

# Prepare the perfect seedbed



## Prepare the perfect seedbed



The power harrow plays an important role in the PÖTTINGER arable farming concept. Best quality tilth and excellent mixing of the soil are highlights of PÖTTINGER power harrows. Combined with a seed drill, this machine becomes a high output and cost effective combination delivering perfect drilling results. PÖTTINGER offers tailor-made systems for every type of soil and every size of operation.

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All information on technical data, dimensions, weights, output, etc. and the images shown, are approximate and are not binding. The machines shown do not feature country-specific equipment and may include equipment that is not supplied as standard, or is not available in all regions. Your PÖTTINGER dealership would be pleased to provide you with more information.

### The best working results



## The best working results for an optimum seedbed

Today's farmers need the right technology to provide the best conditions for germination and growth as well as rapid and uniform emergence. With this series of efficient, high output power harrows, PÖTTINGER provides you with the best possible support.

Designed for the toughest conditions, these machines are known for delivering the best working results working solo and in combination with a seed drill.

## The heart of the machine – the rotor gearbox unit

An extended service life is only possible thanks to precision machining and strong connections.

At PÖTTINGER this level of high quality goes without saying.

- Thick-walled gear sump made of fine-grained steel smooth running and extremely resistant to twisting.
- Large gears located directly above the bearings for a secure seat on the rotor shaft.
- The bearing housings are welded to the central brace and bottom of the sump. An exact spacing between each rotor is guaranteed as a result.
- Power from the gearbox is transmitted directly to the bevel gears.
- Tapered roller bearings with robust, single-piece bearing housing







#### Integrated tine carriers

The tines on the LION power harrow guarantee effective cultivation for intensive loosening and uniform tilth.

- The tine carriers are fully integrated into the gear beam resulting in the gap between tines and gear beam being extremely small
- Harvest residues cannot wrap around the tine carriers
- No stones can become trapped: this prevents damage to the gear beam

## Effectiveness over the entire working width

The specified working widths are precisely maintained with LION power harrows. Thanks to the configuration of the rotors, the machine cultivates the full working width.

- LION 2.5 m -> 2.49 m
- LION 3.0 m -> 2.99 m
- LION 3.5 m -> 3.49 m
- LION 4.0 m -> 3.99 m
- LION 5.0 m -> 4.99 m
- LION 6.0 m -> 5.99 m

The soil is also cultivated along the outermost edges of the machine. This guarantees that the outer seed coulters can place the seed perfectly and optimum merging on adjacent passes is ensured.

## Maximum flexibility



#### The LION as an all-rounder

The LION power harrow not only performs well when operated on its own but also delivers excellent results in combination with any PÖTTINGER implement mounted seed drill. You can use the LION power harrow together with VITASEM, AEROSEM or TEGOSEM. Mounting and removing the drill using the rear roller is quick and easy, without the need for tools.

Mounting of the seed drills on the rear roller is unique and has further advantages:

- The additional weight of the seed drill is carried entirely by the rear roller.
- The centre of gravity of the combination unit is located close to the tractor.
- The power harrow can move up and down independently of the seed drill.
- The drilling depth is not influenced by changing the working depth on the power harrow.

- 1 Compact combination close to tractor
- The weight of the seed drill is carried by the rear roller





#### The best centre of gravity

PÖTTINGER focused on compact design during development. The influence of the seed level inside the hopper is relatively low because the seed hopper is located so close to the tractor. This results in less weight off the front axle even when the seed hopper is full.

- On AEROSEM seed drills the centre of gravity lies between the power harrow beam and the rear roller.
- On VITASEM models, the centre of gravity acts on the front section of the rear roller.
- The optional hydraulic top link tilts the VITASEM implement mounted seed drill forwards at the headland. This shifts the centre of gravity even closer to the tractor.

- 1 PÖTTINGER with seed hopper empty
- 2 Comparable combinations with seed hopper empty
- 3 PÖTTINGER with seed hopper full
- 4 Comparable combinations with seed hopper full

#### Focus on weight

The aim of the development was to manufacture all parts that project (far) to the rear, in particular coulters and loading platform, using special materials. PÖTTINGER uses aluminium components like the ones used in the automotive industry. These are technically advanced and have the same capability as steel.

## Maximum flexibility



## Flexibility with a choice of mounting configurations

A range of mounting options are available to match the model of seed drill. Attachment to different tractors (Cat. 2/Cat. 3) is possible thanks to the extending lower linkage mountings for different tyre diameters.

## Hydraulic or mechanical – it's your choice

On the VITASEM models you can choose between a mechanical or hydraulic top link.







## Implement mounted with mechanical top link

- The compact design makes it possible for the coulter rail and the power harrow rear roller to be so close together
- The implement-mounted drill is fixed to the packer roller and guided in parallel by the top link
- A consistent seed placement depth is ensured thanks to the optimum consolidation of the seedbed as a result of the additional weight on the roller
- Consistent drilling depth even when changing the working depth of the power harrow using the rear roller

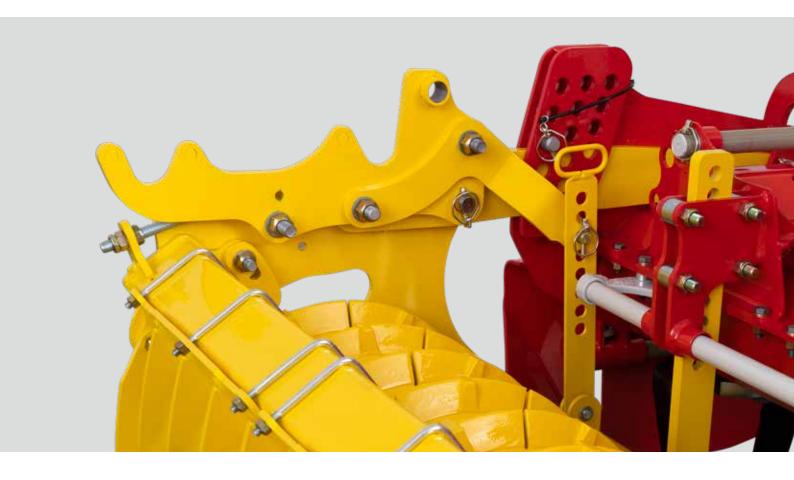
## Implement mounted with hydraulic top link

