

AEROSTAR, AEROSTAR-EXACT, AEROSTAR-ROTATION
TINED WEEDER, ROTATIVE WEEDER

Einböck



Einböck

TINED WEEDER
ROTATIVE WEEDER

AEROSTAR
AEROSTAR-EXACT
AEROSTAR-ROTATION

ADVANTAGES, APPLICATION AREA AND WORKING METHOD

AEROSTAR

- The **AEROSTAR** is our thousandfold proven classic weeder. It has a very good **weeding effect** (70% of the success in weeding is done by covering and choking germinating weeds with topsoil). It has a perfect ground control through **pivoting forks, sections hanging in chains and long tines** (Ø 7 mm / 0.28" and 490 mm / 19.3" long).
- The working widths range from **1,5-15 m / 4.9-49.2 ft** (mounted) and from **18-24 m / 59-79 ft** (trailed).
- The line spacing is effective **2,5 cm / 1"**. There is a big selection of different tines from Ø 6.5-8 mm / 0.26-0.32" and a length of 380-600 mm / 15-23.6".
- For sensitive special crops the AEROSTAR can be equipped with extra long tines and a **hydraulic tine adjustment**. So it is a preliminary stage to the AEROSTAR-EXACT, which is specially designed for these crops.

AEROSTAR-EXACT

- The **AEROSTAR-EXACT** has a **precise depth control** through supporting wheels in the back and the front, so it is perfectly suited for **blind combing**. The wheels in the rear have an oscillating chassis for a perfect tracking. The sections are fixed on forks free of movement – this is important for a **perfect depth control**. The sections can not turn and twist (for example when driving in tractor tracks) and are running very smoothly.
- The tine angle is centrally controlled via the **hydraulic section adjustment** by the tractor. This hydraulic system allows infinitely variable levelling on the go, therefore even on very uneven fields the same pressure on each section across the entire working width can be obtained.
- When the **tines are adjusted so the tip is forward of the bend**, the soil crust is broken up better and the plants are not dragged and pulled to the ground.
- The AEROSTAR-EXACT is perfectly suited for a late weeding, for sensitive special crops or for combing out of coachweed (vine-like parasitic weed).

AEROSTAR-ROTATION

- In contrast to the AEROSTAR and AEROSTAR-EXACT, the **AEROSTAR-ROTATION** works with inclined, rotating star wheels. In comparison to the normal tined weeders it has a higher effect in weeding at lower working speeds. With its rotating working tools it is also suited for weeding in higher residues.
- Using this machine is also possible in a **late growth stage**, because the rotating star wheels do not pull any plants out of the soil. The inclination causes a **better effect in the row** – weeds are pulled out of the row.
- When working in sensitive crops and light soils the **pressure on the rotating star wheels can be hydraulically reduced**, until absolutely no pressure is left anymore and the star wheels are floating. When down-pressure is minimized, the soil has to be very even for optimum performance.
- Because of the special position of the rotating star wheels, the AEROSTAR-ROTATION has a very good effect also with **lower working speeds** of about 2-3 km/h - 1.3-1.7 mph.

THE AEROSTAR FAMILY

OUR STARS ON THE FIELD

AEROSTAR

The tined weeder for perfect **weeding effect**.
Worldwide thousandfold proven the AEROSTAR is not only used for **mechanical crop maintenance**, but also as an **alternative to chemical weed control**.

page 5 - 15



AEROSTAR-EXACT

With the AEROSTAR-EXACT you can weed **row crops** (like corn, soybeans, sunflower, edible beans, vegetables etc.) already in the **cotyledon leaf stage** (the row is just visible).

This is possible because of the **precise depth control** and the accurate setting options of aggressiveness.

page 16 - 19



AEROSTAR-ROTATION

The AEROSTAR-ROTATION combines the advantages of a tined weeder and a rotary hoe. The result is a rotative weeder with **high flexibility in use**.

Steel tines, casted into an inclined plastic disc do the job.

page 20 - 23



USING THE TINED WEEDER

AND GETTING THE DESIRED RESULTS

70% of the success in using a tined weeder stems from covering and choking germinating weeds with topsoil and only 30% of the elimination results are achieved by uprooting them. Due to this fact a number of conclusions can be drawn for a successful use of the tined weeder.

