

# POTILA



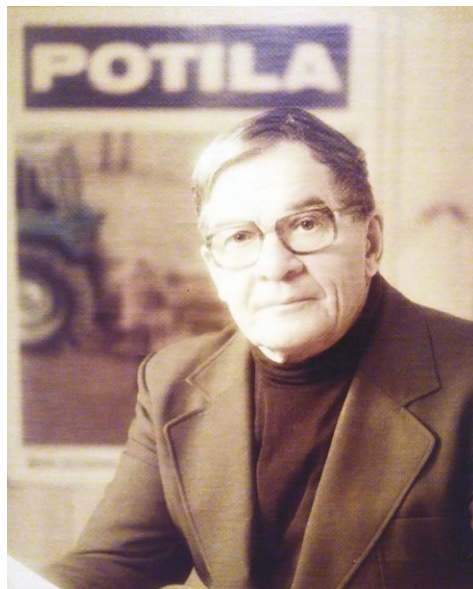
## S-TINE HARROWS

[WWW.POTILA.FI](http://WWW.POTILA.FI)



# POTILA

## 50 YEARS OF ASSURED QUALITY



*"I started with cage rollers, and of course I had crafted iron in my workshop for decades and made many things. In 1966, I made myself a harrow and my neighbors became interested in it as well."*

On September 1, 1967, "M. Potila" was founded.

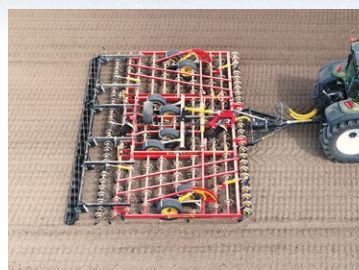
The cornerstones of our production are high-quality Nordic steels, modern manufacturing methods and experienced staff. The products are designed and rigorously tested to operate in the varying conditions of the North and to last from year to year.



One of the first production S-tine harrows

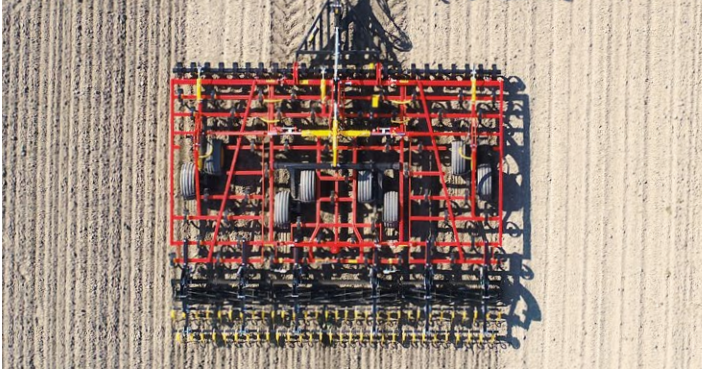


SPH and Magnum harrows in 1999



Master harrow in 2021

# PROPERTIES OF POTILA S-TINE HARROWS



## LONG AND STEADY FRAME

The harrow's wheels are placed on two support point lines, making the longitudinal stability of the harrows excellent. Their frames are durable 3D frames, which guarantee a long service life and the functionality of the frame even in challenging conditions. The length of the harrows guarantee excellent straw penetration and leveling properties.

## EFFECTIVE LEVELING BOARD

The strong 10 x 80 leveling tine combined with a shaped tip blade enable an effective crumbling effect as well as optimal leveling of the field surface. The front leveling board can also be equipped with a stabilizer bar, in which case the front leveling board smooths out even the largest irregularities according to the customer's needs.



## EASY AND VERSATILE ADJUSTMENTS

The longitudinal horizontality of the frame is easily and quickly adjusted to the height of the towbar by means of the push arm at the front of the frame. The side sections can be adjusted to the same depth as the center section by changing the length of the side section cylinders.

## INGENIOUS WORK DEPTH ADJUSTMENT

The working depth of the S-tine harrow is adjusted hydraulically from the tractor cab by means of an ingenious memory cylinder. The scales that are ergonomically located at the front of the frame allow for easy checking of the work depth and the position of the board. Easy to read scales allow precise adjustments to be made.