- The optional hydraulic top link on VITASEM models tilts the coulter rail closer to the power harrow to make the combination even more compact
- A huge ground clearance is provided for the seed coulters at headlands and the drill can be used with great precision along field edges
- The centre of gravity is positioned close to the tractor, this is especially necessary with a full seed hopper

#### **HYDROLIFT**

- Hydraulic system for mounting seed drills using height and length adjustable catch hooks
- Two hydraulic cylinders guarantee a maximum lifting power of up to 2.4 t for heavy linkage-mounted seed drills
- Lifting height limiter optional

## To make work easier for you



#### Clever details

You need to be able to react quickly and easily to different operating conditions. PÖTTINGER power harrows feature some well thought out details.

#### Setting the working depth

The working depth of the rigid LION power harrows can be flexibly adjusted by simply repositioning the bolts in the hole matrix.

On the new folding LION 103 C models it is possible to set the working depth of each frame section from the side without the need for tools.

## Automatic levelling board adjustment

The rear levelling board is standard and is set automatically with the depth of the rear roller. No readjustment is necessary when changing the depth. The rear levelling board can be quickly removed and positioned in front of the rotors.

- Over the full working width the levelling board is always at a consistent distance from the tines
- On all models there is a hole matrix bar that is easily accessible and reliable even after many years of use

#### Optional:

A front levelling board for all rigid models that is identical to the rear board.







#### Side boards

For a perfectly merged adjacent passes, PÖTTINGER offers a side board to match each model.

#### Standard model:

- Depth adjusted using slotted holes
- Can be fixed in the working position and folded vertically for road transport

#### Parallel guided side boards:

- Optional for all rigid models except the CLASSIC series
- Height-adjustable using slotted holes
- Simply fold upwards for transport

#### Spring-protected side boards

Spring-protected side boards are available as an option to ensure perfect merging between passes even in extreme conditions, such as on heavy and stony soils.

- Special feature: when the boards are folded into the transport position, the springs remain pretensioned, this minimises set-up time This minimises set-up times.
- Infinite height adjustment using slotted holes
- For all LION power harrows except the CLASSIC series
- Standard on the LION 1002 series

## To make work easier for you



## Perfect mounting – low PTO shaft angle in operation

For a long service life and smooth running of the PTO shaft, it is important that the power harrow can be attached perfectly to a wide variety of tractor geometries.

- The length and width of the lower linkage mountings can be adjusted without the need for tools
- Optimum length and angle of the PTO shaft
- Ideal for machinery rings with different tractor brands

## PTO shaft holder for easy accessibility

The PTO shaft can be placed on a convenient fold-away support. Additional contamination is avoided and maintenance work is made easier. Thanks to the correct position of the PTO shaft

at the height of the PTO shaft stub, the coupling process is more convenient.







#### Track eradicators

Spring-mounted track eradicators are available as an option for all LION power harrows. At PÖTTINGER these are spring-mounted to protect against stones and foreign objects.

- The working depth can easily be adjusted without the need for tools
- Up to 3 spring-mounted track eradicator tines are available per tractor track, depending on the type of power harrow

### DURASTAR and DURASTAR PLUS tines: coated and proven in the field

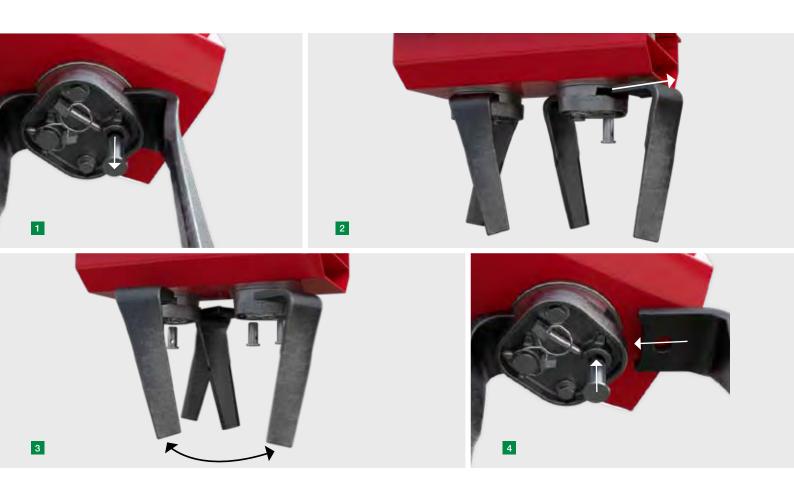
- Up to 60 % longer service life thanks to special coating
- 15-mm and 18-mm-thick reversible tines
- Excellent retention of shape
- Consistently high quality of work because the tines retain their length much longer
- DURASTAR tines available as an option
- DURASTAR PLUS tines can only be ordered as spare parts

#### Bout markers

On PÖTTINGER machines, the bout markers can be mounted either on the seed drill (rigid models) or the power harrow.

- Hydraulic bout markers for reliable activation even on steep ground
- Hydraulic operation
- Transport interlock
- Setting the intensity of the marking
- Shear bolt as overload protection
- Optional for all LION power harrows (except the CLASSIC series)

## To make work easier for you



## Making work easier with technology at the highest level

Constantly changing soil conditions require changes to the tine positions. Practical experience has shown that only what can be done easily is then really done.

