

CONTENTS

SEEDBED COMBINATION EXTREM PAGE 6-15

SEEDBED CULTIVATOR VIBROSTAR PAGE 16-25



CONSTRUCTION

CONSTRUCTION

arable harrow, mini seedbed or double arable harrow tine section

4 or 5 beams



LINE SPACING

LINE SPACING 10 cm (3.94") line spacing



WORKING RANGE*

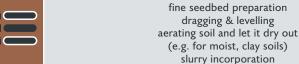


4.8 | 6.4 | 10.5 cm (1.89 | 2.52 | 4,13") line spacing

seedbed preparation slurry incorporation dragging & levelling light cultivation on cover crops cutting the full surface seeding cover crops with seeder P-BOX-STI



WORKING EFFECT*



loosening, (cutting,) mixing, crumbling & levelling



WORKING EFFECT*

SOIL TYPE*

loosening, mixing, crumbling & levelling

SOIL TYPE*



light, medium, heavy, sandy

light, medium, heavy, sandy, stony



WORKING DEPTH*

WORKING DEPTH*

up to 8 cm (3.15")

up to 12 cm (4.72")

PRACTICAL EXAMPLE

PRACTICAL EXAMPLE

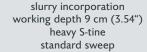
PRACTICAL EXAMPLE

seedbed preparation working depth 8 cm (3.15") mini seedbed tine exchangeable share

seedbed preparation working depth 6 cm (2.36") arable harrow tine section square tine

PRACTICAL EXAMPLE

light tillage on cover crops working depth 6 cm (2.36") heavy S-tine duckfoot sweep











^{*} Varies depending on crumbler, tine type, soil type, preparation

BLADE CULTIVATOR TAIFUN FLAT CULTIVATOR RAZOR PAGE 26-39 & 40-49

CONSTRUCTION

TAIFUN 4 beams | RAZOR 5 beams

LINE SPACING

15 cm (5.91") line spacing

WORKING RANGE*

shallow tillage
stubble cultivation
cutting the whole surface
shallow tillage of cover crops
seeding cover crops with seeder P-BOX-STI
rough seedbed preparation

WORKING EFFECT*

cutting, mixing, loosening & crumbling

SOIL TYPE*

light, medium, heavy, sandy, stony

WORKING DEPTH*

TAIFUN up to 15 cm (5.91") | RAZOR up to 12 cm (4.70")

PRACTICAL EXAMPLE

stubble cultivation working depth 5 cm (1.97") Hercules tine duckfoot sweep



PRACTICAL EXAMPLE

cultivation on cover crops working depth 12 cm (4.72") Hercules tine, standard sweep made from carbide metal



UNIVERSAL CULTIVATOR HURRICANE PAGE 50-63

CONSTRUCTION

4 beams

LINE SPACING

20 cm (7.87") line spacing

WORKING RANGE*

stubble cultivation
cultivation of cover crops
cultivation of clover grass
cutting the whole surface
seeding cover crops with seeder P-BOX-STI
deep tillage

WORKING EFFECT*

cutting, mixing, loosening & crumbling

SOIL TYPE*

light, medium, heavy, sandy

WORKING DEPTH*

up to 25 cm (9.84")

PRACTICAL EXAMPLE

stubble cultivation working depth 7 cm (2.76") standard tine duckfoot sweep



PRACTICAL EXAMPLE

primary tillage working depth 22 cm (8.66") standard tine narrow share























SEEDBED COMBINATION EXTREM

The seedbed combination EXTREM was designed for seedbed preparation on various soil types, especially on ploughed land. The perfect combination of fine and coarse soil particles creates a structure that does not tend to sludge.

The specification of the tine sections and rear rollers, which is designed to meet the customer's soil conditions, ensures ideal depth control. This creates the perfect seed horizon, which forms the basis for optimum seed emergence. Also in heavy soil conditions, a level surface and a fine seedbed are ensured.

The robust and closed frame guarantees smooth operation, stability and user-friendly adjustment.





Туре	Working width cm/ft.	Sections	Tine spacing mm/inch / no. of tines	from HP/kW	Weight approx. kg / lbs
EXTREM 500 E ¹⁾	480/15.70	4	48/1.89 / 98	110/81	1950-2020 kg 4299-4454 lbs
EXTREM 500 G ¹⁾	480/15.70	4	64/2.52 / 76	110/81	1940-2020 kg 4277-4454 lbs
EXTREM 500 2E	480/15.70	8	48/1.89 / 196	110/81	1780 kg 3924 lbs
EXTREM 600 E 1)	580/19.00	4	48/1.89 / 120	140/103	2090-2180 kg 4608-4807 lbs
EXTREM 600 G 1)	580/19.00	4	64/2.52 / 92	140/103	2100-2200 kg 4630-4851 lbs
EXTREM 600 2E	580/19.00	8	48/1.89 / 240	140/103	1980 kg 4366 lbs

E = Harrow sections instead of crumbler G = Mini seedbed tine section 2E = 2x arable harrow tine section

STANDARD EQUIPMENT

- ✓ Frame protected against vibrations via rubber suspension of the sections and crumblers
- ✓ Working depth adjustable in parallel via a perforated rail
- ✓ Closed, compact steel-tube frame
- ✓ Lower links guided on both sides
- ✓ Lower and top links are equipped with hardened bushings
- ✓ Double acting hydraulic cylinders for folding hydraulic lock block for fixing in transport position
- ✓ Side wings adjustable rigid or floating
- ✓ Screwed crumbler axles ball bearing mounted crumblers
- ✓ Parking support
- ✓ Holder for track loosener and levelling plate

Choice of crumblers:

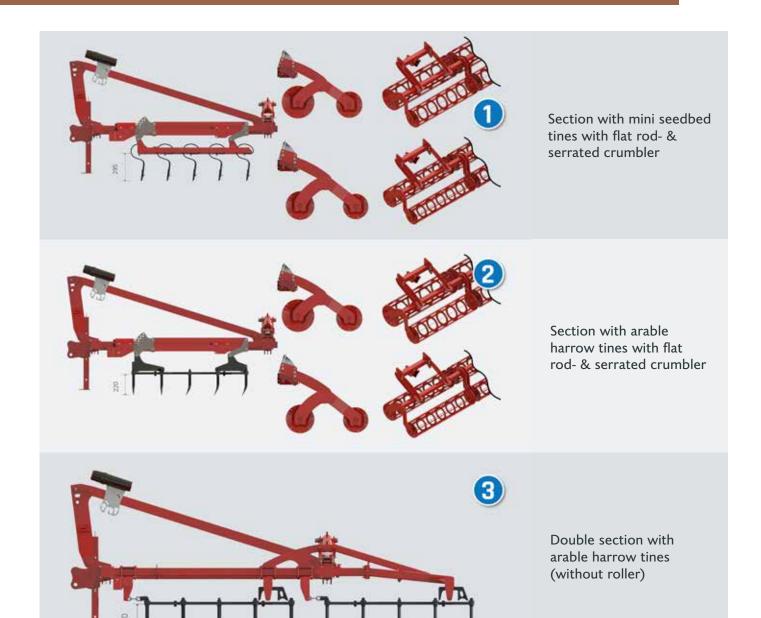
- >> 2E: Harrow section
- 2ZW: Serrated crumbler ø 320 mm & serrated crumbler 280 mm
- 2FZ: Flat rod crumbler ø 380 mm & serrated crumbler ø 320 mm

OPTIONS

- » Track loosener
- » Levelling plate
- » Side-plate on both sides
- » 1-row trailed weeder tines Ø 8 mm / 0,31"
- » Warning signs with holder and LED-light

Optionally with 2ZW = Double serrated crumbler Ø 320 mm and 280 mm or 2FZ = Flat rod crumbler Ø 380 mm and serrated crumbler Ø 320 mm

CONCEPT EXTREM



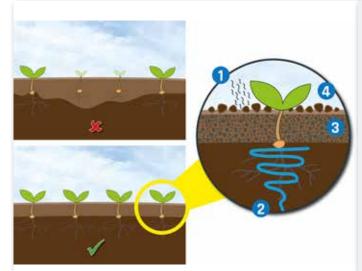
ADVANTAGES EXTREM

TECHNIQUE FOR A PERFECT SEEDBED

In order to ensure precise seed placement, growing conditions and emergence the seedbed combination EXTREM offers the following advantages:

- » Precise levelling of the soil surface
- » Exact depth guidance of the working tools
- » Uniform breaking up and crushing of the soil
- » Perfect mixing of fine soil and coarse crumbs
- » Optimal soil reconsolidation as well as compact seedbed





PREPARING THE IDEAL SEEDBED

Perfect seedbed preparation requests ideal technology. The seedbed combination EXTREM mixes fine soil with coarse crumbs, which prevents sludging and water evaporation. Particularly important in this respect is the correct crumbler, but also the front levelling plates. To ensure that the seed can be placed between the crumbled (top) and consolidated (lower) layer of soil a compact, smooth-running machine which precisely keeps the working depth is needed.