## VERSATILE ACCESSORIES

Depending on the user's needs, the harrows can be equipped with a cage roller, rear levelling board or a rear harrow. Retrofit accessories can also be combined. The height and weighing of the rear harrow can be adjusted with a lightweight crank. The spring-loaded weighing range of the cage rollers is wide, which enables versatile use.



## POTILA SOLVER 700 AT MTY LÄHTEENLAHTI ORGANIC FARM

Brothers Aleksi and Heikki, and their parents, Salla Kopo and Hannu Lähteenlahti grow fields, raise beef cattle and produce milk in Kullaa, Finnish region of Satakunta. In addition to grass fodder, the farm's fields produce organic peas, rapeseed and oats. The fields are mainly loamy soils, rich loamy soil and sandy soil, but clay soils are also in cultivation. After the cultivation area increased by spring 2020, Lähteenlahtis acquired the Potila Solver 700 S-tine harrow.

In the crop rotation, the fields grow grass for three to four years, after which rapeseed, peas and oats are grown on the fields for two

or three years. Grass growing is stopped by plowing, but the stubble of annual plants is to be worked with a Solver or a disc cultivator. In the first spring, brothers Aleksi and Heikki were satisfied with the harrow's straw permeability properties, versatility and its relatively light power requirement. "A farmer colleague's well-buckled oat stump also cultivated well as long as the driving lines were relative to the threshing direction", the brothers state.

To the acquisition of the Potila S-tine harrow was influenced by the proximity of the factory. "We believe that consumers will buy local and domestic food, and therefore we prefer also buying domestic machines ourselves, whenever possible. Now a top quality product was found locally, so it was a no brainer", the brothers say. The advantage of a Potila harrow was also the fully hydraulic working depth adjustment, which is praised for its ease of use. The working depth is so easy to change as the soil types change. At its best, the machine's work output was 6 hectares per hour. Even in stubble cultivation, only 5 liters of fuel was consumed per hectare. Efficient and inexpensive cultivating.

The decision to purchase the harrow was wise. It's proven economical and the overall experience of the harrow has been great after the first spring of use. Solver was by no means the first Potila harrow on the farm. Potila S420 cage roller harrow can also be found in the farm equipment reserve.

## VUORENMAA TRUSTS IN MASTER S-TINE HARROWS

Päivi and Jaakko Hyyti cultivate a crop farm in Köyliö's Vuorenmaa, in Satakunta region of Finland. The farm's plant selection include barley, wheat, oats and starch- and edible potatoes. Almost every type of soil can be found on the farm, which places many demands on the S-tine harrow's performance. Most of the fields are sandy loam- and clay soils. For the spring of 2020, a Master 800 S-tine harrow was acquired to replace the previous 2006 Master 700. "While the model range remained the same, the new harrow surprised with its developments and improved features," the couple notes.

The Hyyti farm relies on plowing, which is why the new harrow is also equipped with double level board. Thanks to the double levelers and a long frame, the working result is very even after just one run. Potila Master is perceived on the farm as a very versatile cultivator that works in a variety of conditions and cultivation needs. The tine division is good and spacious, which also makes the harrow easy to pull. "We cultivate all fields, including potato lands, with Master for sowing / planting," Jaakko says. Potila was the obvious choice because the previous Potila harrow worked well and there were no problems at all with it. There was no need for a heavier harrow on the farm, as no additional weight was needed with the previous Master either. "Work depth adjustment of the new Master is a really good innovation," says Jaakko.

The farm strives for the highest possible quality and maximum yield. Those can be achieved by the good growth conditions of the land; soil structure, pH, drainage and nutrient balances. "When aiming for great yields, Master is the right machine. Profitable and efficient agriculture also demands efficient tools," says Jaakko.

# EXPERIENCE



## THE RALLY LEGEND TRUSTS IN POTILA S-TINE HARROWS

Four-time World Rally Champion, Tommi Mäkinen cultivates his home farm in Puuppola, Central Finland in cooperation with his cousin Tuomas Mäkinen. By spring 2020, Rally Legend acquired a Potila Magnum Plus 800 S-tine harrow. The soil types of the farm are mainly loamy soils, but there is a great variation between the field plots as well as within them. "With varying types of soil, the importance of the operation and accuracy of depth control and the leveling effect are particularly emphasized," Tommi explains as the sowing work is nearing completion.