LION power harrows combine technology and convenience in one unit to deliver the best working results.

### It's so easy – Quick-fix tine changes

The Quick-fix tine system provides a quick and safe solution for even more working convenience.

You can change the tines in just a few simple steps, it has never been so easy.

- 1 Remove lynch pin and lock pin
- 2 Remove tines
- 3 Fit new tines
- 4 Clamp in place finished







## Universal tines for every operation

LION power harrows with 10 tines can be used both as harrows and cultivators. All that is needed is for the tines to be repositioned.

One shape of tine covers standard drilling, mulch drilling and direct mulch drilling.

This ensures optimum mixing and good quality tilth at seed slot level right across the entire working width.

## Sweeping tine position – power harrow

In this position, the tines produce a fine tilth at seed slot level.

- Finer particles of soil are concentrated at the level of the
- Larger clumps and harvest residues remain on the surface
- Protection against erosion
- Standard for every tine thickness

## Aggressive tine position – rotary cultivator

In this position, the tines aggressively break up the soil and optimum mixing is guaranteed. The rotor direction remains the same. The outer rotors still rotate towards the centre.

- The soil is broken up from below
- Harvest residues are

incorporated effectively

■ Only possible with 18 mm

thick tines

### Overview of tine configurations

103 CLASSIC series – lighter power harrows, up to 140 hp LION 253 CLASSIC / 303 CLASSIC / 303.12 CLASSIC  103 series – robust and cost effective power harrows up to 200 hp LION 303 / 303.12 – up to 180 hp LION 353.14 / 403 – up to 200 hp	8 / 10 / 12 10 / 12
103 series – robust and cost effective power harrows up to 200 hp LION 303 / 303.12 – up to 180 hp	
LION 303 / 303.12 – up to 180 hp	10 / 12
·	10 / 12
LION 353.14 / 403 – up to 200 hp	
	14 / 14
1002 series – rigid power harrows for the toughest demands up to 250 hp	
LION 3002 / 4002	10 / 14
103 C series – folding power harrows for high outputs up to 320 hp	
LION 403 C / 503 C	16 / 20

## More reliability in the field



#### Kit you can rely on

LION power harrows guarantee extremely smooth operation and high strength. These machines operate reliably even in the hardest endurance conditions and heaviest soils.

#### Proven technology

The tapered roller bearings in PÖTTINGER power harrows have been proving their strength and reliability for more than 25 years. Nowadays this technology is widely used in every type of vehicle: trucks, cars and in the construction industry.

#### Rugged headstock

LION power harrows deliver the best working results with a rugged headstock and a high level of flexibility.

- Double sided linkage lugs adjustable in width and category: Cat. 2/2, Cat. 3/3, Cat. 3/2
- Bumpy ground between the tractor and power harrow is compensated for by the floating function of the lower linkage arms
- Depending on the tractor model, the mounting lugs can telescope out three fold to bring the power harrow as close as possible







#### Smooth, quiet operation in the field

Regardless of whether it is fitted with a changeable speed gearbox or CLASSIC gearbox, all models of LION power harrow are smooth running during operation and in the headland position.

#### LION CLASSIC gearbox

- Straightforward fixed-speed gearbox up to 140 hp
- Gearbox input stub mounted far back
- Longer PTO shaft for a larger angle and uniform, smooth operation
- No rear PTO shaft

#### LION changeable speed gearbox

- Flexible choice of rotor speed by changing the gears
- PTO shaft at only a minimal angle with incoming gear placed well back
- Protected by a cam-type clutch
- The gearboxes are equipped with cooling fins
- Optional: rear PTO shaft

#### LION central gearbox

- Folding LION C models are equipped with high-volume central gearboxes
- Good self-cooling thanks to high oil flow rates
- Reduced torque load thanks to high shaft speeds between the central gearbox to the external gearbox
- Flat PTO shaft angle due to high position of the PTO shaft stub

## More reliability in the field



- Gear trough supported in the centre
- Tapered roller bearing with robust, single-piece bearing housing
- 3 Large gap between upper and lower bearing

#### Impressive technology

An extended service life is only possible thanks to precision machining and strong connections. The LION power harrows provide the highest strength, smooth-running and long service life, an excellent combination for more reliability in the field.

## Gear trough supported in the centre

The high gearbox housing is formed from a single piece and is additionally reinforced by the welded central brace. This gives the gear beam extreme strength.

- Above the central brace the gears and bearings run submerged in semi-liquid grease.
- The double base also protects the gear beam from dirt ingress and damage.







#### Integrated tine carriers

The tine carrier is completely integrated into the rotor beam, which significantly improves reliability.

- No soil can flow above the rotors because of the small gap between the rotor and the rotor beam
- Harvest residues cannot wrap around the tine carriers
- Stones cannot become trapped

## Tapered roller bearings with robust, singlepiece bearing housing

The bearing housings are welded into the box section with the central brace before being milled on the CNC machining centre. This process ensures exact rotor-to-rotor spacing and guarantees smooth-running and a long service life.

#### A bearing for eternity

A wide support distance between the upper and lower tapered roller bearings reduces the stress acting on them

The lower bearing is located close to the tine carrier. This takes the stress off the bearing and reduces wear. The labyrinth seal carefully seals inwards and outwards, no ingress of dirt.