- 1. Air and heat
- 2. Water
- Fine soil
- 4. Coarse soil crumbs

MANY DIFFERENT COMBINATION POSSIBILITIES

In order to specify the best possible seedbed combination for the different soil types and conditions there is the possibility to combine many different working sections. In this way, the best machine for every field of application, as well as for every objective in soil tillage and seedbed preparation can be offered.



ADVANTAGES EXTREM

SIMPLE, PARALLELOGRAM-GUIDED AND FAST ADJUSTMENT OF THE WORKING DEPTH

The working depth of the sections is adjusted parallel to the ground via an adjustmentboard. This ensures fast and simple, but still precise adjustment of the working tools. In addition, this ensures there is no need to readjust the 3-point-linkage of the tractor when the working depth is changed.





2-ROW CRUMBLERS FOR A CRUMBLY AND RECONSOLIDATED SURFACE

Double crumblers with different diameters follow the tine sections to ensure a perfect seedbed. As they rotate at different speeds, the crumbling effect is perfect. Serrated crumblers improve this effect in comparison to flat steel crumblers. A single row of trailed weeder tines is available as an option on all crumblers.

BRACING TO THE REAR FOR ENOUGH SOIL PRESSURE

In order to be able to increase pressure to the trailled implements (crumblers), the bracing of the three-point linkage is designed directly to the coupling points of the crumblers.



RETRACTION, CENTRE OF GRAVITY AND TRACTION POINT

The low traction point ensures good retraction of the working tools in the soil and smooth guidance of the machine. This guarantees optimum immersion and exact maintaining to the working depth even in heavy soil conditions.





BEARINGS AND MOUNTING OF THE FOLLOWING CRUMBLERS

The large-dimensioned, low-maintenance and completely sealed and protected ball bearings guarantee a long service life of the crumblers. The rubber buffers, which connect the crumblers to the mainframe ensure obstacles (e.g. stones) do not lift the working sections - this again ensures a quiet operation and increases service life.

UNIQUE COMBINATION OF "HARROW-HARROW"

In heavy, wet, sticky soil conditions without stones the combination harrow-harrow is most recommended. Two harrow sections are mounted one behind the other, each of them in the front is fixed to the frame with chains.



DETAILS EXTREM

RUBBER SUSPENSIONS FOR DURABILITY

The frame, as well as the crumblers, are very well protected against vibrations via rubber suspensions.

The machine works more dynamically and there is less force on the frame. The quiet mode of operation extends the service life considerably.





HYDRAULIC FOLDING FOR TRANSPORT WIDTH LOWER THAN 3 METRES

All EXTREM machines have been designed to achieve a transport width of less than 3 m / 9.80 ft. In addition, the design ensures that the machine does not sway or swing during road transport, which in turn increases durability.

SIDE WINGS ADJUSTABLE VIA HANDLES

The side wings can be easily adjusted from completely rigid to floating via handles. If the handles are removed, the wings can float downwards.





SAFETY HYDRAULIC LOCK BLOCK

The safety hydraulic lock block fixes the hydraulic folding mechanism in working- or transport position.

This guarantees a rigid frame over the entire working width during operation in the field or safe road travel at all times.

OPTIONS EXTREM

SPRING MOUNTED LEVELLING PLATE FOR PERFECT SOIL LEVELLING

The spring mounted levelling plate of the seedbed combination (on variant 2E only the rigid variant is possible) is height-adjustable and can therefore be precisely adjusted to the field conditions. The possibility to adjust the position ("trailed" or "forward") will crush the clods, level the surface and even out the tractor tracks. The tools are running very smoothly and the working depth remains exactly the same. The levelling plate is a useful tool especially for springtime seedbed preparation.





SIDE-PLATE ON BOTH SIDES

In order to prevent soil being pushed sideways on the already worked area optionally side plates are available for both sides (for 2ZW/2FZ).

SPRING MOUNTED TRACK LOOSENER (1)

The spring mounted track loosener 32x12 mm / 1.26x0.47" (1) can be easily adjusted to the track width.

Safety track loosener 50x15 mm / 1.97x0.59" with duckfoot sweep 70 mm / 2.76" (2)

For stony soil conditions optional safety track loosener, which are secured against overload by a pressure spring, are available. They are equipped with 70 mm / 2.76" duckfoot sweeps.

Both track loosener can be adjusted in height depending on the desired intensity.







1-ROW TRAILED WEEDER TINES

An optionally available single-row of trailed weeder tines ensure a good distribution of organic matter on the surface. It also increases as final tool the exactitude and precision of the machine.

THE RIGHT COMBINATION EXTREM

E-2ZW: Arable harrow tine section + serrated crumbler Ø 320 mm / 12.60" and Ø 280 mm / 11"

Arable harrow tine section, 5-rows, firmly mounted, height adjustable + small serrated crumblers for heavy soils and good crumbling

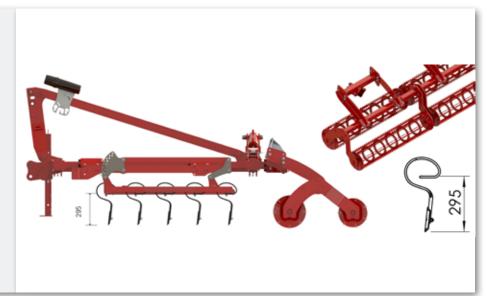
Tine: arable harrow tine 20x20 mm / 0.79x0.79" M18



G-2ZW: mini seedbed tine section + serrated crumbler Ø 320 mm / 12.60" and Ø 280 mm / 11"

Mini seedbed tine section with spring tines, 5-rows, firmly mounted, height adjustable + little serrated crumblers for medium soils

Tine: mini seedbed tine straight with changeable sweep 32x10 mm / 1.26x0.39"



2E: 2x harrow tine sections

Two arable harrow tine sections, 5-rows, in the front fixed with chains to the frame, rear guided, for heavy, sticky soil without stones up to working depth of 8 cm / 3.15"

Tine: arable harrow tine 20x20 mm / 0.79x0.79" M18



E-2FZ: Arable harrow tine section + flat rod crumbler Ø 380 mm / 14.96" + serrated crumbler Ø 320 mm / 12.60"
Arable harrow tine section, 5-rows, firmly mounted, height adjustable + big flat rod- and serrated crumbler for medium soil, flat rod crumbler ensures high load capacity

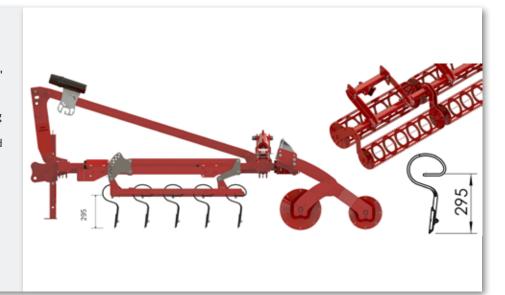
Tine: Arable harrow tine 20x20 mm / 0.79x0.79" M18



G-2FZ: mini seedbed tine section + flat rod crumbler Ø 380 mm / 14.96" + serrated crumbler Ø 320 mm / 12.60"

Mini seedbed tine section with spring tines, 5-rows, firmly mounted, height adjustable + big flat rod- and serrated crumbler for light to sandy soils, flat rod crumbler ensures high load capacity

Tine: mini seedbed tine straight with changeable point 32x10 mm / 1.26x0.39"





SEEDBED CULTIVATOR VIBROSTAR

The VIBROSTAR seedbed cultivator is designed for professional and user-friendly seedbed preparation. It is mainly used for light to medium-heavy soils. The light cultivator creates the perfect seedbed and ensures optimum levelling on ploughed or mulch seeded fields with organic matter. The special design of the frame and the high-quality spring tines which are mounted to the frame with a line spacing of 10 cm / 3.90" ensure intensive soil mixing with excellent soil flow. This ensures that the machine can handle a high amount of residue without getting blocked.