Seeds and grass seeds are grown in the fields. The plant species are timothy, grass, oats, barley, wheat, peas and paba beans. Due to seed cultivation, most of the land is plowed, but some of the land is cultivated with a disc cultivator in the spring or autumn. "One of the selection criteria for the harrow was versatility, and that it can manage disc-cultivated fields without clogging," says Tommi.

According to Mäkinen, choosing Potila was also supported in particular by the product's domesticity and its good reputation among farmers. The aim of the harrow procurement was reducing the current 1.5-2 runs to just one run, so even though the working width increased, the sower would not have to wait for the survey to be completed.

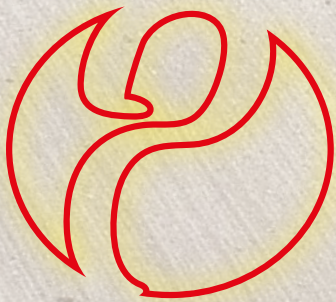
Based on the first spring of use, the Potila S-tine harrow has proven to be a good choice for Mäkinen. "The memory cylinder allows precise adjustment of the working depth easily and quickly in different parts of the block when the soil type varies", says Tommi. The simplicity of the harrow adjustments as well as the quality of the harrow, for example in terms of surface treatment, are impressive. Mäkinen's had reached their goal in terms of driving times, ie one run was enough to achieve a smooth working surface, leveling of the surface and the right crumb structure.





**SMOOTHLY FINISHED CULTIVATION RESULTS  
IN ANY CONDITION**

# INTRODUCING!

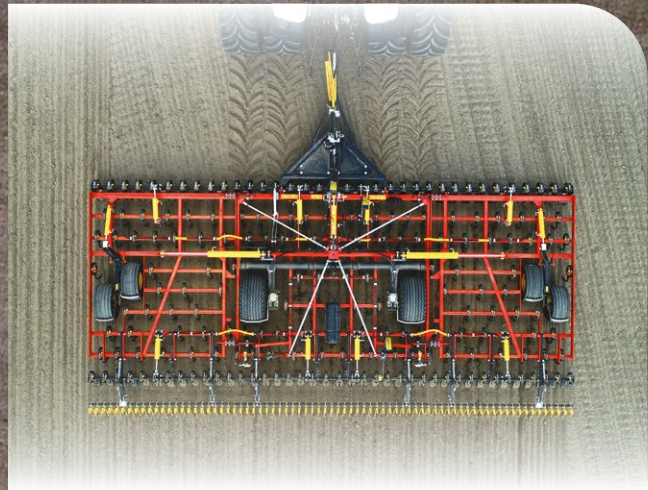


# POTILA

# MASTER 900-1000



**SAFE AND STABLE TO TOW  
EVEN ON LONGER TOWS**



**PERMEABLE AND ROBUST TO OVERCOME THE MOST CHALLENGING CONDITIONS**



**SINGLE WHEEL STRUCTURE PROVIDES SMOOTH MOVEMENT AND A LARGE CONTACT AREA**



## AN EFFECTIVE BASIC HARROW THAT SUCCEEDS

The Master harrow is suitable for all soil types and is available for working widths of 5 to 10 meters. The robust and highly vibrating 11x45mm S-tine ensures an efficient results with fewer runs. The tine geometry is designed to maintain a well-set working depth even on very rigid soil types. This makes the seedbed even with the right crumb structure. Master harrows are known for their durability and excellent value.

## THE HEAVIEST IN ITS CLASS

The massive solid steel beam frame of the Master harrows is robust, which ensures both the durability of the harrow's structure and enables it to maintain its work depth faithfully. The frame runs stably on big wheels and forces the S-tines to work. The frame does not rise even on stiff soils when harrowing. The long frame and the largest number of spike axles in its size class ensure a spacious structure, making the harrow also ideal for cultivating lightly worked soils.

## THE MOST VERSATILE RANGE OF ACCESSORIES

The standard configuration of the Master harrows is great, but in addition to these, the tillage power can be increased with versatile accessories. With the help of accessories, each harrow can be personalized according to the farm's cultivation needs and conditions.