Dimensions of tine rotor shaft:

- 50 mm on the LION 103 CLASSIC / 103 / 103 C series
- 60 mm on LION 1002 / 1002 C

#### PTO speed table for LION models

	LION 103 Classic	LION 103 LION 1002						LION 103 C	LION 1002 C
Input speed	Single speed gearbox				31/34 Optio	4 34/31 n	Single speed gearbox	2-speed manual gearbox	
540 rpm	185	185 285	-	343		209	251	185	_
750 rpm	256	256 395	212	_		290	349	256	-   320
1,000 rpm	342	342 527	283	_		387	456	342	350   420
1,300 rpm	-	_						445	430   -

## For tractors up to 140 hp



## LION 253 CLASSIC / 303 CLASSIC / 303.12 CLASSIC



## For tractors up to 140 hp



### LION 253 CLASSIC / 303 CLASSIC / 303.12 CLASSIC

#### 103 CLASSIC series: Our lightweight power harrows

With the LION CLASSIC series PÖTTINGER offers slightly lighter weight models. On CLASSIC versions you can choose from working widths of 2.50 m with 8 rotors and 3 m with 10 or 12 rotors.



#### CLASSIC gearbox up to 140 hp

- PTO input shaft mounted far back, gearbox equipped with cooling fins
- Fixed rotor speed
- No rear PTO shaft



#### Side boards

On LION CLASSIC models, the height of the side boards is adjusted precisely and easily using slotted holes.

Folded up for road transport without the need for tools, the transport width is less than 2.50 m or 3.0 m.

## For tractors up to 200 hp



## LION 303 / 303.12 / 353.14 / 403



## For tractors up to 200 hp



## Series 103 – robust and cost effective power harrows

With the LION 103 series, PÖTTINGER offers robust and cost effective models for tractors up to 200 hp.

The LION 103 comes with working widths of 3.0 m, 3.5 m and 4.0 m.

## LION changeable speed gearbox up to 180 hp / 200 hp

- Proven changeable speed gearbox
- Variable rotor speed
- PTO input shaft mounted far back, gearbox equipped with cooling fins
- Alignment of PTO shaft almost horizontal between tractor and LION
- Rear PTO shaft optional

### LION 303 / 303.12 / 353.14 / 403



#### The best results

Thanks to the changeable speed gearbox the rotor speed can be adjusted to suit any soil conditions and PTO shaft rpm. The fully hardened tines ensure a long service life.

#### LION 303 / 403

- With 10 or 14 rotors for working widths of 3 or 4 metres and tine dimensions of 18 x 340 mm for a working depth of up to 28 cm
- These power harrows guarantee best results on heavy clay soils and dry ground
- Reliable operation even in stony conditions thanks to the strong tines

#### LION 303.12 / 353.14

- With a working width of 3 or 3.5 metres and 4 rotors per meter of working width, the 330 mm tines are 15 mm thick (optional 18 mm thick) for a working depth of up to 25 cm
- A very fine soil structure is achieved with these models featuring 4 rotors per metre of working width because more tines are in use than on 3.3-rotor machines
- The ideal models for potato and vegetable ground preparation

## For tractors up to 250 hp



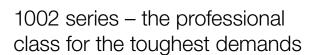


## For tractors up to 250 hp



These professional machines have working widths of 3 and 4 metres and are equipped with advanced technology to handle all soil conditions. You can rely on this LION in the most demanding situations.





- Robust, wide headstock with additional side struts on the LION 4002
- Double sided category 2 and 3 linkage lugs with integrated sway movement and 3-fold length adjustment are designed to match every tractor
- Side boards are spring-mounted and can be folded upwards with the parallel linkage option



## Power harrow technology for the highest power class

- Changeable speed gearbox with large cooling fins for maximum heat dissipation
- A cam-type clutch is integrated into the PTO shaft to protect the gearbox
- Rear PTO shaft optional
- The large-dimensioned, heat-treated precision bevel gears are submerged in semi-liquid grease
- 60 mm diameter rotor shaft with robust tapered roller bearings

## For tractors up to 320 hp



## LION 403 C / 503 C



### For tractors up to 320 hp



#### Even higher output

The power harrow range featuring the new folding LION 103 C series from PÖTTINGER is designed for tractors up to 320 hp

With the LION 103 C series, the focus is on the compactness of the machine and optimised weight distribution. These folding power harrows are designed to be even more operator-friendly by providing a perfect overview of the entire machine to simplify monitoring and control.

## Technical and practical requirements

The top priority in seedbed preparation is the creation of optimum germination and growth conditions to ensure rapid and uniform plant emergence. On the LION 103 C PÖTTINGER achieves this by using 4 rotors per metre of working width and tines that are 300 mm long and 15 mm thick (18 mm thick as an option).

A perfect seedbed is the basis for an optimum harvest. The LION 103 C features maximum clearance and produces fine tilth and a level seedbed.



#### Versatility

The LION 103 C series in combination with the AEROSEM FDD offers the highest level of versatility.

The coupling system for attaching the coulter rail to the power harrow features a simple catch hook solution with lock pin that allows the system to be fitted in a few minutes. This extends the range of applications considerably, since attachment and removal is easier and quicker than on all comparable machines.

All adjustments such as working depth of the tines and the levelling board are easy to operate from the side of the machine. This means the machine can be adapted to work in different soil conditions within a few minutes.

#### Our top customer benefits

- The best working results thanks to proven LION technology combined with the integrated folding system
- High durability and smooth running thanks to a nocompromise drive train and central gearbox
- The highest reliability thanks to the proven LION gear beam design with robust tapered roller bearings
- The highest level of operating convenience thanks to the integrated folding cylinders and intuitive adjustment possibilities

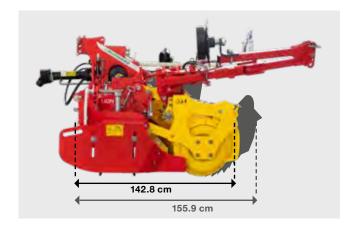
### For tractors up to 320 hp



#### Integrated folding frame

The rotor beam mounting on the LION 103 C series has been completely revised. The folding frame integrated into the rotor beam results in a 13 cm shorter design compared to the models in the previous series and its competitors. This makes it possible to move the weight of the machine and its rear roller closer to the rear axle of the tractor. Having the centre of gravity closer to the tractor means more even weight distribution on the front and rear tyres.

