

BEDNAR
FARM MACHINERY



A single pass is all you need

SWIFTER

SN, SO, SO_F

MAIN ADVANTAGES OF THE MACHINE

- Interchangeable working sections such as mixing shares (autumn), gamma tines and SB-sections for the Spring.
- Crushbar – hydraulic front paddle levelling bar – ensures adaptability in varying conditions.
- Crosskill rollers optimise consolidation and crumbling across the working width.
- Finishing rollers behind the crosskill create a soil cutter effect, leaving your land thoroughly prepared.
- Hydraulically adjustable working depth on the machines (SO_F) for precise seedbed preparation.
- Eradicators located behind the tractor wheels eliminates any possible tracks.
- Zero-maintenance “High quality” bearings ready for high circumferential speed at which the grinding aggression is increased.



AGRONOMIC ADVANTAGES OF THE MACHINE

- Implementing several working operations in one brings lower costs for seedbed preparation.
- 3-leveling bars produce a very flat surface.
- Creating accurate and identical seedbed for all plants on the plot means excellent and uniform germination.
- Intensive clod crumbling with the crosskill and finish rollers. The crushing becomes more intensive by increasing the roller circumferential speed.
- The cultivator can be used for both conventional systems of farming (ploughing) and in minimum tillage systems as well.
- Due to the technical design of the machine it is possible to work at high working speeds, easier to meet the required agronomical deadlines.

BEDNAR SWIFTER is a progressively designed seedbed cultivator which allows you to create uniform seedbeds in just one pass irrespective of the high working speeds and reduces operating costs for the user.

Crops such as oil seed rape, sugar beet and maize require high quality seedbed establishment. This is a requirement for a successful harvest and achieving high yields per hectare. The Swifter seedbed cultivators excel in their modern design and simple construction. The technical features of the SwifTERS make them popular machines which are able to perform high quality work, even in very difficult soil and climatic conditions.



“SwifTERS are simple machines which in just one pass make excellent seedbed and high quality topsoil structure. A uniform seedbed created in this way is a basic condition for placing seeds at the same starting depth over the whole drill working width. This creates a solid basis for a successful harvest.”

Ladislav Bednar

SWIFTER
Benefits



SWIFTER
Utilisation



Savings are inevitable thanks to:


- **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** = helps to 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.



Jan Hodoval
Pocaply, Litomerice district, Czech Republic 
area: 70 ha
machine: Swifter SN 4000

"The Swifter prepares the soil in just one pass in almost any conditions. This means I can start to plant or seed vegetables earlier. Vegetables are my main commodity."

Jan Hodoval, private farmer

A DEMONSTRATION ON A PLOUGHED FIELD

The Swifter tills the topsoil after winter in just one pass to an almost perfectly flat level. In very dry conditions, two passes are required.



A DEMONSTRATION IN A MINIMUM TILLAGE SYSTEM

After a good incorporation of plant residue in a plough-free system of farming the Swifter makes a superb job.



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 3-4 rollers guarantees the crushing quality and the soil preparation e.g. for sowing oilseed rape.



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.