Depending on the field conditions and cultivation objective, the cultivator is available with 4 or 5 row tine arrangement, tines with various different shapes and lengths as well as different trailed weeder. The version with 4-row frame is also available with a front roller.





Туре	Working width cm/ft.	No. of tines	from HP/kW	Weight approx. kg / lbs
VIBROSTAR 4-390	390/12.80	39	85/62	1290 kg 2844 lbs
VIBROSTAR 4-450	450/14.80	45	90/66	1370 kg 3020 lbs
VIBROSTAR 4-490	490/16.10	49	100/74	1430 kg 3153 lbs
VIBROSTAR 4-550	550/18.00	55	120/88	1650 kg 3638 lbs
VIBROSTAR 4-610	610/20.00	61	140/103	1780 kg 3925 lbs
VIBROSTAR 4-810 ¹³	810/26.60	81	180/132	3440 kg 7584 lbs
VIBROSTAR 4-1210	1210/39.70	121	240/176	7500 kg 16535 lbs
VIBROSTAR 5-400	400/13.10	40	90/66	1470 kg 3241 lbs
VIBROSTAR 5-500	500/16.40	50	120/88	1930 kg 4255 lbs
VIBROSTAR 5-600	600/19.70	60	150/110	2340 kg 5159 lbs
VIBROSTAR F-4-450	450/14.80	45	110/81	2250 kg 4961 lbs
+ VIBROSTAR F-4-490	490/16.00	49	120/88	2360 kg 5203 lbs
VIBROSTAR F-4-550	550/18.00	55	140/103	2680 kg 5909 lbs
VIBROSTAR F-4-610	610/20.00	61	160/118	2840 kg 6262 lbs

- with 2 rubber support wheels on the side-wing
 double folding frame, standard trailed with bolted chassis, with 4 rubber support wheels mounted on the side and external wing

STANDARD EQUIPMENT

- ✓ Line spacing 100 mm
- ✓ Tine arrangement in 4 rows | on 5-... 5 rows
- S-tine
- ✓ Lower links guided on both sides
- ✓ Lower and top link equipped with hardened bushings
- ✓ Screwed crumbler axles ball bearing mounted
- ✓ Position of second crumbler separately adjustable
- ✓ Holder for levelling plate

VIBROSTAR 4F-...

- ✓ Levelling plate adjustable, "dragged" or "push" position
- ✓ Front flat rod crumbler ø 380 mm or Front round rod

VIBROSTAR XXL (1210)

- VIBROSTAR 4-1210 with semi-mounted frame
- ✓ Rubber support wheels on the side wings for even depth control

Choice of crumblers:

- >> 1ZW: Serrated crumbler ø 320 mm

- 2ST: Following weeder tines 2 rows ø 10 mm RP47: Ring packer roller ø 470 mm with spring stripper & following weeder tines 2 rows ø 10 mm

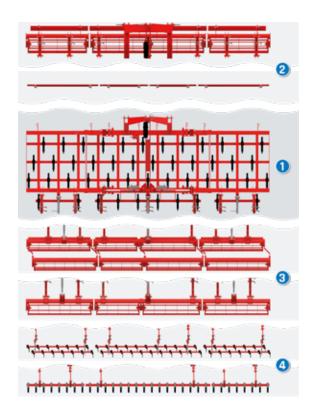
OPTIONS

- » Track loosener (not for 4F-... & XXL)
- » Levelling plate (standard for F4-...)
- VIBRO-BOARD hydraulically adjustable (for 5-... & XXL)
- » Trailed weeder tines 1- or 2-row (not for XXL)
- Stone protection for central bearings
- Duckfoot sweeps 70 mm | 2,76" or 105 mm | 4,13"
- Rubber support wheels
- » Special tine straight
- Heavy S-tine (standard for F4-...)
- » Tine reinforcement (not for 4F-...)
- Pneumatic seeder P-BOX (not for XXL)
- Warning signs with holder and LED-light

Additional for VIBROSTAR 5-...

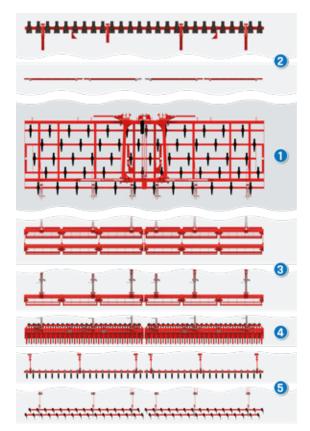
- Side plate on both sides
- Double drag tines

CONCEPT VIBROSTAR



Frame with 4-rows of tines

- 1. 4-row frame structure with 10 cm / 3.90" line spacing and 36.5/42 cm (14.40/16.50") spacing between beams
- 2. Levelling plate or front roller (front crumbler up to 6.1 m / 20 ft. working width)
- 3. Differentrearrollersandrollerdiameters(serrated,flat steel, round-rod)
- 4. Trailed weeder tines 1- or 2-row



Frame with 5-rows of tines

- 1. 5-row frame structure with 10 cm / 3.90" line spacing and 36.5/39 cm (14.40/15.40") spacing between beams
- 2. Levelling plate or VIBRO-BOARD
- 3. Differentrearrollers and roller diameters (serrated, flat steel, round-rod)
- 4. Ring packer roller
- 5. Trailed weeder tines 1- or 2-row

ADVANTAGES VIBROSTAR

FINEST SEEDBED PREPARATION

Even seedbed preparation and levelling on ploughed or mulchtill fields with organic matter. Ideal for seedbed preparation even on compacted soil, as clods are placed on the surface and fine soil is placed in the seed layer. The different rollers for precise depth control ensure excellent mixing as well as crumbling.





SUFFICIENT CLEARANCE

Up to 52 cm / 20.50" of clearance (depending on working depth and choice of tines) ensures operation without blocking.

10 CM / 3.90" LINE SPACING ENSURES PERFECT WEED CONTROL

In order to cut through the entire surface, when equipped with heavy S-tines, 105 mm / 4.13" wide duckfoot sweeps can be fitted. These provide sufficient overlap at 100 mm /3.94" line spacing to ensure working over the full surface.





VIBRO-BOARD FOR BEST WORKING QUALITY

A hydraulically adjustable VIBRO-BOARD ensures initial levelling in front of the tines as well as breaking up and crushing of the clods. This way, the foundation for excellent working quality of the seedbed cultivator is already ensured by the first working tool.

Available for VIBROSTAR XXL and VIBROSTAR 5-...

ADVANTAGES & DETAILS VIBROSTAR

LEVELLING PLATE FOR PERFECT FLAT SURFACE

The levelling plate, adjustable in height and angle, levels the surface. The cultivator's working tools are guided smoothly during operation. By adjusting it on "dragging" or "on grip" position, it crushes the clods and levels it out. The levelling plate is recommended especially for seedbed preparation on ploughed fields in spring. In combination with the front roller, this plate is standard.





