitable roller



### More rollers, fewer clods

SWIFTER cultivators come with a standard 3 rollers – front slatted and rear slatted tandem or crosskill tandem rollers. The number of rollers of a machine enhances the crumbling effect. The basic rollers can be equipped with a fourth finish rod roller of 270 mm in diameter with high circumferential speeds. Thus enabling you to achieve the perfect crumbling effect of a “soil cutter”. Together with the flattening levelling bars the machine delivers the perfect preparation on the most challenging of lots.

#### DUAL ROW CROSSKILL

Ideal solution for all soil types. High quality cast iron rollers of 350/440 mm in diameter for precise fine crumbling with a self-cleaning effect.

weight: 162/167 kg/m  
diameter: 350/440 mm



#### DUAL CROSSKILL FOR ROCKS

Ideal solution for all types of soils with stones. Greater spacing between the rows prevents jamming caused by stones which block the rollers.

weight: 160 kg/m  
diameter: 350 mm



#### DUAL ROW SLATTED ROLLER

Suitable for all-year-round cultivation of light soils. The rollers of 370/270 mm diameter create the effect of a “soil cutter”.

weight: 115/60 kg/m  
diameter: 370 mm/270 mm (only for SM)



SWIFTER

## Effective and comfortable operation



SWIFTER

## User friendly solutions



### High performance and comfortable operation

The entire concept of the wide SWIFTERS is designed to achieve maximum performance with a high standard of user comfort. Therefore the machine is equipped with several construction elements, which enhance its performance (the ability to work with a machine in operating position at the headland as well) and protect the tried components against damage (e.g. protected bearings). This combined with modern GPS navigation systems allows you to significantly increase the work efficiency, saving time and fuel.

### Easy and simple operation

An important factor for every farmer is the user friendliness of the machine – maintenance, setting, folding etc. and our designers' lengthy experience with wide cultivators have made the SWIFTER SE and SM some of the best out there in the world of modern machines. The user-friendly adjustment of the working bodies helps you reap the benefits by optimizing the work quality. An aspect that is always welcomed by those operating the machines.

#### WORK AT THE HEADLAND WITHOUT LIFTING

Time is lost by lifting the machine at the headland, which lowers the efficiency of the machine by up to 25 %. Thanks to the ability to turn at the headland with the machine in its operating position, you will eliminate that loss.



#### USING GPS FOR HIGHER OUTPUT

Machines with a working width of e.g. 16 m, tend to have an overlap of more than 1 m without the use of GPS! By utilizing satellite navigation, you will use the entire width of the machine to its maximum, which will enhance your efficiency by 6-10 %.



#### MAINTENANCE-FREE BEARINGS OF REAR ROLLERS

Multiple seals prevent the dirt from getting into the bearing and the reinforced design limits the possibility of damage. The bearing is maintenance-free.



#### MECHANICALLY SET THE WORKING DEPTH OF THE SHARES (GAMMA-TINES)

The working depth can be set simply and very precisely by means of a trapeze screw with a removable handle. The accurate setting of the sections is measured by a number scale with marker.



#### HYDRAULICALLY SET THE WORKING DEPTH OF THE SHARES (GAMMA-TINES)

Effortlessly and comfortably set the working depth directly from the tractor cabin.



#### SET THE WORKING HEIGHT OF THE LEVELLING BARS AND THE FINISH ROLLERS

The working position can be easily adjusted by a regulatory handle which defines the position of the stop screw against the silentblock. At the same time the silentblock serves as a protection against slide.



## SWIFTER SE series



### BEDNAR SWIFTER SE

is a seedbed cultivator designed for tractors ranging from 220 to 380 HP

- working widths 8, 10, 12 m
- folding in the front direction to the drawbar
- interchangeable section (shares × gamma-tine)
- easy to transport on narrow roads thanks to the transport width of 3 m and height of 4 m

SWIFTER		SE 8000	SE 10000	SE 12000
Working width	m	8.2	10.2	12.2
Transport width	m	3	3	3
Transport length	m	6.9	7.5	8.6
Working depth*	cm	2-12	2-12	2-12
Number of shares	pcs	32	40	48
Number of shares (SB-section)	pcs	60	74	88
Number of gamma tines	pcs	78	96	116
Total weight**	kg	5,900-6,500	6,500-8,500	8,100-9,900
Recommended output*	HP	220-260	280-330	330-380