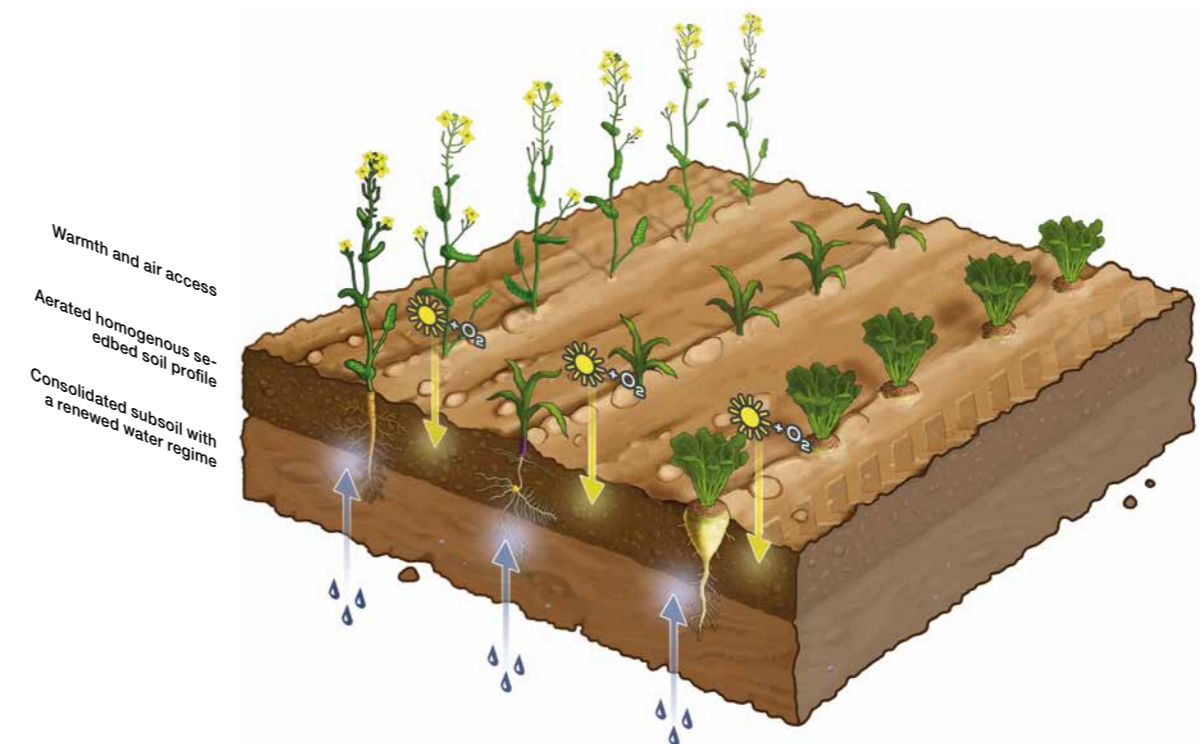
Summer seedbed preparation – similar complications as in spring preparation occur in summer, when it is often necessary to prepare the soil when harvesting is still going on so that sowing can begin, generally winter rapeseed followed by other crops. In summer, frost and snow doesn't help till the soil 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.



SWIFTER

Seedbed preparation in tough conditions



Wet and heavy soil – the Swifter deals with the complications of wet and heavy soil conditions without any hassle in just one pass thanks to its carefully designed working parts and overlapped rear double crosskill rollers.



Stony soil – for stony conditions, the crosskill rollers can be separated from each other. As such, the rollers do not get blocked by stones. You can work and prepare high-quality seedbeds even in these harsh conditions.



Soil with a large amount of post-harvest residue – the Swifter can even work with a large amount of post-harvest residue remaining on the surface after the winter. A plough-share working section is ideal for working with a large amount of post-harvest residue.



The seedbed is cut over the whole working width at a constant depth. A high quality seedbed is very important for uniform crop germination. The BEDNAR Swifter creates a high quality seedbed irrespective of how tough the conditions are.



SWIFTER

Experience



“It is not unusual for us to face extremely difficult conditions in our fields. For me, the Swifter has proven itself regarding soil preparation in wet conditions, preparing the rough furrow magnificently. Frame springs contribute to work comfort. I would not hesitate to invest in a Swifter again for soil preparation.”

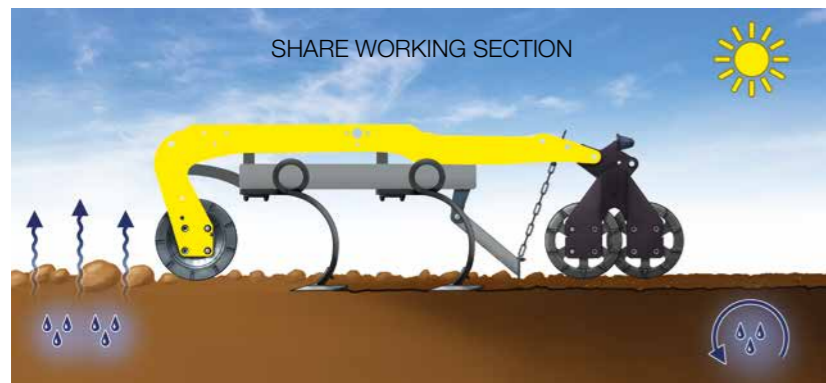
Jiri Richter, private farmer
Czech Republic



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-shanks 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.