At the same time we have increased the gap between the bearings on the rotor beam hinge points to improve the durability of the robust folding frame.



#### Compact design

Shorter, stronger and more compact: These characteristics have been incorporated by engineering an integrated folding frame.

Thanks to the compact construction an excellent field of vision is provided even with large working widths. This is made possible by installing the folding cylinders in the headstock.

Following additional changes to the setting systems, the machine now features a perfect layout.



### The best working results

Each section of the machine can adapt optimally to the ground contours thanks to vertical travel of up to 20 cm. A pressure accumulator system ensures the correct ground pressure, which is distributed evenly over the entire width of the machine. Optimum seedbed preparation is ensured even in the most difficult conditions.







# Working depth adjustment

The working depth is set for each frame section using swing clips and without the need for tools. Adjustment is easy and is accessible from the side of each folding section. The correct position is achieved by moving an integrated push rod with a scale that is easy to read. The working depth can also be adjusted hydraulically as an option.

# Adjusting the levelling board

The 15-hole matrix and ratchet wrench supplied are used to fine-tune the position of the levelling board. This means that when the working depth of the power harrow is changed the levelling board is adjusted automatically as well.

# Integrated folding cylinder

Thanks to the integrated folding cylinders being located under the headstock, the LION 103 C models offer an unrestricted view of the entire machine. In the working position the cylinders are completely retracted and therefore protected from dust and dirt.

# For tractors up to 320 hp





#### Generously dimensioned central gearbox

The PTO input speed from the tractor goes out to the two external gearboxes without changing the transmission ratio. This ensures that the power transmitted to the external gearboxes arrives without loss of torque. Reliability is enhanced as a result.

#### Reliable operation in all conditions

Reduction to a rotor speed of 342 rpm does not take place until the external gearbox.

Protected by a cam-type clutch, the LION 103 C series delivers impressive reliability and is approved for all PTO shaft speeds.





#### Reinforced track eradicator tines

Equipped with overload protection of up to 180 kg and tungsten carbide points, the track eradicator tines deliver the best working results.

Up to three track eradicators per tractor track are available as an option. These can be shifted into position along the tube profile and the working depth easily adjusted by means of lock pins.

#### **Bout markers**

Optional bout markers have a pivoting radius of 90 degrees to the rear and have a central folding hinge for road transport.

The integrated hydraulic collision safety device and the additional shear bolt ensure maximum reliability. The aggressiveness is easily adjusted by altering the position of the disc.

# LION 403 C / 503 C





### High performance combined with flexibility

The LION 103 C puts in an impressive performance on its own and together with a seed drill. In combination with the AEROSEM FDD, the short design of the machine becomes even more important. Thanks to the quick attachment and removal of the coulter rail, the LION is ready to be used on its own in no time at all.

### Optional preselect system

The LION 103 C Series requires 3 double-acting spool valves when fully equipped. When used in combination with an AEROSEM FDD seed drill, an optional preselect system with integrated hydraulic block is offered. All functions can then be controlled using a preselect system and only one spool valve is required. A gearbox temperature monitor is available together with the preselect system.





### Parking position

The LION 103 C series can be parked when folded up to save space.

In combination with a seed drill it is recommended the machine is parked in the unfolded position to avoid having to detach the coulter arms. This is possible without additional parking stands.

### Road transport

With a transport width of just 2.55 metres, enhanced safety is also provided on the road. The rollers are secured for road transport using transport interlock bolts.

# For tractors up to 500 hp



### A new dimension in performance

With the new folding LION 1002 C series PÖTTINGER extends its power harrow range for tractors up to 500 hp.

We optimise our machines and develop new technology based on many years of successful experience in seedbed preparation. Customer feedback has also provided a major influence on the design of the new power harrow series.

## Technology at a glance

For perfect seed emergence, a level seedbed of fine tilth is crucial. PÖTTINGER achieves this goal with the LION 1002 C series with a working width of 6 metres. 20 rotors, each with a pair of 18 x 340 mm tines, ensure ideal seedbed preparation across the entire working width in the toughest conditions.

When developing the new power harrow series, the focus was on the compactness of the machine. Integrating the folding frame into the rotor beam has made the machine more compact and improved weight distribution.

The folding power harrow, designed to withstand the toughest conditions, is now even more customer-friendly. A perfect overview of the entire machine enhances safety during operation.



### High output

The LION 1002 C series puts in a convincing performance with the highest output both solo and in combination with an AEROSEM FDD.

The handling has been designed for maximum ease of use. Working depth and levelling board adjustment are conveniently accessible from the side. Hydraulic working depth adjustment is available as an option for highly variable soil conditions.

Thanks to the simple coupling system, with an AEROSEM FDD you have a compact, high output seed drill at your disposal. The user-friendly catch hook solution allows the coulter rail to be attached and detached in a matter of minutes for increased machine utilisation.

## Our top customer benefits

- The best operating convenience thanks to proven LION technology combined with the integrated folding system
- The best working results to produce the finest seedbed in the toughest conditions, approved for tractors up to 500 hp
- The longest durability thanks to a large-dimensioned central gearbox and rotor beam with welded central brace
- Enhanced safety during operation thanks to the compact design and best overview

# For tractors up to 500 hp





### The best working results

Both side boards are equipped with guide vanes, are spring-mounted and pre-tensioned. Perfect merging between passes and the highest level of reliability are ensured by an overload protection system.