- ▶ The soil should be well prepared and crumbly and should flow easily from the movement of the tine. Therefore it is important to have the optimum pH level on the uppermost layer of soil with a high degree of clay and silt, which normally tends to crust. In order to keep soil compaction to a minimum a light tractor with maximum working width of the weeder should be used for levelling and blind cultivation in spring.
- ▶ The seedbed of fields on which the tined weeder will be used should be prepared coarsely in autumn so it will still crumble nicely in spring.
- ▶ For fall-seeded crops topsoil raised due to frost resulting in uneven soil, should first be rolled in spring and should not be weeded before the plants are upright after rolling.
- ▶ Operate the weeder as fast as possible depending on crop and conditions (max. 12 km/h - 7.5 mph). Faster speeds move the soil more intensely and the weeds will be buried under the soil. This is a very efficient approach and will result in a high weed elimination factor. Only the AEROSTAR-ROTATION shows a better efficiency with lower speeds.

CHOSING THE PERFECT TIME

The most efficient measures are the ones taken before the new plants have emerged. This is why fighting weeds has to be exactly timed around soil cultivation and sowing.

- ▶ Wherever possible, sowing and blind weeding should be preceded by shallow levelling cultivation. It will cause a whole generation of weeds in the top layer of the soil to germinate at the perfect time.
- ▶ Blind weeding just before the crop comes up is usually highly successful. It can be done until the crop emerges.
- ▶ The success rate of weed elimination through burying it loose under soil or dislodging is best during the germination or white thread stage of the weeds.
- ▶ The best time for using the tined weeder is, when the weed-seedlings penetrate the seedbed. As soon as the first leaves show up the tined weeder should be employed.
- ▶ Autumn germinating weed seeds cause the most problems in winter crops in a grain dominant crop rotation. The perfectly timed use of the tined weeder before winter can be the key to success. A slight delay in sowing wheat will extend the weed killing opportunity with proper tillage and will therefore help lower the weed density.
- ▶ Fighting weeds is more complicated once they have passed the small leaf stage and have reached the rosetta stage. A more intense weeding procedure (more tine pressure or a steeper tine angle) will be necessary since the weeds will be hard to pull out and are more likely to survive being smothered under the soil.
- ▶ Using the tined weeder in windy and sunny days is particularly effective. Uprooted weeds will dry out in the afternoon.



BOOSTS SOIL VITALITY

KEEPS WEEDS IN CHECK

For a number of years Einböck's AEROSTAR has been a tried and tested alternative to chemical weed elimination worldwide.

The working range of the tined weeder is impressive. Its successful use with grain, corn, beetroot, rape, potatoes, peas, soybean, field bean, tomatoes, strawberries, herbs and vegetables as well as on grassland make it an indispensable tool in soil cultivation.

Through its thorough and effective operation the tined weeder fits perfectly into your overall cultivation concept, which ranges from crop rotation, fertilization and improving the soil to mechanical weed control. Therefore it will support you in achieving your likely goal of keeping weeds in check so they will not cause any qualitative and quantitative damage. It is safe to assume that you are not considering a total elimination of weed since a limited amount of a variety of weeds can have a positive effect.

Further desirable side effects when using the AEROSTAR, e.g.

- soil aeration
- regulation of the water balance by interrupting the capillary effect
- enhancing root tillering effect

contribute essentially towards a prospering development of your crop. Of course the success of herbicide-free weed control will still very much depend on your careful observation of the process in your soil.

Choose the best time of operation, i.e. use the weeder at noon in sunny weather which will dry up the weed seedlings and eliminate them. The soil should not be too moist. It will be up to you - who knows best about your soil conditions and the weather - to determine the ideal tine diameter and length, the working depth and speed as well as the tine settings.

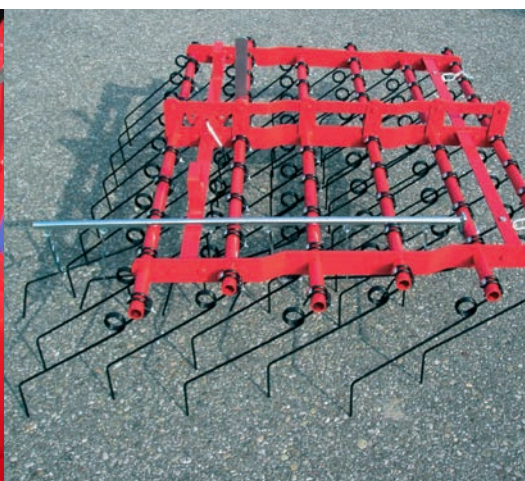


The **hydraulic tine adjustment** will make using the AEROSTAR in changing soil conditions a whole lot easier. It also puts the tines in a flat angle when the AEROSTAR is folded.

Small molehills can be levelled by **grassland plates** which are mounted directly to the tines.

The **support wheels** are height-adjustable in half-hole increments. The wheel base between the middle wheels is 1.45 m / 4.76 ft. For an additional charge the adjustment can be extended infinitely variable up to 2 m / 6.6 ft.

This feature can be added at a later point.