SIMPLE WORKING DEPTH ADJUSTMENT

The working depth is adjusted by means of bolts in a breadboard. With the spindle, the downforce on the rollers can be adjusted to the specific conditions. The result is a reconsolidated seedbed with an optimally crumbly structure. Even in heavy soil conditions, the cultivator guarantees optimum penetration and an exact constant working depth. The vibrating spring tines cultivate and aerate the soil at any desired working depth. They vibrate as well in the direction of operation as laterally, thus ensures that the desired working depth is maintained at all times.

FLAT SEEDBED PREPARATION WITH FRONT ROLLER

In some working widths (see table: Technical data), the VIBROSTAR seedbed cultivator is also available as an implement with front roller. This makes the machine ideal for very shallow seedbed preparation (e.g. for sugar beets). For improved depth control, the height of the front roller can be adjusted precisely and easily by means of bolts in a breadboard.





UNCOMPLICATED SEEDING OF CATCH CROPS

For seeding of catch crops, a pneumatic seeding box (P-BOX-STI) can be installed or retrofitted at any time. The distribution plates are factory-fitted in front of the trailing rollers (but can also be positioned differently on request).



SOLID THREE-POINT MOUNTING

The 3-point mounting is equipped with hardened bushings and the lower links are guided on both sides.





BIG VARIETY OF DIFFERENT SPECIFICATIONS

The large number of different levelling tools in combination with various tines, sweeps and trailed weeder tines make the VIBROSTAR to a fine cultivator that can be individually adapted to the respective conditions and purposes. In this way, the best specification to achieve the desired result can be found.

TRANSPORT POSITION

All models are folded hydraulically to a transport width of less than 3 m / 9.80 ft.

The VIBROSTAR XXL has a transport width of 3.5 m / 11.50 ft.





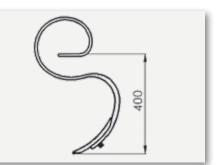


THE RIGHT TINES VIBROSTAR

STANDARD S-TINE

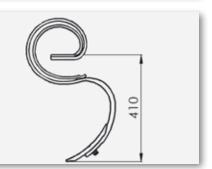
Standard S-tine material 32x10 mm / 1.26x0.39"

For medium to light soil conditions - recommended in ploughed fields. This tine is available for VIBROSTAR $4 - \dots$ and VIBROSTAR $5 - \dots$ as standard and has a frame clearance of 400 mm / 15.75". These are equipped with narrow shares.



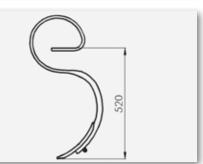
STANDARD S-TINE WITH REINFORCEMENT SPRING

Material 32x10 mm / 1.26x0.39" + 32x8 mm / 1.26x0.31" For medium to heavy, stony soil conditions - can be used after ploughing.



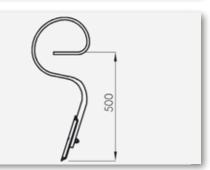
HEAVY S-TINE

Material 45x12 mm / 1.77x0.47" - For all soil conditions, can be used after ploughing (for spring use, for incorporation of winter greening, etc.). This tine is mounted as standard on VIBROSTAR F-4-....



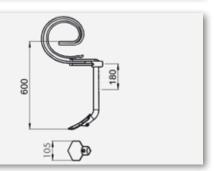
SPECIAL TINE STRAIGHT

Material 45x12 mm / 1.77x0.47" - For medium to light soil conditions (corn and beet cultivation), especially in stony soil conditions.



TRACK LOOSENER HEIGHT ADJUSTABLE

with duckfoot sweep 105 mm / 4.13" Material 32x10 mm / 1.26x0.39" + 32x10 mm / 1.26x0.39"



OPTIONS VIBROSTAR

DUCKFOOT SWEEP 70 MM / 2.76" OR 105 MM / 4.13" (ONLY POSSIBLE WITH HEAVY S-TINE)

Duckfoot sweeps with 70 mm / 2.76" or 105 mm / 4.13" width can be mounted on heavy S-tines to nearly cut the full surface (Depending on soil type).





RUBBER SUPPORT WHEELS FOR UNIFORM DEPTH CONTROL

Depending on the version, rubber support wheels are available (standard on VIBROSTAR XXL).

LEVELLING PLATE

In order to level the ground before the first row of tines, optional levelling plates can be mounted, which can be adjusted at an angle.

(Standard at VIBROSTAR F-4-...)





VIBRO-BOARD

Mounted on the frame of a trailed VIBROSTAR XXL or 5-row VIBROSTAR, this VIBRO-BOARD is easy to operate from the tractor thanks to its hydraulic adjustment. Furthermore it ensures levelling before the first row of tines.

THE RIGHT CRUMBLER VIBROSTAR

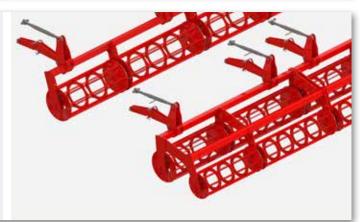
1 ZW: 1-ROW SERRATED CRUMBLER Ø 320 mm / 12.60" For medium to light soil conditions

2 ZW: 2-ROW SERRATED CRUMBLER Ø 320 mm/12.60" / Ø 280 mm / 11.02" For medium to heavy soil conditions



1 F: 1-ROW FLAT STEEL CRUMBLER Ø 380 mm / 14.96" For medium soil conditions

2 FZ: 2-ROW CRUMBLER, 1st ROW FLAT STEEL Ø 380 mm / 14.96", 2nd ROW SERRATED CRUMBLER Ø 320 mm / 12.60" For medium soil conditions



1 R: 1-ROW ROUND ROD CRUMBLER Ø 380 mm / 14.96" For medium to light soil conditions, in wet conditions, with stones

2 RZ: 2-ROW CRUMBLER, 1st ROW ROUND ROD Ø 380 mm / 14.96", 2nd ROW SERRATED CRUMBLER Ø 320 mm / 12.60"

For medium to light soil conditions, for sandy and wet conditions.



2 R: 2-ROW ROUND ROD CRUMBLER Ø 380 mm/14.96" / Ø 380 mm / 14.96"

(only available for VIBROSTAR XXL)

For medium to light soil conditions, for sandy, stony and wet conditions.

2 RF: 2-ROW ROLLER, 1st ROW ROUND ROD Ø 380 mm / 14.96", 2nd ROW FLAT ROD Ø 380 mm / 14.96"

(only available for VIBROSTAR XXL)

For medium to light soil conditions.





RP 47: RING PACKER ROLLER Ø 470 MM / 18.50" WITH 2-ROW TRAILED WEEDER TINES

(only available for VIBROSTAR 5-rows) Wedge-shaped reconsolidation on all soil types for a fine soilstructure.

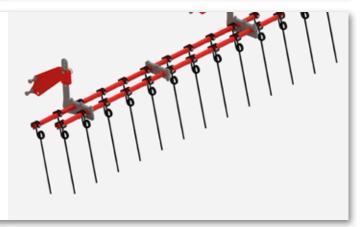


2ST: 2-ROW TRAILED WEEDER TINES WITH Ø 10 mm / 0.39" INSTEAD OF CRUMBLER

(only available for VIBROSTAR 5-rows)

Without rear roller - no reconsolidation of the soil. For very wet, sandy or stony soil conditions.

There are 4 support wheels mounted on the frame - as standard.



Туре	1 ZW	2 ZW	1F	1 R	2 F	2 R	2 FZ	2 RZ	2 RF	2 ST
VIBROSTAR 4-390 - 4-610	✓	~	✓	✓	-	-	✓	~	-	-
VIBROSTAR 4-810 - 4-1210	-	-	-	-	✓	✓	✓	✓	✓	-
VIBROSTAR 5-400 - 5-600	✓	✓	✓	✓	-	-	✓	✓	-	✓
VIBROSTAR F-4-450 - F-4-610	✓	✓	✓	✓	-	-	✓	✓	-	-



For every soil and for a wide range of conditions, the right crumbler and working tools are available!