## Standard configuration

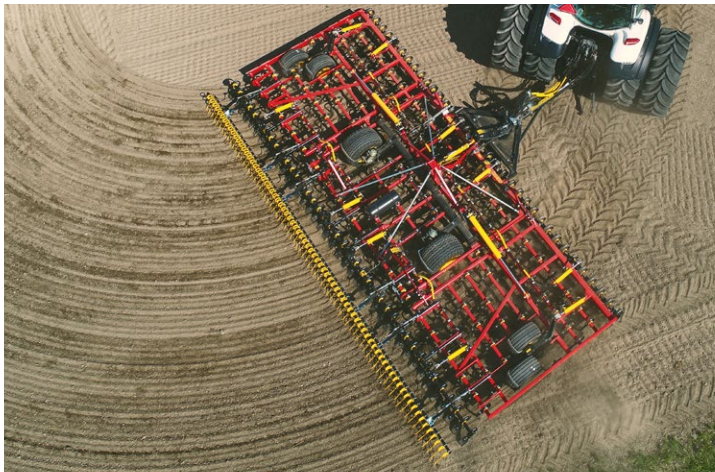
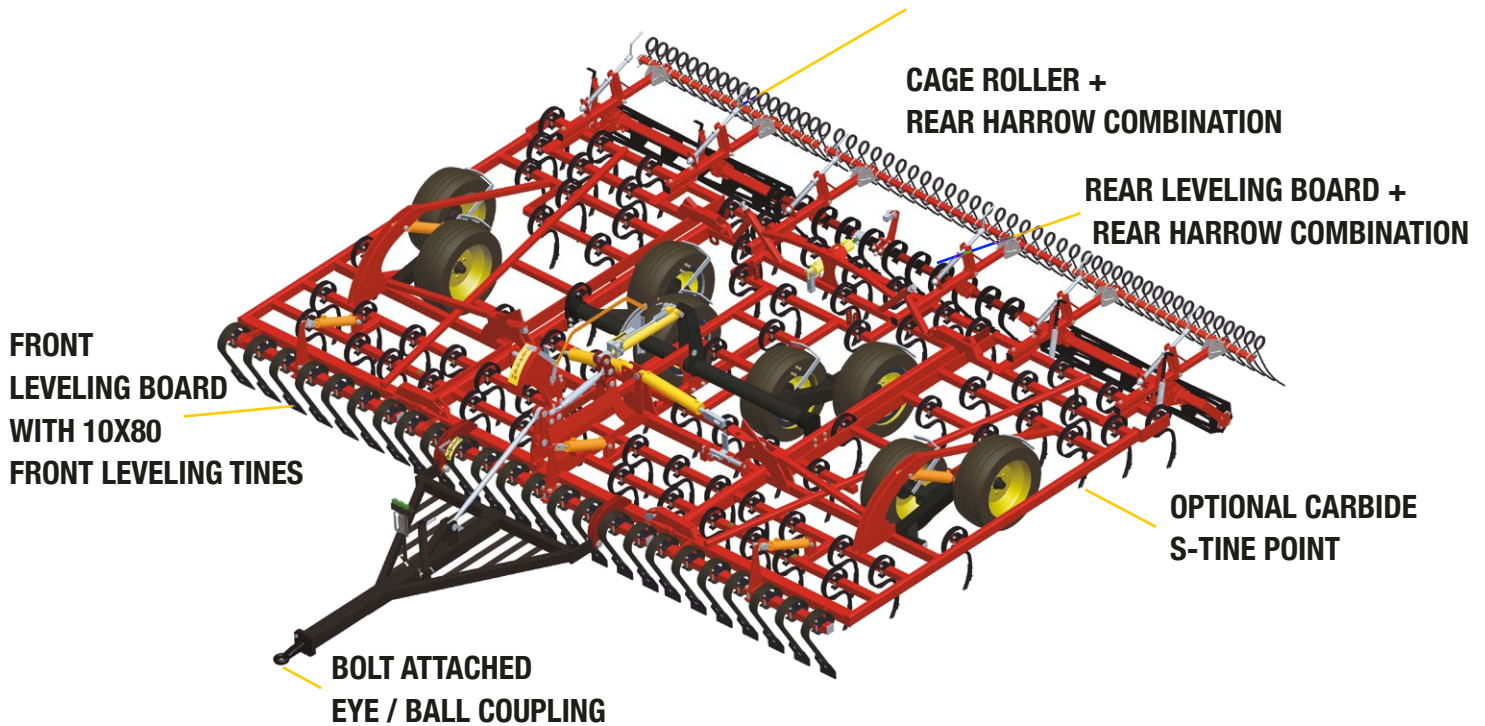
- Potila 11x45 mm S-tines
- 8 cm tine spacing
- Working depth adjustment hydraulically directly from the cab
- Tires: 500-800: 250 / 65-14.5
- Tires: 900-1000: Side blocks: 300 / 65-12, Middle section: 480 / 45-17
- The sections open and lock hydraulically
- Working depth indicator
- Hydraulic front leveling board
- Rear lights