Implements with a working width of 4.5 m and 5 m / 14.8 ft and 16.4 ft fold manually or hydraulically and are **spring supported**.

For cultivating rows of still very small plants Einböck has developed a **tine raising-bar** that will raise the tines above the rows so that the young plants are not damaged.

Warning signs with lights are available for an extra charge.

Technical data AEROSTAR mounted

| Type/ Working width cm / ft | Number of tines | Lower link category | Feelers | Folding action rigid mec hydr. | Transport width/height in m - ft | Sectors | hp/kW | Weight approx. kg / lbs |
|-------------------------------------|--------------------|------------------------|---------|-----------------------------------|----------------------------------|---------|-------|----------------------------|
| AEROSTAR 150 / 4.9 | 60 | I/22 | 2 | • | 1,5/1,25 - 4.9/4.1 | 1 | 15/11 | 190 / 420 |
| AEROSTAR 200 / 6.6 | 84 | I/22 | 2 | • | 2/1,25 - 6.6/4.1 | 1 | 20/25 | 200 / 441 |
| AEROSTAR 300 / 9.8 | 120 | I/28 | 2 | • | 3/1,25 - 9.8/4.1 | 2 | 30/22 | 280 / 617 |
| AEROSTAR 450 / 14.8 | 180 | I/28 | 2 | • • | 2,6/1,65 - 8.5/5.4 | 3 | 40/29 | 480 / 1.058 |
| AEROSTAR 500 / 16.4 | 204 | I/28 | 2 | • • | 2,6/1,95 - 8.5/6.4 | 3 | 50/37 | 510 / 1.124 |
| AEROSTAR 600 / 19.7 | 240 | II/28 | 2 | • | 3/2,25 - 9.8/7.4 | 4 | 60/44 | 620 / 1.367 |
| AEROSTAR 600 / 19.7 | 240 | II/28 | 4 | • | 3/2,25 - 9.8/7.4 | 4 | 60/44 | 740 / 1.631 |
| AEROSTAR 750 / 24.6 | 300 | II/28 | 4 | • | 2,6/3,15 - 8.5/10.7 | 5 | 65/48 | 850 / 1.874 |
| AEROSTAR 800 / 26.2 | 324 | II/28 | 4 | • | 2,6/3,45 - 8.5/11.3 | 5 | 70/51 | 870 / 1.918 |
| AEROSTAR 900 / 29.5 ¹ | 360 | II/28 | 4 | • | 3/3,75 - 9.8/12.3 | 6 | 70/51 | 980 / 2160 |
| AEROSTAR 900 / 29.5 ^{2,3} | 360 | II/28 | 4 | • | 3/3,30 - 9.8/10.8 | 6 | 80/59 | 1.170 / 2.580 |
| AEROSTAR 1200 / 39.4 ^{3,4} | 480 | II/28 | 4 | • | 3/3,30 - 9.8/10.8 | 8 | 80/59 | 1.310 / 2.888 |
| AEROSTAR 1500 / 49.2 ^{3,4} | 600 | II/28 | 4 | • | 3/4,25 - 9.8/13.9 | 10 | 90/66 | 1.600 / 3.527 |

¹ can be reduced to 6 m / 19.7 ft working width

² can be increased up to 12 m / 39.4 ft working width

³ shear retraction (see page 11)

⁴ can be reduced to 9 m / 29.5 ft respectively 12 m / 39.4 ft working width

⁵ can be increased up to 9 m / 29.5 ft working width

Technical data and specifications are approximate and without obligation. Construction and design are subject to change.

Standard equipment AEROSTAR

| |
|---|
| Tines Ø 7 mm / 0.28", 490 mm / 19.3" long |
| No frame distortions |
| Central tine adjustment (5 positions) |
| Line spacing 2.5 cm / 1" (center to center of tine) |
| Large bearing mounted rubber support wheels, distance approx. 1.36 - 1.45 m / 4.46 - 4.76 ft, Dimension 16x6.50/8 (18.8.50/8 on shear-retraction in the centre) |
| The side sections fold in automatically through parallel guidance (shear retraction - see page 11) |
| Parking support |
| For machines with shear-retraction two double acting hydr. valves are necessary |
| Transport width 1.50 m - 3.00 m / 4.9 ft - 9.8 ft |
| Operating instructions |