BLADE CULTIVATOR TAIFUN

The blade cultivator TAIFUN is a multi-purpose, highly efficient machine. It is a classic machine for seedbed preparation due to its high and spacious frame construction – especially for areas with catch crops and winter greening. The incorporation of liquid manure and organic fertilizer, as well as light and shallow stubble turning or second stubble cultivation and the combat of couch grass are ideal jobs for the TAIFUN.

Due to the ultra-flat cutting with duckfoot sweeps with a line spacing of 15 cm / 5.90", the TAIFUN blade cultivator is the perfect machine for a successful first mechanical weed control. The many possible combinations (e.g. shares, rollers, trailed weeder tines, support wheels, etc.) allow the blade cultivator to be optimally adapted to many different conditions.







Type/ Working width cm / ft.	No. of beams	Tines	No. of double drag tines	from HP/kW	Weight approx. kg / Ibs
TAIFUN 250 / 8.20 1,2)	4	17	4	70/52	850 - 1130 kg 1874 - 2492 lbs
TAIFUN 300 / 9.80 1,2)	4	20	5	90/66	960 - 1250 kg 2117 - 2756 lbs
TAIFUN 400 / 13.10 ¹⁾	4	26	6	110/81	1530 - 1960 kg 3374 - 4322 lbs
TAIFUN 500 / 16.40 ¹⁾	4	34	8	130/95	1740 - 2260 kg 3837 - 4983 lbs
TAIFUN 600 / 19.70 ¹⁾	4	40	10	160/118	1880 - 2450 kg 4145 - 5402 lbs
TAIFUN 700 / 23.00 ¹⁾	4	46	12	190/140	2260 - 3000 kg 4983 - 6614 lbs

- units optionally available with the following crumblers: F, R, FZ, RZ, RP47
 rigid frame

STANDARD EQUIPMENT

- ✓ Large spring tines Vulcanus 50x13 with reversible share 53 m
- ✓ Tine arrangement 4 rows
- ✓ Line spacing 15 cm
- ✓ Large frame dimension
- ✓ Lower links guided on both sides
- Lower and top link mountings are equipped with hardened bushings
- Spring-mounted double drag tines between the last tine
- ✓ Parking position for double drag tines
- Crumblers parallelogram-guided and height-adjustable in the half breadboard
- ✓ Rear roller ball-bearing mounted

Choice of crumblers:

- FZ: Flat rod crumbler ø 400 mm & serrated crumbler ø 320 mm & following weeder tines 2 rows ø 10 mm
 R: Round rod crumbler ø 400 mm & following weeder tines 2 rows
- RZ: Round rod crumbler ø 400 mm & serrated crumbler ø 320 mm & following weeder tines 2 rows ø 10 mm
- N RP47: Ring packer roller ø 470 mm with spring stripper & following weeder tines 2 rows ø 10 mm

OPTIONS

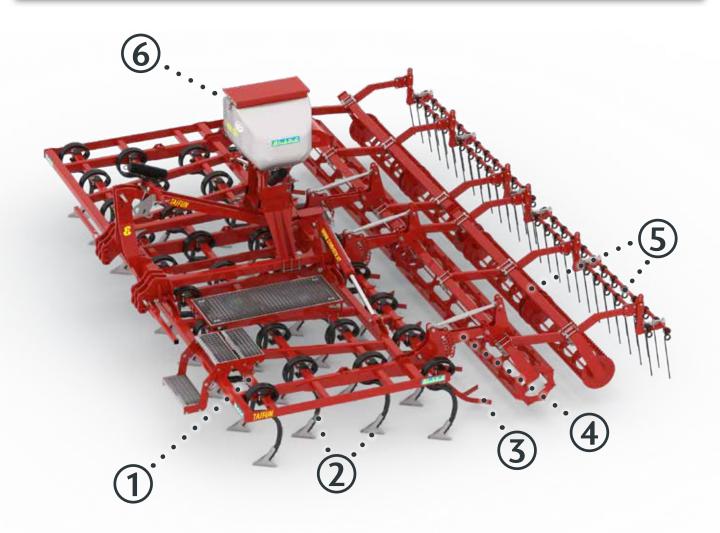
- » Levelling plate
- Side plate adjustable
- » HERKULES tine
- » Hydraulic working depth adjustment
- Reinforcement spring of HERKULES tine
- Duckfoot sweep 200/240 mm | 7.87/9.45"
- Duckfoot share 220 mm | 8.66" made from carbide metal
- Narrow share 53 mm | 2.08" made from carbide metal
- Rubber support wheels integrated in the frame
- Support wheels mounted in front of the side wings (only for TAIFUN 600 & 700)
- Trailed weeder tines
- Pneumatic seeder P-BOX
- Warning signs with holder and LED-light



The allrounder for cutting the whole surface shallow.

CONCEPT TAIFUN

- 1. 4-beam frame construction; 15 cm / 5.9" line spacing: 60 cm / 23.6" tine distance
- 2. Various tine sizes with narrow, duckfoot or carbide metal sweeps
- 3. Double drag tines with parking position
- 4. Simple mechanical or hydraulic working depth adjustment
- 5. Large selection of rear rollers and trailed weeder tines
- 6. Seeding box to seed cover crops

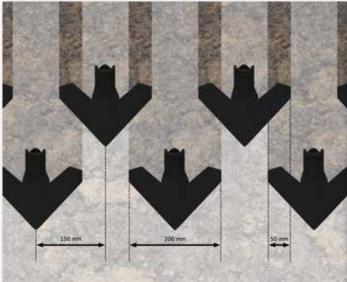


ADVANTAGES TAIFUN

A REAL "ALL-ROUNDER" THE TAIFUN BLADE CULTIVATOR:

- » Incorporation of catch crops: Full-surface, clean and flat undercutting of winter-hard or non winter-hard catch crops (cover crops, intercrops; greenings) as well as perfect uprooting.
- » Seedbed preparation: A perfect structure of coarse and fine soil ensures ideal conditions for germination, as well as a safe and uniform emergence.
- » Stubble cultivation: An ultra-flat stubble cultivation and scalping of the whole surface, stimulates lost crop seeds to germinate.
- » Seeding of catch crops: With the second cultivation, catch crops can be sown simultaneously using the pneumatic seeding box P-BOX.
- » Regulation of deep rooting and seed weeds "glyphosate replacement".
- » Incorporation of slurry, "fake" seedbed, and much more.





OVERLAPPING DUCKFOOT SWEEPS = ACROSS THE WHOLE WORKING WIDTH

If a full width cutting of the soil is requested, optionally available duckfoot sweeps provide the necessary overlap at a line spacing of 15 cm / 5.90". For example, the 200 mm / 7.87" sweeps guarantee an overlap of 50 mm / 1.97" (33.3 %) (see graphic). There are also 240 mm / 9.45" duckfoot sweeps with an overlap of 90 mm / 3.54" available. Due to this generous overlap the whole field is cultivated during shallow operation and emerged weeds are mechanically regulated.

WORKING DEPTH PRECISELY ADJUSTABLE

The working depth of the blade cultivator can be adjusted via bread board on the parallel guided rear roller. Additionally the working pressure of each roller or the angle of the trailed weeder tines to the soil can be adjusted with a spindle. All the pressure is transferred to the rear roller. The machine works very calmly because all the weight of the cultivator is on the rear roller unit.

Option:

Hydraulic working depth adjustment



ADVANTAGES TAIFUN

TUBE-IN-TUBE CONSTRUCTION

The tube-in-tube construction of the frame guarantees durability and stability.



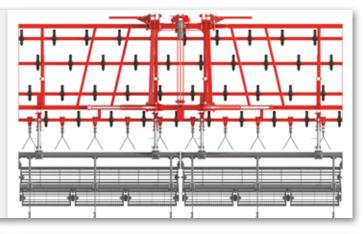


BIG FRAME CLEARANCE

The big frame clearance (up to 580 mm / 22.83") guarantees clog-free working and a perfect work result even in fields with a big amount of organic matter.