As an option, up to 3 hardened track eradicator tines can be mounted per tractor track with a triggering pressure of 180 kg. A front levelling board is also available as an option, or it can be re-positioned from the rear to the front.

#### Powerful 2-speed manual gearbox

A newly developed PTO driveline with 2-speed manual gearbox provides a wide speed range. The 1002 C series is approved for PTO speeds between 750 and 1300 rpm. This means that your tractor

always runs within its optimum performance range. Reliability is enhanced as a result. A high-capacity gearbox housing provides the necessary cooling.





### Ground tracking

Thanks to the integrated pressure accumulator system in both sections of the machine, the power harrow can move downwards by 2° (approx. 10 cm) and upwards by 5° (approx. 20 cm).

Uniform pressure is applied over the entire width of the machine to maintain a consistent working depth.

#### Convenient to use

The working depth is adjusted without the need for tools. This is carried out from the side of the machine. An intuitive indicator scale acts as a depth guide.

Thanks to the parallel linkage, the levelling board is adjusted automatically when the working depth is changed. A total of 15 different basic setting positions can be selected.





### Reliable operation in all conditions

The rotor speeds vary between 320 and 430 rpm. This ensures perfect working results at all times while reducing fuel consumption. Thanks to its strongly dimensioned external gearbox, the power harrow is approved for tractor outputs of up to 500 hp. A cam-type clutch on each frame section protects the machine against overload up to 2,200 Nm.

### Tine dimensions and position

With 18 x 340 mm tines, you are equipped for every job in the field. DURASTAR tines with a 60 % longer service life are available as an option.

The tines can be mounted in two positions: aggressive or sweeping. Available as an option with the quick tine change system.





#### Choice of rear rollers

PÖTTINGER offers a total of 3 different rear rollers in different sizes to meet your individual requirements. The rear roller on the LION 1002 C is guided in a parallelogram, so that in combination with an AEROSEM 6002 FDD no readjustment of the coulter rail is necessary when changing the working depth.

### Enhanced safety during transport

The transport chassis can be adapted to ensure safe transport on the road. The chassis is hydraulically damped to make road transport smoother. This is engaged conveniently using catch hooks, which are centrally locked and unlocked using a ratchet wrench.

# Cover crop sowing unit



### Helps you save time

The TEGOSEM cover crop sowing unit combines soil cultivation and sowing a catch crop in a single pass to save time and costs. The TEGOSEM can be combined with rigid PÖTTINGER LION power harrows as well as with FOX compact combinations. This sowing unit can be used together with three-point mounted rigid implements.

### Precision distribution

The seed material is distributed pneumatically through up to 8 outlets. This guarantees pinpoint precision over the whole working width regardless of the wind conditions. The distributor plates are adjusted by changing the shaft angle.

# Your advantages with TEGOSEM and LIONcombination:

- Seedbed preparation and sowing in a single pass
- Fast and cost-effective sowing of cover crops
- Seed is deposited in front of the rear roller; the seed is then pressed down and emergence is accelerated
- The outlets are located close to the rear roller to guarantee uniform emergence
- Loading platform with handrail for convenient and safe filling
- Can be retrofitted to all existing rear rollers







## Precision sowing

The seed material is distributed evenly with the TEGOSEM. The metering system is driven electrically. Two different metering shafts are provided as standard to ensure precision distribution for fine or coarse metering, even at low seed flow rates. Pressure is built up the fan to distribute the seed through eight outlets over the entire width of the machine.

### Calibration

Calibration is easy: the calibration procedure is started at the press of a button. A calibration bag is provided as standard equipment. A logical guide makes each calibration step easy to follow.

## Metering start/stop

A sensor on the top link detects the signal for starting and stopping metering. During operation it is not necessary to start the metering process manually.

# Hitching and detaching

- The sowing unit including coulter rail is mounted and removed without the need for tools
- Mounted on coupling points on the rear roller and top link
- Parking stands are standard

## The TEGOSEM can be combined with LION power harrows:

	For machine type	Tractor mounting	Fan drive system	Hopper location	Hopper location (litres)	Weight
TEGOSEM 200	LION 3.0 / 3.5 / 4.0 m	Rigid 3-point	Electric fan drive	Rear roller	200	145 kg

# The right roller for all soil types



# Overview of roller types

	2.50 m	3 m	3.50 m	4 m LION 4002	4 m LION 403 C	5 m LION 503 C	6 m LION 6002 C
Cage roller 420 mm	148 kg	195 kg	-	_	_	_	_
Cage roller 540 mm	_	325 kg	_	_	_	_	_
Tooth packer roller 420 mm	332 kg	365 kg	_	_	_	-	_
Tooth packer roller 500 mm	440 kg	525 kg	580 kg	600 kg	790 kg	940 kg	1,560 kg
Tooth packer roller 550 mm	_	547 kg	600 kg	690 kg	870 kg	1,040 kg	1,680 kg
Crumbling packer roller 525 mm	_	520 kg	_	750 kg	_	-	-
Pack ring roller 550 mm	493 kg	550 kg	655 kg	740 kg	890 kg	1,030 kg	1,610 kg
Prism packer roller 500 mm 12.5 cm	_	560 kg	640 kg	735 kg	965 kg	1,055 kg	1,690 kg
Prism packer roller 500 mm 15 cm	-	530 kg	-	695 kg	-	-	-
Prism packer roller 600 mm 12.5 cm	-	780 kg	890 kg	1,010 kg	1,195 kg	1,425 kg	1,850 kg
Prism packer roller 600 mm 15 cm	_	740 kg	_	925 kg	_	_	_
Rubber packer roller 585 mm	_	575 kg	_	_	_	_	_

### Your tailor made solution

Whether used in medium or high moisture soil, light or heavy soil conditions, PÖTTINGER offers you tailor-made roller solutions.