\*depends on soil conditions \*\*depends on the machine accessories

## SWIFTER SM series



### BEDNAR SWIFTER SM

is a seedbed cultivator designed for tractors ranging over 400 HP and more

- working widths 14, 16, 18 m
- folding in the back direction behind the drawbar
- interchangeable sections (shares × gamma-tine)
- easy to transport on narrow roads thanks to the transport width of 3 m and height of 4 m

SWIFTER		SM 14000	SM 16000	SM 18000
Working width	m	14.2	16.2	18.2
Transport width	m	3	3	3
Transport length	m	13.6	14.6	15.6
Working depth*	cm	2-12	2-12	2-12
Number of shares	pcs	56	64	72
Number of shares (SB-section)	pcs	104	118	132
Number of gamma tines	pcs	136	152	168
Total weight**	kg	11,600-14,200	12,400-15,400	13,200-16,600
Recommended output*	HP	400-435	450-500	500-550

\*depends on soil conditions \*\*depends on the machine accessories

### SMART FOLDING IN THE FRONT DIRECTION

You can easily fold the machine into the transport position directly from the tractor's cabin. The fully hydraulic folding of side working frames in the direction of the front to the drawbar gives the machine very small transport dimensions.



### COMPACT TRANSPORT DIMENSIONS

Compact transport dimensions guarantees easy handling, even in cramped and difficult terrain, e.g. a working width of 10 m the transport length is only ¾ m longer than that of the classic folding cultivator with a working width of 5 m.



### TELESCOPIC BARS

The bars stabilise the side frames of the machine when it operates at high speeds. They belong to the standard components on the SWIFTER SE 10000, SE 12000.



### COMFORT FOLDING OF BAR-LOCK

The machine is equipped with a Bar-Lock folding system, which enables you to easily fold and unfold the machine from the comfort of the tractor's cabin. Furthermore it allows you to reverse with the machine in its working position.



### BAR-LOCK

The Bar-Lock system allows you to fold and unfold the wide SWIFTER SM in just 2 minutes to a working or transport position.



### HYDRAULIC CONTROL OF THE SECTIONS

Each section is equipped with hydraulic cylinders which enable the machine to lift the sections (in the event of clogging), or it alleviates without lifting the machine. Furthermore it fixes the sections in their transport position.



SWIFTER  
Users' experience



 Rostenice, a.s.  
Rostenice, Vyskov district

area: 9,000 ha  
machines: 2x SWIFTER ST (SM) 17000,  
2x SWIFTER SS (SM) 15000,  
SWIFTER SE 10000, Mulcher MZ 6000,  
Mulcher MM 7000, Atlas AE 7000

"Perfect seedbed preparation is our priority and I can confirm that the SWIFTER is the only machine which stood out and always succeeded in our conditions. That is one of the reasons why we already have 5 units of the BEDNAR cultivators at our company. It's deployed throughout the season to the fullest. In fact all of the preparation is done by SWIFTER cultivators only, which literally work 24 hours a day," the chief mechanic Mr. Frantisek Rysanek states about the machine.



 ZEMO, s.r.o.  
Bohate Malkovice, Vyskov district

area: 1,800 ha  
machine: SWIFTER SM 16000

"I am the only one in our company who has navigation on his tractor. The connection of navigation and SWIFTER is the best solution for me so far, which I have been able to put into practice. The fields now have an ideally prepared seedbed and moreover after an all-day shift I am able to assemble the machine in a jiffy thanks to the Bar-Lock system and the transport on local roads does not pose any difficulty to me."

Lubos Tesar, machine operator



 Cooperative farm  
Chynorany, Partizanske district

area: 3,500 ha  
machine: SWIFTER ST (SE) 12000

"In a prolonged shift the output of our 12 m SWIFTER is in the range of 80 ha. This area fully suffices to the sowing of corn by two planters. The consumption of fuel with our set in hilly terrain is approximately 5.2 l/ha and on the flat it's around 4.2 l/ha. The oil consumption in the coarse furrow is higher at 6-7 l/ha. The machine evens the coarse furrow perfectly."

Peter Borcha, machine operator



 PD Sokolce  
Sokolce

area: 5,000 ha  
machines: SWIFTER ST (SE) 12000,  
SWIFTER SE 12000, Terraland TN 3000 D7R

"We have been using the Switer for over 2 years and we have been reaching a daily output of 200 ha in two working shifts. Lots are perfectly prepared. Thanks to the machine's outstanding work we bought another 12 m SWIFTER SE 12000 last year, the time taken for soil preparation has been significantly reduced and the productivity of work significantly increased."