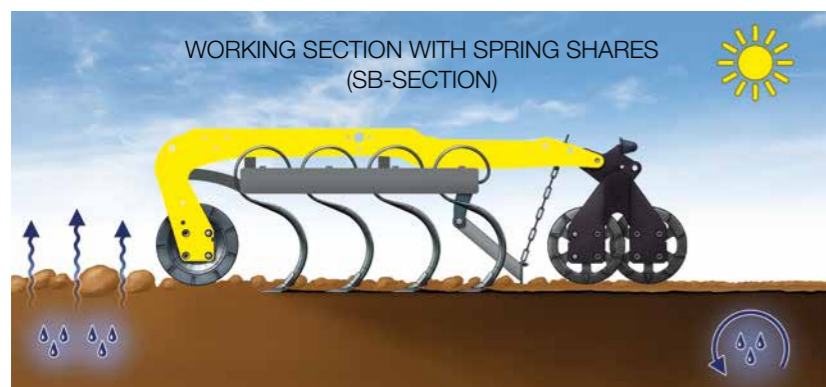
2 rows of overlapping 270 mm shares guarantee the undercut of the soil profile across the entire range of the machine by which a solid base of the machine is formed. At the same time the soil, thanks to the working angle of the shares, is aggressively cultivated and thus a loosened upper layer is formed. 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.

Choose the suitable roller



More rollers, less clods

Swifter SN and SO_F cultivators standardly come equipped with 2 rollers – a front slatted roller and back slatted (crosskill) rollers. The Swifter SO_F can also be equipped with two-row rollers in the rear machine section (slatted roller / crosskills). The Swifter SO always standardly comes equipped with 3 rollers – a front slatted roller and rear slatted (crosskill) rollers. The number of rollers on the machine multiplies the effect of clod crumbling. Basic rollers can be added if requested with a third 270 mm diameter finish tube roller with a high circumferential speed. This way you can achieve the thorough crushing effect of a “soil cutter”. Together with the levelling bars, the machine performs the thorough preparation even in difficult conditions.

SINGLE ROW SLATTED ROLLER

A simple and cheap solution for the spring cultivation of light soils.

weight: 78 kg/m
diameter: 370 mm



DUAL ROW SLATTED ROLLER

Suitable for all-year-round cultivation of light soils. The rollers of 350/370 mm diameter create the effect of a “soil cutter”.

weight: 168 kg/m
diameter: 350/370 mm



SINGLE ROW CROSSKILL

The single row crosskill with scraper system is made from cast iron, suitable for crushing clods.

weight: 92 kg/m
diameter: 370 mm



DOUBLE ROW CROSSKILL

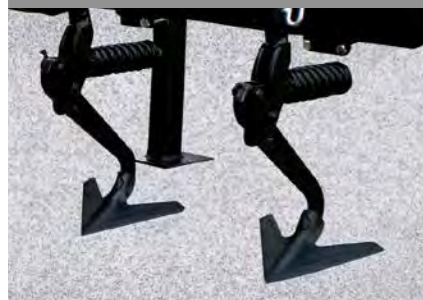
The double row crosskill self-cleaning roller made from high-quality cast iron, creating a thorough clod crushing effect. Only for Swifter SO/SO_F.

weight: 194/212 kg/m
diameter: 350/440 mm



ERADICATORS

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



FRONT LEVELLING BAR MECHANICAL

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



CRUSHBAR – FRONT HYDRAULICAL PADDLE LEVELLING BAR

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



FRONT CRUMBLING ROLLER

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



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").



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.