## Accessories

- Hydraulic rear leveling board with 11x45 mm springs
- Spring-weighted cage roller
- Height-adjustable, spring-loaded rear harrow
- Two-row rear harrow
- Note! Up to 2 accessories per harrow
- Rear leveling board + cage roller retrofit combination
- Carbide s-tine points
- Stabilizer bar for front- and / or rear leveling board
- Roller drive
- Track eradicators
- Spare wheel
- Hitch for ball coupling

# MASTER

## CRANK-ADJUSTED AND SPRING-LOADED REAR HARROW



The bogie structure of the Master 900 and 1000 center sections has been replaced by a unit wheel structure, which stabilizes the harrow travel in the field and makes road driving even safer. The unit wheel design also enables efficient hydraulic and pneumatic brakes (Optional). Brakes are available for Master 800 also.



For difficult-to-cultivate clay soils, a combination of a rear harrow and a cage roller is available and they enable incredible crumbling performance, which makes the surface and crumb structure of the field excellent. With the hydraulic adjustment of the rear harrow and the spring adjustment of the cage roller, we can also avoid excessive fine-down with finer soils.

MASTER	500	600	700	800	900	1000
Weight with rear harrow, kg	2530	2990	3270	3530	4050	4400
No. of tines w/ 8 cm spacing, 11x45 tines	62	75	87	97	117	130
Tine axles, pcs	8	8	8	8	7	7
Power requirement from, hp	90	110	130	150	170	190
Hydraulic connections 1- / 2-way	- / 3	- / 3	- / 3	- / 3	- / 4	- / 4
Depth adjustment, hydr.	H	H	H	H	H	H
No. of wheels 250 / 65-14.5	6	8	8	8		
No. of wheels 300 / 65-12 - side section					4	4
No. of wheels 480 / 45-17 - middle section					2	2
Frame length, m	3,30	3,30	3,30	3,30	3,00	3,00
Transport width, m	2,70	2,70	2,70	2,70	3,99	3,99



## FOR PLOWED - MINIMUM TILLAGED - STUBBLE

Solver harrows are designed to be permeable. The harrow has a long body and the tines are divided into eight tine axles. The 10 x 65 mm tines, which are higher than the normal S-tines, create a larger ground clearance and the tines are spaced every 12 cm. The rear harrow is divided into two rows to penetrate the plant residue. In good conditions, spring stubble cultivation as well as sowing cultivation of plowed and lightly cultivated fields can be done with just one harrow. In addition, the Solver harrow can be used for autumn stubble harrowing, in which plant residue is spread evenly and residual grain and weeds can be germinated as early as autumn. Solver is a versatile harrow for varying conditions and needs.

## EFFICIENT CULTIVATOR

Thanks to the robust front leveling board, powerful tines and powerful accessories, Solver harrows produce a smooth seedbed as well as the right crumb structure. The vibration of the tines is even stronger than before and the 60 mm wide point ensures a great crushing performance and a smooth seedbed even at high driving speeds.

## MECHANICAL WEED EXTERMINATOR

### - ALSO FOR ORGANIC FARMING

A 140 mm wide goose-foot blade is available for the tines of the Solver harrows. Goose-foot blades that cut through the ground, combined with a cage roller, are an effective method of mechanically eradicating weeds. Vibrating goose-foot equipped tines cut weeds, after which the cage roller cleans the roots of the soil material. Two-row rear harrow lifts the weeds that are free from the soil material to the surface of the field. Bare weeds dry and die quickly on the field surface, allowing perennial weeds to be effectively removed from the field.