Optional equipment AEROSTAR

| |
|--|
| Tines 490 mm / 19.3" long, Ø 6.5 mm / 0.26" instead of standard tine |
| Tines 380 mm / 15" long, Ø 6.5 mm / 0.26" instead of standard tine |
| Tines 490 mm / 19.3" long, Ø 8 mm / 0.32" instead of standard tine |
| Tines 490 mm / 19.3" long STRAIGHT, Ø 8 mm / 0.32" instead of standard tine |
| Tines 600 mm / 23.6" long, Ø 7 mm / 0.28" instead of standard tine |
| Spring-mounted front leveling plate (up to 6 m / 19.7 ft working width) |
| Hydraulic tine adjustment per section unmounted |
| Hydraulic tine adjustment per section mounted |
| Additional grassland plates mounted on the tines |
| Additional control valve: for machines with shear-retraction (see page 11) needed, if tractor only has one double acting hydraulic valve |
| Warning sings and lights |
| Inside twin wheels 18x8.50-8, outside single wheels 18x8.50-8 instead of standard wheels for light and sandy soils |
| Retro-fitting of a seeder like the P-BOX airseeder or the ROTOSEEDER is possible at any time - ask for our detailed brochure |

AEROSTAR

Our AEROSTAR features a stable sectional steel tube frame which comes in three varieties:

- rigid
- manual folding
- hydraulic folding, depending on the desired working width

By using top quality materials and by designing a heavy-duty construction we enable you to put additional pressure on the tines of the six-row tine sections. This is possible by increasing the down pressure and lengthening the top link (easily done with a hydr. toplink) and may be necessary under extreme soil conditions.

Depending on the working width the AEROSTAR is supported by two or four air-filled rubber tires. These support wheels will not let the round steel spring tines penetrate the ground too deeply under loose soil conditions. The tine sections will adjust to any ground elevations through pivoting tine section mounting. The aggressivity of each section can be adjusted separately.

The tine tube is torsion-resistant and guarantees the same tine position over the entire frame length so that the tine aggressiveness will remain constant. This is of particular importance under hard soil conditions. The directional stability of the tines is guaranteed through an exact guidance by plastic holders. The tines will therefore always face exactly the same direction, thus also significantly increasing the vibration effect. The holders will not let the tines become twisted or loose. The spring coils of the tine are below the tine holders, this is why the tines can vibrate better and why each of their movements comes from the spring. For cultivating rows of still very small plants Einböck has developed a tine raising bar that will lift the tines above the row so that the young plants are not damaged.

The AEROSTAR is also particularly suitable for using in grassland and seeding, overseeding or interseeding. Therefore Einböck offers several equipment accessories such as a front leveling plate and a pneumatic seeder. A special brochure is available for these applications. Simply ask for the brochure on grassland care.



WHY TINE LENGTH IS IMPORTANT

- longer tines will compensate uneven ground better
- a longer tine allows more clearance
- plants like potatoes, maize, sunflower, field bean, etc. can undergo weeding even at a later stage
- the tine must be raised when folding to transport position

60 tines on 1.5 m / 4.9 ft working width make a **static line distance of 2.5 cm / 1"**. Only this distance will provide the desired effect of moving all the soil and not missing weeds.

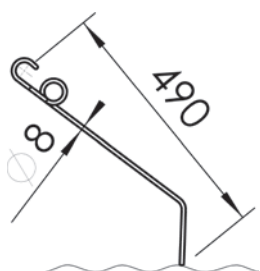
The aggressiveness of the spring tines can be adjusted with a **central lever** that allows five different positions. The tines should be brought into a raised position for putting the machine into transport mode.

The **tine tube is torsion-resistant** and guarantees the same tine position over the entire frame length so that the tine aggressiveness will remain constant.

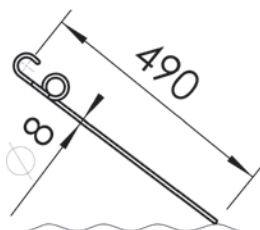


THE TINE IS RIGHT...

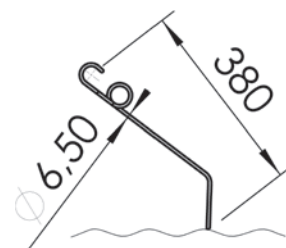
FOR SUSSUCCESSFULLY FIGHTING WEEDS



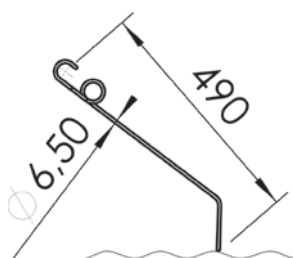
For **tough soil conditions** the tine with a diameter of 8 mm / 0.32" and a length of 490 mm / 19.3" should be used. This tine is the most commonly used in grassland cultivation.



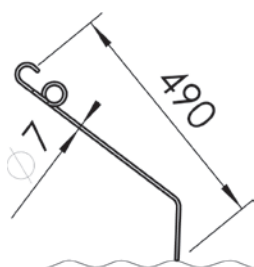
For **rocky soil** we recommend this straight tine so that the rocks are not moved to the surface. It has a diameter of 8 mm / 0.32" and a length of 490 mm / 19.3".