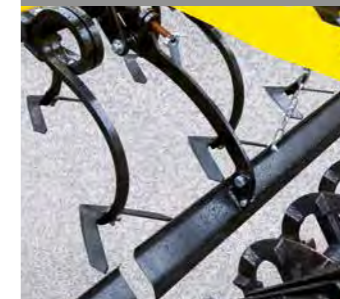
4 ROWS OF SPRING SHARES (SB-SECTION)

Ensure the soil profile is cut over the machine's whole working width without vertically mixing the soil. This means no moisture is lost.



LEVELLING BAR

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



REAR CRUMBLING ROLLERS

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



SWIFTER SN



SWIFTER SO/SO_F



REAR LEVELLING BAR

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



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.



SWIFTER SN series



Swifter SO_F series



BEDNAR SWIFTER SN

is a mounted seedbed cultivator designed for tractors from 75 HP

- mounted machine
- working widths of 3, 4, 5 m
- 4 m folded and 4 m fixed models
- sections are interchangeable (share / gamma-tine / SB-section)
- easy to transport thanks to its centre of gravity

BEDNAR SWIFTER		SN 3000	SN 4000	SN 4000R	SN 5000
Working width	m	3	4	4	5
Transport width	m	3	2,33	4	3
Transport length	m	2,75	3,02	3	2,7
Working depth*	cm	2-12	2-12	2-12	2-12
Number of shares	pcs	12	16	16	20
Number of shares SB-section	pcs	19	30	30	38
Number of gamma-tines	pcs	29	40	40	48
Total weight**	kg	1 080-1 410	1 650-2 080	1 510-2 120	2 300-2 850
Recommended output*	HP	90-120	140-160	140-160	145-200

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

BEDNAR SWIFTER SO_F

is a semi-mounted seedbed cultivator designed for tractors from 120 HP

- semi-mounted machine
- working widths of 4, 5, 6, 7, 8 m
- sections are interchangeable (share / gamma-tine / SB-section)

BEDNAR SWIFTER		SO 4000F	SO 5000F	SO 6000F	SO 7000F	SO 8000F
Working width	m	4	5	6,2	7,2	8
Transport width	m	2,7	2,7	2,7	2,7	2,95
Transport length	m	7,3	7,3	7,3	7,3	7,3
Working depth*	cm	2-12	2-12	2-12	2-12	2-12
Number of shares	pcs	16	20	24	38	32
Number of shares SB-section	pcs	30	38	45	51	59
Number of gamma-tines	pcs	34	44	54	64	74
Total weight**	kg	3 200-4 000	3 600-4 700	4 100-5 700	4 300-5 700	4 800-6 100
Recommended output*	HP	120-150	145-200	155-215	180-220	210-230

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

CONNECTED WITH A 3-POINT LINKAGE

The mounted Swifter SN is connected to the tractor using a 3-point linkage; the Swifter SN 3000 with a category II. and III., the Swifter SN 4000 with a category III.



CENTRE OF GRAVITY

The Swifter SN model is designed to be as close as possible to the tractor hitch. This means it has a centre of gravity which even stabilises the set with small tractors without weighing.



FOLDABLE SWIFTER SN

The Swifter SN model is also designed to be foldable with a working width up to 3 m so it can be used on the roads within the EU.



WORK ON HEADLANDS WITHOUT LIFTING UP

Lifting at headlands wastes time, which reduces the machine efficiency by up to 25 %. The Swifter SO_F design means the machine doesn't lift up at headlands.



CONNECTION TO THE TRACTOR ARMS

The Swifter SO_F is connected to the tractor simply by the tractor arms. Easy, fast connection. Fast response to any obstacles.



TRANSPORT DIMENSIONS

The Swifter SO_F is designed for transport on roads throughout the European Union. The machine's transportation width is up to 3 m and height up to 4 m for all working widths.



Swifter SO series /Swifter Concept/



Swifter Concept

The Swifter Concept is the term for a range of machines with a universal frame and various interchangeable working components. Thus offers a solution for varying requirements for spring or autumn seedbed preparations. Acquisition of the entire Swifter Concept range (universal frame + 4 working sections) saves 34 % on costs as opposed to buying 3 separate machines.

CULTIVATOR SECTION

A wide selection of sections for thorough seedbed preparation in autumn and spring.