The scrapers can be adjusted centrally, or individually by rotating the scraper tube. They can simply be pivoted away for cleaning. The coated scraper plates are reversible, which leads to a longer service life.

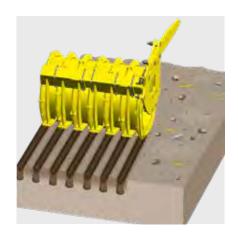


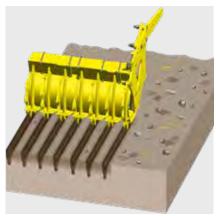


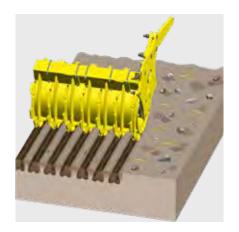
Requirements	Prism packer roller	Tooth packer roller	Crumbling packer roller	Pack ring roller	Cage roller	Rubber packer roller
Consolidation	++	0	+	++	0	++
Damp conditions	+	0	0	++	0	+
Dry conditions	++	++	++	++	++	++
Crumbling effect	++	++	++	++	+	++
Load capacity	++	++	+	++	+	++
Suitability for stones	++	0	_	++	+	0
Scrapers (coated)	yes	optional	yes	yes	no	yes

- ++ highly suitable
- + very suitable
- o suitable
- not suitable

# The right roller for all soil types







## Prism packer roller

This roller handles all operating conditions, including stony ground and larger quantities of harvest residues.

Consolidation in strips promotes drainage and breathability of the soil in the area between the rings, which has been subject to less precompaction.

- Prism rings spaced at 12.5 or 15 cm
- Diameter: 500 and 600 mm
- Coated scrapers are standard

## Tooth packer roller

This roller is suitable for all types of soil. The roller leaves behind a perfectly consolidated seedbed with loose, fine soil at seed level.

In wet conditions, the geometry of the roller produces good capillary action and reduces contamination thanks to its scrapers.

The hardened scraper plates are reversible, which leads to double the service life.

- Diameter: 420 mm, 500 mm and 550 mm
- Coated scrapers optional

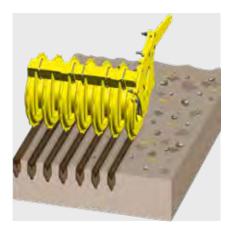
# Crumbling packer roller

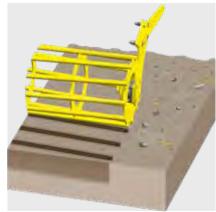
This roller is especially suitable for heavy, clay soils.

The result is a deep consolidation effect with loose crumbling effect just under the surface.

Scrapers prevent soil sticking to the roller.

- Diameter: 525 mm
- Coated scrapers are standard







## Pack ring roller

Ideal for stony, damp conditions and heavy organic residues. Harvest residues remain on the surface of the soil and protect the soil against drying.

The roller produces a corrugated consolidation effect to promote drainage and allow the soil to breathe.

- Diameter: 550 mm
- 8 rings per metre of working width for 12.5 cm row spacing
- Coated scrapers are standard

# Cage roller

The ideal roller for dealing with dry, non-sticky soils.

The roller is fitted with strong bars for optimal consolidation.

Diameter: 420 mm, 8 barsDiameter: 540 mm, 11 bars

# Rubber packer roller

This roller is ideal for widely varied ground conditions.

Thanks to its high load capacity, it can be used where other rollers have reached their limits.

The special profile produces consolidated ridges.

- Diameter: 585 mm
- Coated scrapers are standard

# Standard & Optional Equipment









	Tines 15 x 330 mm	Tines 18 x 330 mm	Tines 18 x 340 mm	DURASTAR
LIGHT OF ACTION				
LION 253 CLASSIC	_	_		
LION 303 / 303.12 CLASSIC	<b>-/</b> ■	-/□	■/-	
LION 303 / 303.12	<b>-/</b> ■	-/□	■/-	
LION 353.14 / 403	■/-	□/-	-/ <b>=</b>	
LION 3002 / 4002	-	-	■/■	
LION 403 C / 503 C	■/■	0/0	_	
LION 6002 C	-	_		









	HYDROLIFT for linkage-mounted machines	PTO through shaft	Bout markers	Spring-mounted track eradicators
LION 253 CLASSIC		-	_	_
LION 303 / 303.12 CLASSIC		_	_	
LION 303 / 303.12				
LION 353.14 / 403				
LION 3002 / 4002		-		
LION 403 C / 503 C	-	_		_
LION 6002 C	=	_		_

### More equipment options

- Hydraulic depth adjustment
- PTO shaft 1 ¾" 6 spline (except 253/303/303.12 CLASSIC)
- PTO shaft 1 %" 21 spline
- Stroke limiter for HYDROLIFT

# Often ordered together











QUICK FIX quick- change tines	Aggressive tine position	Front levelling board	spring-loaded side boards	parallel guided side boards
			_	-
	□/ <b>-</b>		_	<del>-</del>
	□/ <b>-</b>			
	-/□			
	0/0			
	-			-
				_











Track eradicator tines	Warning sign and lighting	Temperature monitoring	Hydraulic control	TEGOSEM
_	_	_	_	
_		_	-	
_		_	<del>-</del>	
_		_	-	
_		-	=	
				_
				_