The tine with a diameter of 6.5 mm / 0.26" and a length of 380 mm / 15" is particularly suitable for **medium soil**.

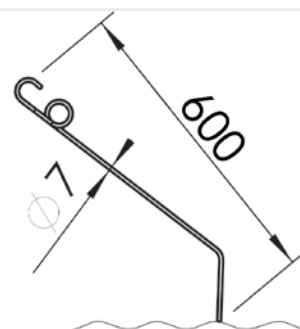


The tine with a diameter of 6.5 mm / 0.26" and a length of 490 mm / 19.3" is designed for **very light soil conditions**.



This standard universal tine with a diameter of 7 mm / 0.28" and a length of 490 mm / 19.3" is ideal for **medium to heavy soil conditions**. This tine length can also compensate uneven spots in the field.

This tine is the first choice in small grain farming.



This tine with a diameter of 7 mm / 0.28" and a length of 600 mm / 23.6" is well suited for **special crops**. It also compensates for **uneven soil** very well. This is the least aggressive tine offered.



On **special crops** - like these tomatoes
- individual tines can be removed so
that the plants are not harmed.



THIS IS WHAT YOU CAN EXPECT FROM THE AEROSTAR:

- ▶ Sturdy tube frame
- ▶ Large support wheels with ball bearings
- ▶ Greasing points on all articulated links
- ▶ Hardened joint pins equipped with sliding sleeves
- ▶ Plastic fork support - no wear of steel tubes
- ▶ Shear retraction (see page 11) through parallel guidance
- ▶ Easy and accurate adjustment of the tine angle
- ▶ Tines made from patented spring steel
- ▶ Increased tine vibration through special plastic holders
- ▶ Totally free movement of spring and tine eliminates chance of breaking
- ▶ Round edges on all frame components are gentle on plants
- ▶ Quick coupling - lower link arm quick hitch for fast hitching/unhitching to the tractor
(up to 9 m / 29.5 ft working width without shear retraction - see page 11)
- ▶ Heavy duty angle support beams prevent the swinging of the side wings on larger working widths

HEAVY DUTY CONSTRUCTION

FOR OPTIMUM CULTIVATION RESULTS



Folding the side sections will reduce the width of the AEROSTAR to a **transport width of only 2.6 m to 3 m / 8.5 ft to 9.8 ft.**



Larger working widths, especially with shear retraction, are made possible through a large **angular support brace** that will keep the frame from swinging even at higher speeds and aggressive tine position.



Shear retraction:

Even a working width of 12 m / 39.4 ft and 15 m / 49.2 ft can be reduced to a **transport width of only 3 m / 9.8 ft.**





AEROSTAR

Further standard equipment AEROSTAR pull-type

Tines \varnothing 7 mm / 0.28", 490 mm / 19.3" long

Parking chocks

Front parking support

Suspended beams with hydraulic level control

Lower link category II and III

3 double acting hydraulic remotes necessary
(1 of them with floating position)

Tire track width adjustable from 1,75 to 2,25 m / 68 to 88"
in 10-cm- / 4"-steps

Further optional equipment AEROSTAR pull-type

Tines 490 mm / 19.3" long, \varnothing 6.5 mm / 0.26"
instead of standard tine

Tines 600 mm / 23.6" long, \varnothing 7 mm / 0.28"
instead of standard tine

Tines 490 mm / 19.3" long, \varnothing 8 mm / 0.32"
instead of standard tine

Tines 490 mm / 19.3" long STRAIGHT, \varnothing 8 mm / 0.32"
instead of standard tine

Wheels 13.0/55-16 instead of 10.0/75-15.3 AW
(standard equipment at AEROSTAR 24 m / 79 ft)

Drawbar attachment \varnothing 50 mm / 2" via hydraulic
parallelogram instead of lower link arms





18-24m

59-79ft

For large-scale farms we offer the AEROSTAR in a semi mount or optional draw bar pull type design. We recommend, however, using this giant version of the AEROSTAR in predominantly flat terrain.

The chassis, which is attached to the lower link of the tractor, is carried by two large-dimensioned wheels. When in operation two additional adjustable wheels on the outer wings will give the weeder frame high operational stability (no swinging up or down).

A stable sectional steel tube frame with cross braces will ensure that the frame of the weeder does not swing forward or backward. Of course - like on all other Einböck implements - all joints are equipped with wear protection sleeves and the bolts are specially hardened. When folding the frame to its transport position and when turning at the end of the field the outer wheels have no ground contact. This way none of the plants will be harmed or damaged.



All sections of the semi pull type version of the AEROSTAR are attached to suspend beams. These beams are hydraulically controlled (hydraulic level adjustment).