Tibor Lajtos, chief agronomist



 Claessens - Group  
Nagybaráti - Puszta, Somogyoszob

area: 3,500 ha  
machine: SWIFTER ST (SE) 12000

"Our farm has 1200 dairy cows and the need for quality forage is enormous. The SWIFTER helps us prepare the soil for seeding fast and with high quality, especially for corn which is used for silage purposes. We are trying to maximize the yield of corn to cover the forage base."

Peter Claessens, owner



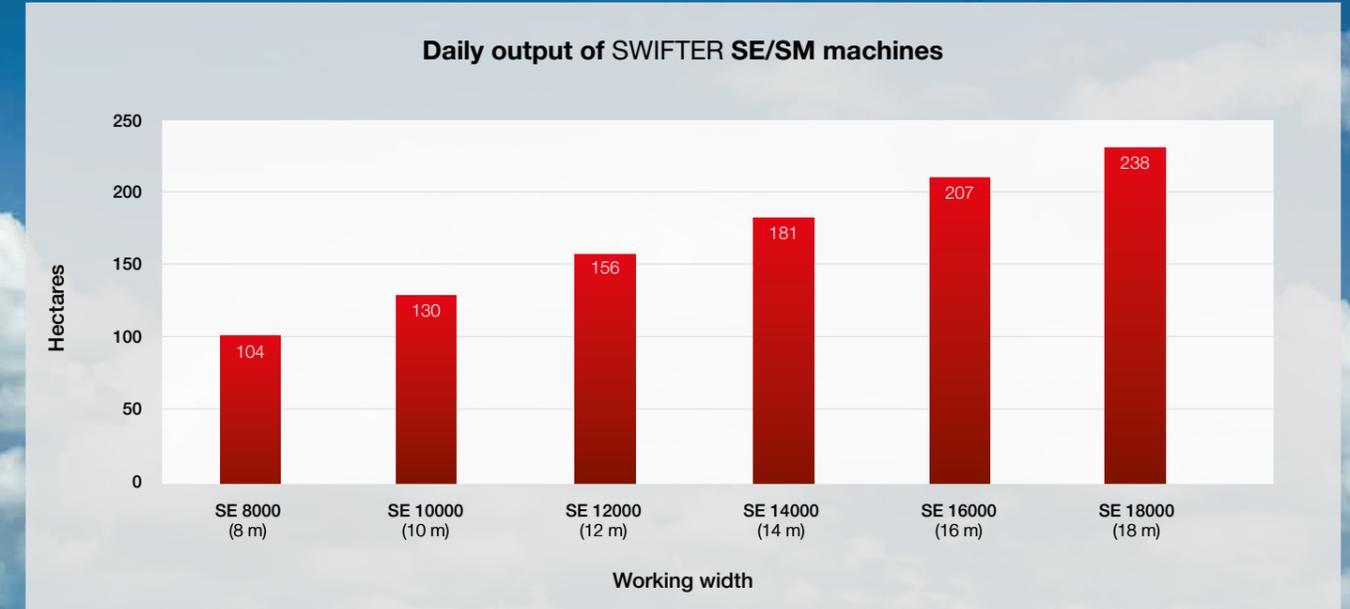
 ABG Bageritz  
Germany

area: 4,300 ha  
machine: SWIFTER SE 10000

"Our farm has been using the SWIFTER for seedbed preparation for corn, wheat and beet. We are very satisfied with its work."

Kurt Gerhold, head of the farm

SWIFTER  
Table of daily output





# I did maximum for more yield this year

## soil cultivation



**STRIEGEL-PRO**  
Harrows



**SWIFTERDISC**  
Disc Cultivators



**ATLAS**  
Disc Cultivators



**SWIFTER**  
Seedbed Cultivators



**FENIX**  
Versatile Cultivators



**TERRALAND**  
Chisel Ploughs



**CUTTERPACK**  
Trailed Packers



**PRESSPACK**  
Trailed Packers



**TERRALAND DO**  
Combined Chisel Plough

## seeding and fertilizing



**OMEGA**  
Seed Drills



**FERTI-BOX**  
Hopper for Fertilizer



**ALFA DRILL**  
Seed Hopper

## inter-row cultivation mulching



**ROW-MASTER**  
Inter-row Cultivator



**MULCHER**  
Rotary Cutters

**BEDNAR FMT, s. r. o.**  
Lohenicka 607  
190 17 Praha-Vinor  
Czech Republic



Your Authorized Dealer



EUROPEAN UNION  
European Regional Development Fund  
Operational Programme Enterprise  
and Innovations for Competitiveness



\* M A O O 4 4 0 \*