100 % EVEN TINE DISTRIBUTION

An even tine distribution ensures work without clogging, a cutting of the full surface and a smooth tensile behaviour.





GREASEABLE JOINTS WITH HARDENED BUSHINGS

LOWER LINKS AND UPPER LINKS WITH ROTATION LOCKS AND HARDENED BUSHINGS

WORKING TOOLS TAIFUN

SPRING TINE HERKULES 70X12 MM / 2.76X0.47", FRAME CLEARANCE 580 MM / 22.83" (RECOMMENDED)

The optional spring tine Herkules is made of 70x12 mm / 2.76x0.47" material, at a frame clearance of 580 mm / 22.83". The tine is recommended for heavy, but also stony soils, for seedbed preparation. For this operation a use of duckfoot sweeps is also possible. The sweep is mounted with two bolts, this is a big advantage in stony and heavy conditions.

Narrow share: The narrow share (standard equipment) is $53 \, \text{mm} / 2.09^\circ$ wide and is recommended for operations deeper than 10 cm / 3.90°. **Duckfoot sweep:** The duckfoot sweep with a width of 200 mm / 7.87° is suitable for cutting the full surface in low depth. Both shares are 6 mm / 0.24° thick. The TAIFUN is also called spring tine cultivator.



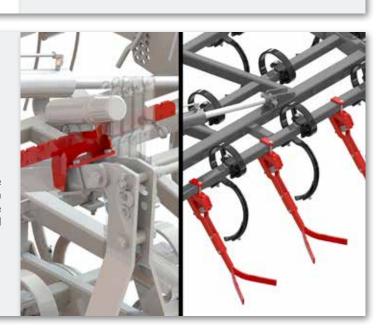


SPRING TINE VULCANUS 50X13 MM / 1.97X0.51", CLEARANCE 525 MM / 20.67"

The spring tine Vulcanus (standard) is made from 50x13 mm / 1.97x0.51" spring steel. The frame clearance is 525 mm / 20.67". The spring tine is for light up to medium-heavy soil and for seedbed preparation after ploughing. For this operation duckfoot sweeps can be mounted optionally. The strong spring tine Vulcanus, made from high- quality spring steel, is designed for long service life.

TOOL-FREE ADJUSTABLE AND SPRING-MOUNTED DOUBLE DRAG TINES (STANDARD EQUIPMENT)

Double drag tines guarantee an even levelling between the last row of tines and the rear rollers or weeder tines. This is an advantage because the rear roller can evenly recompact the soil over the entire working width. They can be dismounted without tools and kept safe directly on the frame.



OPTIONS TAIFUN

SWEEPS MADE FROM CARBIDE METAL FOR HERKULES TINES

The sweeps made of carbide metal for Herkules tines are optionally available as duckfoot sweeps 220 mm / 8.66" and as narrow shares 53 mm / 2.09". The application of carbide metal plates and the special geometry of these sweeps increase the operating time and reduce wear.







DOUBLE SPRING FOR HERCULES TINE

A double or reinforcing spring with wedge is optionally available for the HERKULES tine. This extra spring ensures that a constant working depth is maintained, especially with flat tillage. The reinforcing spring wedges itself into the HERKULES tine with even the slightest pre-tension, thus reducing the lateral movement of the tines. The vibrating effect of the spring loaded tines is retained. The double or reinforcing spring is particularly recommended for hard, heavy soils.

LEVELLING PLATE "DRAGGING" OR "ON GRIP"

The levelling plate is clamped on the front of the frame and can be adjusted in height through bolts. The levelling plate crushes clods, levels the soil, covers the tractor track and can be adjusted "dragging" or "on grip". The operation of the working tools is extremely smooth and the working depth is maintained exactly. In spring the levelling plate is especially recommended for seedbed preparation.





P-BOX FOR CATCH CROP SOWING

With the pneumatic seeding box P-BOX-STI all common seeds and their mixtures can be distributed very simply from approx. 1 kg / ha. The seeds are pneumatically transported via hoses to the distribution plates, which spread it exactly. The seeding box is adjusted via an operating terminal in the tractor - the metering roller is driven by an electric motor.



FRONT SUPPORT WHEELS

For an even smoother running and depth guidance on machines with bigger working width (from 6 m / 19.70 ft.).





PIVOTING SIDEPLATE

The parallelogram-guided sideplate is height adjustable and foldable. It prevents ridging during seedbed preparation.

CHASSIS

For the TAIFUN with heavy rollers we recommend a chassis instead of the mounted version, since the heavy weight of the machine might harm the 3-point linkage of the tractor and increase soil compaction on the headland.





TRAILED WEEDER TINES

The standard two-row trailed weeder on the F, R, FZ, RZ or RP 47 roller can be replaced on request by a single-row weeder.

THE RIGHT ROLLER TAIFUN

F: FLAT ROD ROLLER

Good crumbling on medium soil.



R: ROUND ROD ROLLER

Good crumbling on medium soil and good load capacity on light soil.



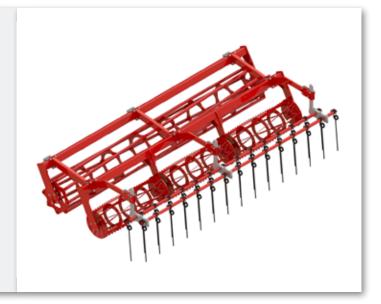
FZ: FRONT FLAT ROD - / REAR SERRATED ROLLER

Good crumbling on heavy soil.



RZ: FRONT ROUND ROD - / REAR SERRATED ROLLER

Good crumbling on medium to heavy soil, good load capacity on sandy soil.



RP 47: RING PACKER ROLLER Ø 470 MM / 18.50" WITH SPRING STRIPPER BETWEEN THE RINGS

The wedge-shaped reconsolidation roller compacts the soil in deeper areas and closes all cavities while the topsoil stays loose and is finely crumbled. Its high load capacity makes it suitable for all different types of soil. Spring scrapers between the rings help to avoid blockage.







BLADE CULTIVATOR TAIFUN XXL

The blade cultivator TAIFUN is a multi-purpose, highly efficient machine. It is a classic machine for seedbed preparation due to its high and spacious frame construction – especially for areas with catch crops and winter greening. The incorporation of liquid manure and organic fertilizer, as well as light and shallow stubble turning or second stubble cultivation and the combat of couch grass are ideal jobs for the TAIFUN.

Due to the ultra-flat cutting with duckfoot sweeps with a line spacing of 15 cm / 5.90", the TAIFUN blade cultivator is the perfect machine for a successful first mechanical weed control. The many possible combinations (e.g. shares, rollers, trailed weeder tines, support wheels, etc.) allow the blade cultivator to be optimally adapted to many different jobs as well as conditions.

The semi-mounted version of the TAIFUN - the TAIFUN XXL - is just as versatile and durable as the 3-point version. Due to its special frame design and the matching working tools, the semi-mounted blade cultivator is the ideal machine for large farms and fields.