This suspended beam system can adapt to any unevenness in the terrain in an excellent way. On strongly crusted soil the double-acting cylinders of the beams will let you exert pressure on the sections.



Technical data AEROSTAR 18 - 24 m / 59 - 79 ft

| Type/ Working width in cm / ft | height | Transport- (m / ft) length | width | hp/kw | Number of tines | Sections | Wheels | Weight approx. kg / lbs |
|-----------------------------------|------------|-------------------------------|------------|---------|--------------------|----------|--------|----------------------------|
| AEROSTAR 1800 / 59 | 2.95 / 9.7 | 6.50 / 21.3 | 3.00 / 9.8 | 120/88 | 720 | 9 | 4 | 3950 / 8708 |
| AEROSTAR 2400 / 79 | 2.95 / 9.7 | 9.20 / 30.2 | 3.00 / 9.8 | 140/103 | 960 | 13 | 4 | 5460 / 12037 |

Technical data and specifications are approximate and without obligation. Construction and design are subject to change.



The suspended beam system by Einböck gives the tined weeder sections the same pressure independently from the position.

LEADING EDGE TECHNOLOGY WITH THE EINBÖCK SUSPENDED BEAM SYSTEM

The construction of the main frame **enforced by cross braces** is a guarantee for a long product life.

The sophisticated **retraction mechanism** together with putting the tines into the lowest angle position makes it possible to reduce the transport width to only 3 m / 9.8 ft.





AEROSTAR-





- EXACT

PRECISE WEEDING TECHNOLOGY RIGHT AT THE POINT

Accurate, sensitive and precise – these are the demands now placed on modern weeding technology - especially when working in special crops. The AEROSTAR-EXACT is the perfect machine for that, it extends the successful tined weeder range with a special model for precision and versatility.

The AEROSTAR-EXACT is equipped with angled spring tines with a diameter of 7 mm / 0.28" and a length of 600 mm / 23.6", which adapt perfectly to uneven soil, so weeding is also possible in later growth stages of the plant. The "tip is forward of the bend" adjusted tines have a better effect on breaking the soil crust and do not harm the crops. Unlike with tines "tip is behind the bend" the plants are not getting pushed or pulled to the ground and therefore will not be injured.

The pivoting rear wheels and the sensitive hydraulic tine adjustment guarantee, that the tines in the front and in the back are precisely controlled in working depth even on uneven soil. The hydraulic tine section adjustment provides the same pressure on each section across the entire working width. With these numerous possible adjustments the AEROSTAR-EXACT is perfectly suited for sensitive crops.



Standard Equipment AEROSTAR-EXACT

Tines Ø 7 mm / 0.28", 600 mm / 23.6" long

No frame distortion

Central hydraulic tine adjustment

Line spacing 2,5 cm / 1"