Share working section



Usage – summer and autumn preparation when the soil needs loosening and mixing after the previous harvest.

Gamma-tines working section



Usage – spring seedbed preparation for keeping spring moisture in soil.

Working section with spring shares (SB-section)



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

BEDNAR SWIFTER SO is a semi-mounted seedbed cultivator designed for tractors from 120 HP

- semi-mounted machine
- working widths of 4, 5, 6, 7 m
- unique system of interchangeable working sections (Swifter Concept 3-in-1) - share / gamma-tine / SB-section, disc

SWIFTER		SO 4000	SO 5000	SO 6000 2S	SO 6000 4S	SO 7000
Working width	m	4	5	6,1	6,2	7,2
Transport width	m	2,85	2,85	2,85	2,85	2,85
Transport length	m	7	7	7	7	7
Working depth*	cm	2–12	2–12	2–12	2–12	2–12
Number of shares	pcs	16	20	24	24	28
Number of shares SB-section	pcs	30	38	45	45	53
Number of gamma-tines	pcs	40	48	60	60	70
Total weight**	kg	3 100–4 100	3 500–4 800	4 000–5 500	4 300–5 800	5 000–6 500
Recommended output*	HP	120–150	145–200	150–210	155–215	180–220

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

SECTION REPLACEMENT

It is very simple to replace the Swifter SO seedbed cultivator working sections for the SwifterDisc XO disc section. The disc section is affixed to the side frame using bolts, and main screws with casing through the side frame girders. The exchange takes roughly 2–3 hours.



SUSPENSION OF THE WORKING SECTIONS

The machine working sections are suspended using leaf springs. All bumps in the direction from the soil to the main frame of the machine and consequently to the tractor are reduced using these springs. The machine works solidly and at high speeds.



SAFE TRANSPORT

BEDNAR Swifter SO machines are designed for transport on roads throughout the EU. The transportation width is 3 m for all models, and height up to 4 m.



SWIFTER

Easy to set up

MECHANICALLY SETTING THE SHARE (GAMMA-TINES) WORKING DEPTH

You can easily set the working depth using the trapezoidal screw with removable handle. The numbered scale with indicator ensures the precise setting.



HYDRAULICALLY ADJUSTABLE WORKING DEPTH (GAMMA-TINES)

Set the working depth with ease and comfort right from the tractor cabin.



SET THE WORKING HEIGHT FOR THE LEVELLING BARS AND FINISH ROLLERS

You can easily set the working position using the regulating handle which determines the position of the stop screw against the silent block. The silent block also serves to protect against slips.



SWIFTER

Further information

MAINTENANCE-FREE BEARINGS

The rear roller bearings, prepared for high circumferential speed, are maintenance-free. The machine operator does not need to regularly lubricate each bearing, of which there are generally a large number for seedbed cultivators.



SIDE DEFLECTOR

The side deflector located on the machine sides prevent earth from being transferred outside the machine working width. This prevents the formation of ridges. Connections between each pass are not visible.



Product range

T: +420 283 092 529
 E: info@bednarfmt.com
 W: www.bednar-machinery.com

BEDNAR FMT s.r.o.
 Lohenická 607
 190 17 Praha 9 - Vinoř
 Czech Republic

The technical data and illustrations are approximate.
 Reservations are made for any design changes.

TILLAGE

Straw harrows STRIEGEL-PRO



Disc cultivators SWIFTERDISC



Disc cultivators ATLAS



TILLAGE

Seedbed cultivators SWIFTER



Versatile cultivators FENIX



Chisel ploughs TERRALAND



TILLAGE

Trailed packers
 CUTTERPACK, PRESSPACK, GALAXY



INTER-ROW CULTIVATION

Inter-row cultivator ROW-MASTER



SOWING AND FERTILISING

Seed drills OMEGA



Fertiliser hopper FERTI-BOX



ROTARY CUTTERS

Rotary cutters MULCHER



* K M 6 0 0 1 7 1 *

För mer information besök vår hemsida:
www.lantmannenmaskinimport.se

LMi