Type/ Working width cm / ft.	No. of beams	Tines	No. of double drag tines	from HP/kW	Weight approx. kg / lbs
TAIFUN XXL 800 / 26.20 RP 58 ¹⁾	4	54	13	200/147	7540 kg 16623 lbs
TAIFUN XXL 800 / 26.20 DN ²⁾	4	54	13	200/147	7820 kg 17240 lbs
TAIFUN XXL 900 / 29.50 RP 58 ¹⁾	4	60	15	240/176	7870 kg 17350 lbs
TAIFUN XXL 900 / 29.50 DN ²⁾	4	60	15	240/176	8180 kg 18034 lbs
TAIFUN XXL 1200 / 39.40 RP 58 ¹⁾	4	80	20	340/250	9620 kg 21209 lbs
TAIFUN XXL 1200 / 39.40 DN ²⁾	4	80	20	340/250	9950 kg 21936 lbs

- 1) RP 58 = Ring packer roller Ø 575 mm / 22.60" with spring stripper between the rings and trailed weeder tines, 1-row Ø 12 mm / 0.50" DN = Double Nova roller Ø 575 mm / 22.60" the U-steel rings mesh, followed by trailed weeder tines 1-row Ø 12 mm / 0.50"

STANDARD EQUIPMENT

- ✓ Heavy spring-tine HERKULES 70 x 12 with standard sweep 53 mm
- ✓ Tine arrangement 4 rows
- ✓ Line spacing 15 cm
- Heavy frame construction semi-trailed version with big
- ✓ Parking support and wheel chocks
- hardened bushings
- parallel lifting by an additional cylinder
- Spring-mounted double drag tines between the last tine row and the rear roller
- Parking position for double drag tines
- ✓ Crumblers height-adjustable in the half breadboard
- ✓ All rear rollers ball-bearing mounted
- ✓ Front support wheels adjustable in a breadboard
- ✓ Braking axle for mounting of pneumatic trailer brake system

- RP58: Ring packer roller ø 575 mm with spring stripper & following weeder tines 1 row ø 12 mm
- DN: Double nova roller ø 575 mm (interlocking steel rings) & following weeder tines 1 row ø 12 mm

OPTIONS

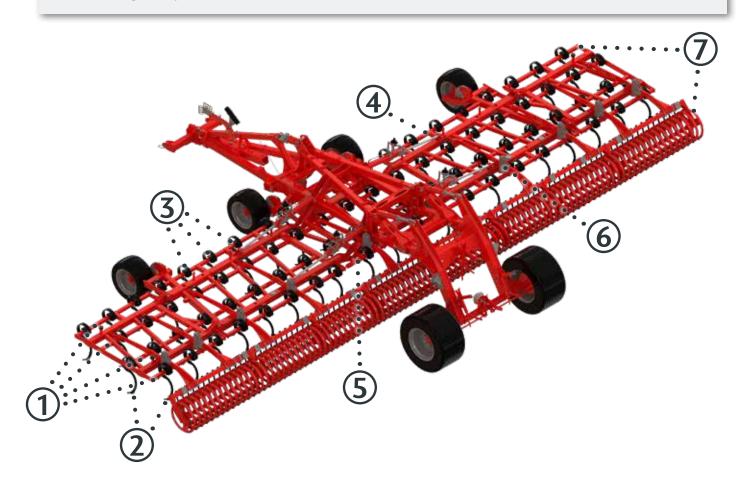
- » VIBRO-BOARD (hydraulically adjustable)
- Pneumatic trailer brake
- Levelling plate
- Reinforcement spring of HERKULES tine
- Duckfoot sweep 200/240 mm | 7.87/9.45"
- Duckfoot share 220 mm | 8.66" made from carbide
- Narrow share 53 mm | 2.08" made from carbide metal
- Warning signs with holder and LED-lights



Powerful, robust, durable, efficient, precise - the TAIFUN XXL is all that!

CONCEPT TAIFUN XXL

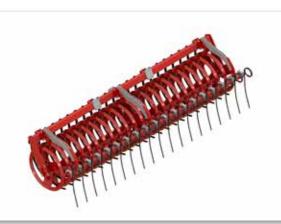
- 1. 4-beam frame construction
- 2. Herkules-tines and different sweeps
- 3. 15 cm / 5,9" line spacing; 60 cm / 23.6" tine distance
- 4. Frame clearance up to 580 mm / 22.8"
- 5. Double drag tines
- 6. Working depth easily adjustable via half breadboard
- 7. Wide range of options



DETAILS TAIFUN XXL

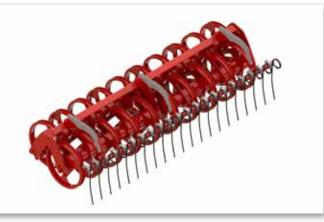
RP 58: RING PACKER ROLLER Ø 575 MM / 22.64" WITH SPRING STRIPPER BETWEEN THE RINGS

Similar to RP 47, but with a diameter of 575 mm / 22.64" for high load capacity with heavy machines. The single-row trailed weeder is standard on 8, 9 and 12 m (26.20, 29.50 and 39.40 ft.) working width.



DN: DOUBLE-NOVA-ROLLER Ø 575 MM / 22.64"

Through the U-steel rings, which are getting filled with soil on purpose, soil rolls on soil. This soil-conserving reconsolidation ensures a rough surface structure. Because of its high load capacity it is suited perfectly for all soil conditions. The single-row weeder is standard on 8, 9 und 12 m (26.20, 29.50 and 39.40 ft.) working width.





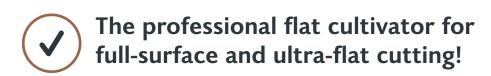








The RAZOR flat cultivator is the professional's tool for razor-sharp, full-surface and ultra-flat tillage. The mounted cultivator shows its strengths at the first stubble cultivation, incorporation of cover crops with duckfoot sweeps at working depths of up to 12 cm / 5", as well as when working with large amounts of organic material. The key features of the RAZOR are the 5 rows of tines, the line spacing of 15 cm / 5.9", the convenient hydraulic working depth adjustment, the three-row parallelogram-guided following weeder tines, as well as the HERKULES S-tines with reinforcing springs, duckfoot sweeps with an overlap of up to 9 cm / 3.5", and much more.









RAZOR	400	500	600	
Working width (m/ft.)	3.90 12.80	5.10 16.70	6.00 19.70	
Transport width (m/ft.)	2.93 9.60	2.93 9.60	2.93 9.60	
Parking height (m/ft.)	2.26 7.40	2.86 9.40	3.26 10.70	
Weight (approx. kg/lbs) MIN	1420 3100	1630 3600	1850 4100	
Weight (approx. kg/lbs) MAX	2160 4800	2490 5500	2780 6100	
HP/kW from	120/88	160/118	200/147	
Hydr. control units (double acting) Basic equipment	2	2	2	
Mounting category (Cat.)	II / Ø 28 III / Ø 36	II / Ø 28 III / Ø 36	II / Ø 28 III / Ø 36	
Number of rows	5	5	5	
Distance between rows (cm/ft.)	50 1.60	50 1.60	50 1.60	
Number of tines	26	34	40	
Folding	Н	Н	Н	
Depth-control wheels (front and rear)	2+4	2+4	2+4	

STANDARD EQUIPMENT

- ✓ Tine arrangement 5 rows
- ✓ Distance between rows 500 mm | 19.68"
- ✓ Line spacing 150 mm | 5.90"
- ✓ HERKULES tine 70 x 12 mm | 2.76 x 0.47"
- ✓ Narrow shares (53 mm | 2.08") or duckfoot sweeps (200 mm | 7.87")
- ✓ Hydraulically folded frame (H-folding) transport width 293 cm | 115.40"
- ✓ Sturdy tube-in-tube frame construction
- ✓ Hydraulic working depth adjustment of the rear tools
- ✓ Lower and top link equipped with hardened bushings

Choice of rear working tools:

- >> F: Flat rod crumbler ø 400 mm | 15.75"
- >> R: Round rod crumbler ø 400 mm | 15.75
- >> RA: Wheels with tractor tyre profile 20x10.00-8