# Technical data

	Mounting	Working width	Transport width	Rotor			
103 CLASSIC series lighter power harrows							
LION 253 CLASSIC	Cat. 2 and 3	2.5 m	2.5 m	8			
LION 303 CLASSIC	Cat. 2 and 3	3.0 m	3.0 m	10			
LION 303.12 CLASSIC	Cat. 2 and 3	3.0 m	3.0 m	12			
103 series Robust and cost effect	ive power harrows						
LION 303	Cat. 2 and 3	3.0 m	3.0 m	10			
LION 303.12	Cat. 2 and 3	3.0 m	3.0 m	12			
LION 353.14	Cat. 2 and 3	3.5 m	3.5 m	14			
LION 403	Cat. 2 and 3	4.0 m	4.0 m	14			
1002 series Professional class for t	the toughest demands						
LION 3002	Cat. 2 and 3	3.0 m	3.0 m	10			
LION 4002	Cat. 2 and 3	4.0 m	4.0 m	14			
Series 103 C / 1002 C folding power harrows for the toughest applications							
LION 403 C	Cat. 3	4.0 m	2.55 m	16			
LION 503 C	Cat. 3	5.0 m	2.55 m	20			
LION 6002 C	Cat. 3 and 4	6.0 m	3.00 m	20			

# LION power harrows

Working depth	Standard tines	Possible PTO speeds	Rotor speed at 1,000 rpm	For tractors up to	Weight without roller
28 cm	18 x 340 mm	540 / 750 / 1,000 rpm	342 rpm	103 kW / 140 hp	908 kg
28 cm	18 x 340 mm	540 / 750 / 1,000 rpm	342 rpm	103 kW / 140 hp	1,020 kg
25 cm	15 x 330 mm	540 / 750 / 1,000 rpm	342 rpm	103 kW / 140 hp	1,010 kg
28 cm	18 x 340 mm	540 / 750 / 1,000 rpm	342 / 527 rpm	132 kW / 180 hp	1,070 kg
25 cm	15 x 330 mm	540 / 750 / 1,000 rpm	342 / 527 rpm	132 kW / 180 hp	1,060 kg
25 cm	15 x 330 mm	540 / 750 / 1,000 rpm	342 / 527 rpm	147 kW / 200 hp	1,190 kg
28 cm	18 x 340 mm	540 / 750 / 1,000 rpm	342 / 527 rpm	147 kW / 200 hp	1,300 kg
28 cm	18 x 340 mm	540 / 750 / 1,000 rpm	342 / 527 rpm	184 kW / 250 hp	1,190 kg
28 cm	18 x 340 mm	540 / 750 / 1,000 rpm	342 / 527 rpm	184 kW / 250 hp	1,450 kg
25 cm	15 x 330 mm	540 / 750 rpm 1,000 / 1,000 ECO rpm	342 rpm	235 kW / 320 hp	2,150 kg
25 cm	15 x 330 mm	540 / 750 rpm 1,000 / 1,000 ECO rpm	342 rpm	235 kW / 320 hp	2,450 kg
28 cm	18 x 340 mm	750 rpm 1,000 rpm 1,300 rpm	320 rpm 350 / 420 rpm 430 rpm	368 kW / 500 hp	3,150 kg

# MyPÖTTINGER



# MyPÖTTINGER - it's easy. Anytime. Anywhere.

### Benefit from numerous advantages

MyPÖTTINGER is our customer portal that provides you with key information about your PÖTTINGER machines.

Get specific information and useful tips on your PÖTTINGER machines in "My machines". And find out more about the PÖTTINGER product range.

### My machines

Add your PÖTTINGER machinery to "My machines" and assign a name. You will receive valuable information such as: useful tips on your machine, operating instructions, spare parts lists, maintenance information, as well as all the technical details and documentation.

### Info on the product range

MyPÖTTINGER provides you with machine-specific information for all machines built starting 1997.

Scan the QR code on the machine's data plate with a smartphone or tablet or go to www.mypoettinger.com and enter the machine number from the comfort of your own home. You will immediately receive all the information on your machine, such as: instruction manuals, equipment options information, brochures, photos and videos.

## ORIGINAL PARTS





CLASSIC **DURA**STAR **DURA**STAR

### Rely on the original

PÖTTINGER Original Parts meet the highest demands in terms of functionality, reliability and performance. These are characteristics that PÖTTINGER is committed to delivering.

That is why we manufacture PÖTTINGER Original Parts from the highest quality materials. We ideally match each individual spare part and wear part to your machinery's overall system. This is because different soil and operating conditions often need to be taken into consideration.

He have been listening to our customers and now offer three different lines - CLASSIC, DURASTAR and DURASTAR PLUS - to make sure you have the right part to meet every requirement. Original parts are worth every cent, because know-how cannot be copied.

### Your advantages

- Immediate and long-term availability.
- Maximum durability thanks to innovative production processes and the use of the highest quality materials.
- Avoidance of malfunctions due to a perfect fit.
- The best working results thanks to optimum match to the overall system of the machine.
- Save time and costs thanks to longer replacement intervals on wear parts.
- Comprehensive quality testing.
- Ongoing advancement through research and development.
- Worldwide spare parts supply.
- Attractive, competitive prices for all spare parts.

### Wear parts

The CLASSIC line is for standard duty applications. With these ORIGINAL INSIDE parts we have defined the benchmark for quality, best price/performance ratio and reliability.

DURASTAR is the innovation on the wear components market - durable, high quality, productive and reliable.

Are you used to putting your machines to work in the most extreme conditions? Then the DURASTAR PLUS line is the right choice for you.

# **#POTTINGER**





### More Success with PÖTTINGER

- A family-owned company since 1871 your reliable partner
- Specialist for arable and grassland
- Future-safe innovation for outstanding working results
- Roots in Austria at home throughout the world

### Prepare the perfect seedbed

- LION power harrows deliver the best working results for seedbed preparation
- Maximum flexibility tailor-made systems for every type of soil and every size of business
- Making work easier for you with the highest level technology.
- Extremely smooth operation with the greatest strength and reliability

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