Accurate depth control through front support wheels and rear oscillating chassis

Large, bearing mounted support wheels
track width adjustable up to 2 m / 6.6 ft

Hydr. transport lock at 9 and 12 m machines

Front and rear fixed sections

Tines behind rear wheels to eliminate tire tracks

Operating instructions

Optional Equipment AEROSTAR-EXACT

Tine raising bar for row crops

Tine loss protection

Control valve: combines 2 double acting control units to 1

Warning signs and lights

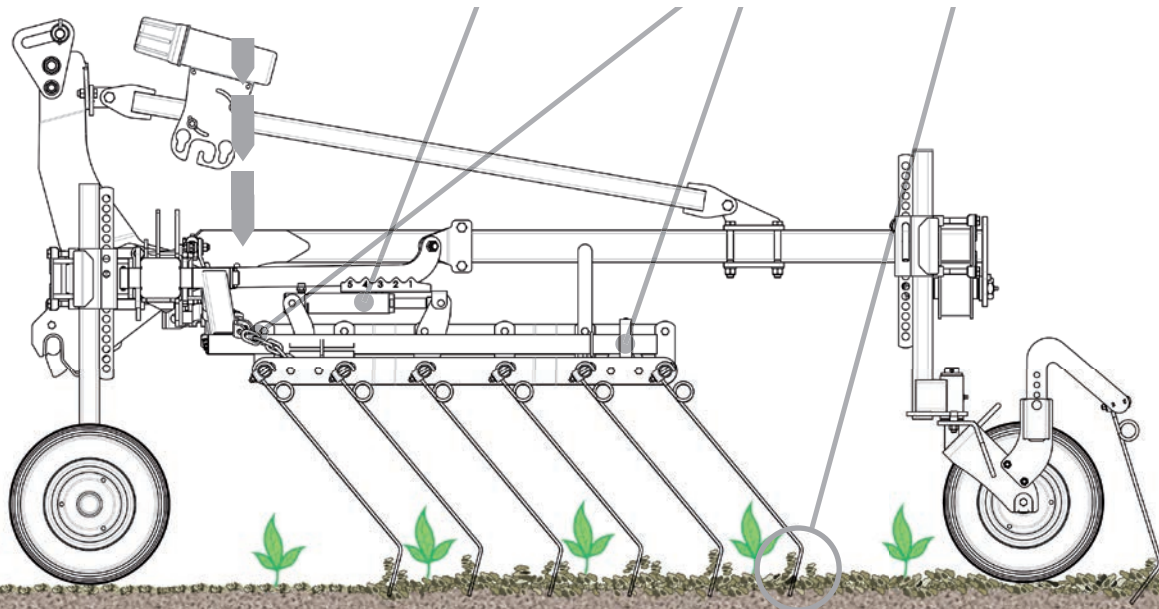
slotted hole
for upper link

low pressure
on the sections

hydraulic
tine adjustment

fixed
sections

tine position
"tip is forward of the bend"



Technical data AEROSTAR-EXACT

| Type/ Working width in cm / ft | Number of tines | Sections m / ft | Wheels | hp/KW | Weight approx. kg / lbs |
|---|-----------------|-----------------|--------|-------|----------------------------|
| AEROSTAR-EXACT 300 / 9.8 | 120 | 2 x 1,5 | 4 | 30/22 | 540 / 1190 |
| AEROSTAR-EXACT 600 / 19.7 | 240 | 4 x 1,5/4.9 | 6 | 60/44 | 940 / 2.072 |
| AEROSTAR-EXACT 900 / 29.5 ¹ | 360 | 6 x 1,5/4.9 | 6 | 80/95 | 1.600 / 3.527 |
| AEROSTAR-EXACT 1200 / 39.4 ¹ | 480 | 8 x 1,5/4.9 | 6 | 90/66 | 1.880 / 4.145 |

¹ shear retraction (see page 11)

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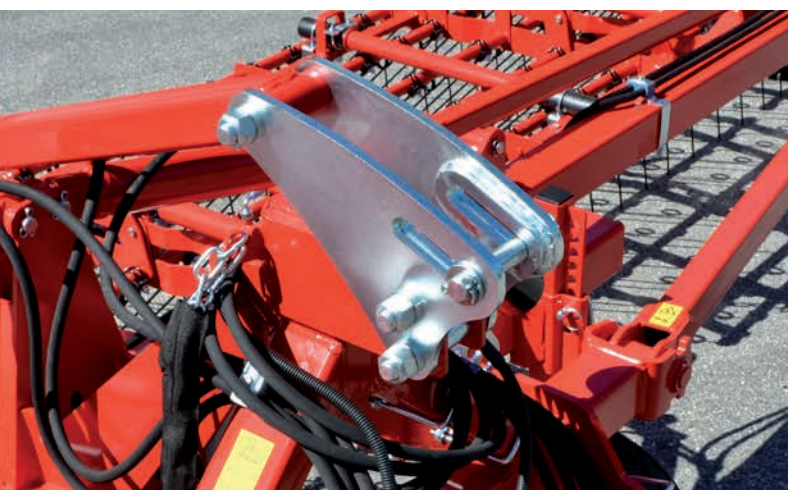
The **hydraulic tine adjustment** will make using the AEROSTAR-EXACT in changing soil conditions a whole lot easier. It also puts the tines in a flat angle when the AEROSTAR is folded.



The tine with a diameter of 7 mm / 0.28" and a length of 600 mm / 23.6" offers many advantages in **special crops**. And it also adapts very well to **uneven soil conditions**.

- Breaks the soil crust effectively
- Intensive weed control
- Long tines for optimal soil adaptation
- The longer tine allows more space under the section tubes for larger plants.
- The slightly "tip is forward of the bend" positioned tines work under the plant and lift the leaves from the soil. Therefore the soil between the rows is broken open and aerated without injuring the leaves by "dragged" tines.

A **slot for the upper link** allows the AEROSTAR-EXACT to perfectly compensate uneven soil conditions.



The **fixing of the sections** prevents them from swinging and spinning.





AEROSTAR-





-ROTATION

ROTATIVE WEEDER

WITH WIDE RANGE OF APPLICATION

The AEROSTAR-ROTATION combines the advantages of a tined weeder and a rotary hoe. Compared to a usual tined weeder the AEROSTAR-ROTATION achieves a higher level of weed control. Rotating working tools unroot or cover weeds, encourage tillering and crack even hard soil crusts without any problems. This machine is also very well suited for higher residue conditions and slightly moisture soil.