### Standard configuration

- Potila 10x65 mm S-tines
- Tines on 8 axles with 12 cm tine spacing
- Working depth adjustment hydraulically directly from the cab
- Flexible leveler with 10x80 mm tine
- 250 / 65-14.5 wheels on four axles as standard
- Hydraulically opening and locking sections as standard
- Working depth indicator
- Hydraulic front leveling board
- Rear lights

### Accessories

- Hydraulic rear leveling board with 11x45 mm springs
- Spring-weighted cage roller
- Two-row rear harrow

*Note! Up to 2 accessories per harrow*

- Carbide s-tine point
- Goose-foot blades
- Stiffener bar for front- and / or rear leveling board
- Roller drive
- Track eradicators
- Spare wheel
- Hitch for ball coupling

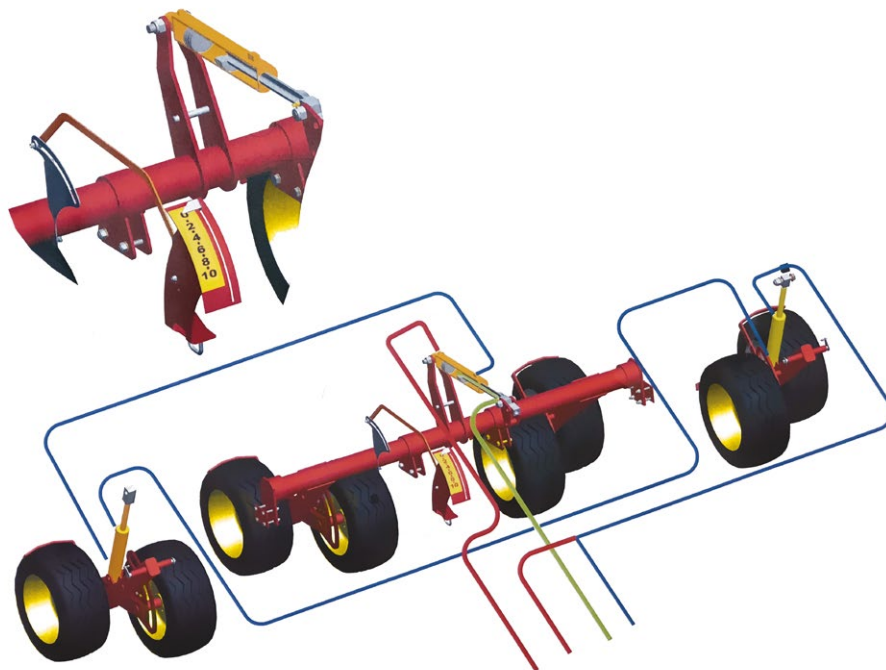
# SOLVER



The optional goose-foot blade cuts through the ground and makes a smooth tillage base. The goose-foot blade is an excellent accessory, especially for organic production.



Potila Solver's tine geometry and height enable a very even tillage base. The tine also vibrates laterally very effectively, thus crumbling the soil with great intensity.



The working depth is adjusted directly from the tractor cab using a memory cylinder. In all Potila S-tines harrows.

SOLVER	600	700	800
Weight, kg*)	3600	3850	4200
Number of tines with 12 cm spacing, 10x65 tines	50	58	66
Tine axles, pcs	8	8	8
Power requirement from, hp	110 / 135	130 / 160	150 / 190
Hydraulic connections 1- / 2-way	- / 3	- / 3	- / 3
Depth adjustment, hydr.	H	H	H
Number of wheels 250 / 65-14.5	8	8	8
Frame length, m	3,29	3,29	3,29
Transport width, m	3,00	3,00	3,00

\*) includes cage roller and two-row rear harrow

# POTILA



MANUFACTURER:



[WWW.POTILA.FI](http://WWW.POTILA.FI)



FACTORY SPARE PARTS CENTER

KARSOLANTIE 3, 32210 LOIMAA

FINLAND

TEL. +358 10 843 7020

[WWW.DOMETAL.FI](http://WWW.DOMETAL.FI)