The hydraulic pressure adjustment allows anything from full pressure on the star wheels to no pressure. No pressure allows the wheels to float. Therefore the machine is perfectly suited for difficult soil conditions and sensitive special crops. A level seedbed preparation is necessary for low pressure operation.

An effective use of the machine is also possible in a late growth stage, because the rotating wheel does not push down any plants, but releases them. The inclined star wheels also have a better effect in the rows.



6.5 mm / 0.26" thick spring steel tines, cast into an inclined plastic disc do the job. Each of these 50 cm / 9.7" big star wheels is suspended separately, therefore they adapt perfectly to any surface irregularities.

The discs are mounted at a **line distance of 15 cm / 5.9"** on sections of 1.50 m / 4.9 ft. Even at low working speed as often required for sensitive crops, the AEROSTAR-ROTATION **works effectively**.

Standard equipment AEROSTAR-ROTATION

| |
|--|
| Diameter of star wheels 50 cm / 9.7" – tine diameter 6.5 mm / 0.26" |
| Line spacing 15 cm / 5.9" |
| Separate mounting of each star wheel |
| Maintenance free bearings on the star wheels |
| Hydraulic adjustment of aggression – full or no pressure on the star wheel is possible |
| Pressure and level control between the sections |
| Large bearing mounted rubber support wheels, distance approx, 1.36 – 2.20 m / 4.46 - 7.22 ft |
| Dimension 16 x 6.50/8 (with shear folding 18 x 8.50/8 in the middle) |
| Hydr. transport lock at 9 and 12 m machines |
| Shear retraction through parallel guidance (see page 11) |
| Parking support |
| Transport width 3.00 m / 9.8 ft |
| Operating instructions |

Optional equipment AEROSTAR-ROTATION

| |
|--|
| Rotation-weeding-element instead of normal tines for working in the center of the machine (recommended for heavy residues) |
| Control valve: combines 2 double acting hydraulic connections to 1 (for machines with shear retraction) |
| Inside twin wheels 18x8.50-8 |
| Outside single wheels 18x8.50-8 instead of standard wheels for light and sandy soils |
| Warning signs and lights |

Technical data AEROSTAR-ROTATION

| Type/Working width cm / ft | Number of star wheels | Sections | Folding | Hydraulic requirements ² | hp/kW | Weight approx. kg / lbs |
|--|-----------------------|----------|-----------|-------------------------------------|-------|-------------------------|
| AEROSTAR-ROTATION 150 / 4.9 | 10 | 1 | rigid | 1 da | 20/15 | 270 / 595 |
| AEROSTAR-ROTATION 300 / 9.8 | 20 | 2 | rigid | 1 da | 35/26 | 420 / 926 |
| AEROSTAR-ROTATION 450 / 14.7 | 30 | 3 | hydraulic | 2 da | 50/37 | 650 / 1.433 |
| AEROSTAR-ROTATION 600 / 19.7 | 40 | 4 | hydraulic | 2 da | 65/48 | 810 / 1.786 |
| AEROSTAR-ROTATION 900 / 29.5 ¹ | 60 | 6 | hydraulic | 3 da | 80/59 | 1.560 / 3.440 |
| AEROSTAR-ROTATION 1200 / 39.4 ¹ | 80 | 8 | hydraulic | 3 da | 95/70 | 1.890 / 4.167 |

¹ shear retraction
² sa = single acting da = double acting

Technical data and specifications are approximate and without obligation. Construction and design are subject to change.



AEROSTAR-ROTATION

Rotating working tools unroot or cover weeds, encourage tillering and crack even hard soil crusts without any problems. The star wheels are **mounted inclined**, therefore the efficiency of weed control is outstanding.

- Works with heavy residues - perfectly suited for minimum-tillage
- Optimally suited for difficult soil conditions and sensitive special crops
- Total treatment over the whole working width by inclined mounted star wheels
- Automatic pressure and level control for an even aggressivity over the full working width
- Compact shear retraction at 9.00 m / 29.5 ft and 12.00 m / 39.4 ft machine

The pressure is **comfortably and infinitely variable adjustable** from the tractor's seat. This innovative system uses the power of two counteracting tension springs. By extending the hydraulic cylinder, the tension of the preload spring increases. The pressure on the star wheels increases as well.

When retracting the cylinder, the relieving spring is tensioned. If desired the pressure on the star wheels can be reduced, until absolutely no down pressure is left (the star wheels are nearly floating).

The **bi-directional angle** of the inclined mounted star wheels prevents a possible side pull.

Standard weeder tines are used in the center. As an option there is a star-wheel-element available.



Related brochures

- CHOPSTAR - Technology for row crops
- ROTARYSTAR - Rotary hoe



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