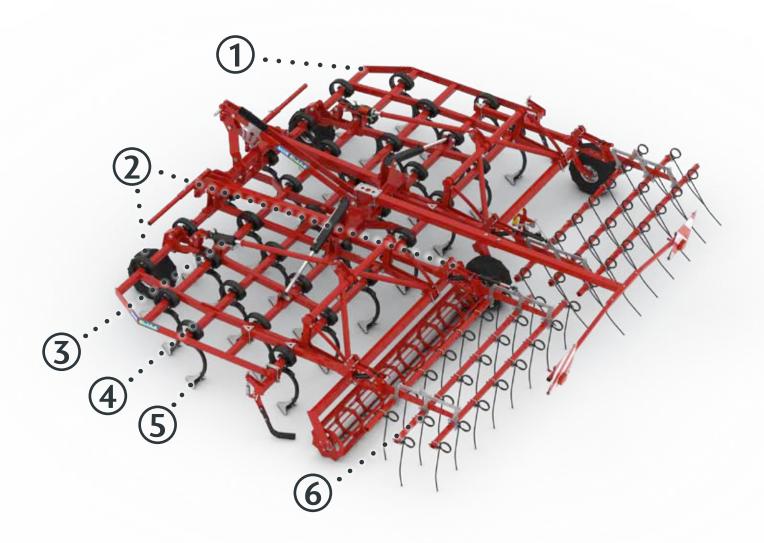
OPTIONS

- » Front rubber support wheels; autom. depth adjustment with the rear working tools
- » 3-row parallelgram-guided trailed weeder tines with 12 mm | 0.47" tines
- » Hydraulic adjustment for following weeder tines
- » Hydraulic adjustment for following weeder tines parallelogram
- » Reinforcement spring for HERKULES tine
- » Duckfoot share 240 mm | 9.45"
- » Duckfoot share 220 mm | 8.66" made from carbide metal
- » Narrow share 53 mm | 2.08" made from carbide metal
- » Scraper blades on the left and/or right
- » Electrical control valve
- » Parking supports for rear tools
- » Pneumatic seeder P-BOX
- » Warning signs with holder and LED-light



CONCEPT RAZOR

- 1. 5 rows; 50 cm / 19.68" distance between rows
- 2. Depth guidance at the rear via roller or wheels and optionally at the front via wheels
- 3. Simultaneous hydraulic working depth adjustment at the rear & front
- 4. HERKULES tines with 15 cm / 5.9" line spacing; Optional: Reinforcing spring with wedge
- 5. Duckfoot sweeps or narrow shares with up to 9 cm / 3.5" overlap
- 6. 3-row trailed weeder tines optionally with hydr. adjustment



ADVANTAGES RAZOR

A REAL "RAZOR" – THE RAZOR FLAT CULTIVATOR:

- » Incorporation of catch crops: Full-surface, clean and flat undercutting of winter-hard or non winter-hard catch crops (cover crops, intercrops; greenings) as well as perfect uprooting.
- » Stubble cultivation: An ultra-flat stubble cultivation and scalping of the whole surface, stimulates lost crop seeds to germinate.
- » Seeding of catch crops: The P-BOX seeding box allows catch crops to be sown at the same time as stubble cultivation.
- » Regulation of deep rooting and seed weeds -"glyphosate replacement".
- » Incorporation of slurry
- » "Fake" seedbed, and much more



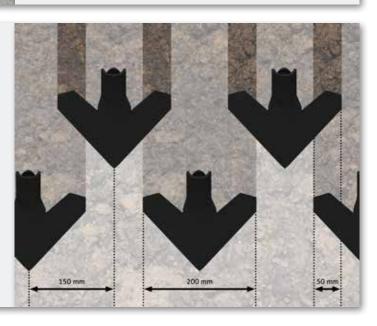


FLEXIBLE DEPTH GUIDANCE

The depth guidance can be quickly changed between following rollers or wheels with a tractor tire profile. For ultra-shallow tillage, it is essential to keep the working depth precisely. For this reason, wheels in front of the tine section ensure even better soil adaptation for the RAZOR, which further increases the precision of the work. Behind the rear depth guidance, the three-row following weeder tines, guided by a parallelogram, ensure that roots, weeds and grasses are brought to the surface, uprooted and laid down on top to

FULL SURFACE CUT

If a full width cutting of the soil is requested, duckfoot sweeps provide the necessary overlap at a line spacing of 15 cm / 5.90° . For example, the 200 mm / 7.87° sweeps guarantee an overlap of 50 mm / 1.97° (33.3 %) (see graphic). There are also 240 mm / 9.45° duckfoot sweeps with an overlap of 90 mm / 3.54° available. Due to this generous overlap the whole field is cultivated during shallow operation and emerged weeds are mechanically regulated.



ADVANTAGES RAZOR

HIGH FRAME HEIGHT

With a frame height of 60 cm and a distance between rows of 50 cm, the RAZOR is ideal for large amounts of organic material. The material flows evenly through the cultivator due to the even distribution of the tines over the entire working width and the high frame height, ensuring clog-free operation even with large amounts of organic material.





5-ROW TINE ARRANGEMENT

The 5-row tine arrangement ensures that the tines are optimally distributed across the entire working width. This guarantees an even, ultra-flat cut with perfect mixing of organic material.

CONVENIENT ADJUSTMENTS

The fully hydraulic adjustment enables precise, convenient and time-saving machine adjustment directly from the tractor cab. Whether for quickly changing the working depth or making fine adjustments to the following weeder tines, the hydraulic adjustment guarantees maximum user-friendliness. This means that the RAZOR is always optimally adjusted and can achieve the best results.



SPECIALIST IN ULTRA-FLAT TILLAGE

When it comes to ultra-shallow and flat cultivating, the RAZOR offers a number of advantages for tillage and economic efficiency. The shallow soil penetration reduces wear and tear and fuel consumption, which in turn lowers operating costs. In addition, the RAZOR is ideal for integrated crop protection as a mechanical alternative to herbicides. With its razor-sharp sweeps, it makes ultra-shallow tillage a speciality. Whether it's precise incorporation of cover crops in spring or flat stubble cultivation in summer, the new RAZOR flat cultivator is designed for precise and sharp cutting down to a working depth of 12 cm / 4.5".





CENTRE OF GRAVITY CLOSE TO THE TRACTOR

During construction, attention was paid to mounting the RAZOR as close as possible to the tractor to minimise the centre of gravity distance from the tractor.

REINFORCING SPRING WITH SPECIAL WEDGE

The optionally available reinforcing spring with its special wedge tilts itself even with slightest pre-tension into the HERKULES tine, thus reducing the lateral movement of the tines. The vibrating effect of the spring loaded tines is retained.



DETAILS RAZOR

SHARE & SWEEP SELECTION

Depending on the work, the following working tools are available:

- » Narrow shares 53 mm
- » Duckfoot sweeps 200 mm
- » Duckfoot sweeps 240 mm
- » Carbide metal narrow shares 53 mm
- » Carbide metal duckfoot sweeps 220 mm





HERKULES TINES

The new RAZOR flat cultivator is equipped with the proven HERKULES spring-loaded S-tines and additional internal reinforcing springs. This combination ensures precise track and line stability, a full-surface cut and exact depth guidance. The 'springy' tine movement also produces the desired 'chisel effect', which promotes good uprooting and soil loosening. The duckfoot sweeps which are mounted on the HERKULES tines have a line spacing of 15 cm / 5.90" and an overlap of up to 9 cm / 3.54".

SELECTION OF DEPTH GUIDANCE

The following tools are available for rear depth guidance, depending on the activity:

- » Flat rod crumbler roller ø 400
- » Round rod crumbler roller ø 400 mm
- » Rear wheels with tractor tire profile



HYDRAULIC WORKING DEPTH **ADJUSTMENT**

The working depth can be adjusted hydraulically as standard. The optionally available front wheels are automatically and conveniently adjusted with the rear depth guidance. The current working depth can be read on a scale. This ensures a comfortable and perfect adjustment of the working depth and quick readjustment.





TUBE-IN-TUBE CONSTRUCTION

The frame is designed as a stable 5-row tube-in-tube construction for high area performance and durability, ensuring maximum operational reliability over many years.

H-FOLDING

The folding of the flat cultivator is done by means of two divided wings. This makes it easy to park the machine in a space-saving way. The RAZOR automatically locks itself in the working and transport position by means of a safety hydraulic lock block.



OPTIONS RAZOR

WHEELS IN FRONT OF THE FRAME

For optimal depth guidance independently of the tractor, rubber support wheels are also available on request at the front of the frame. These are controlled at the same time as the hydraulic depth adjustment of the rear rollers/wheels, so no separate adjustment is necessary.





3-ROW FOLLOWING WEEDER TINES

A parallelogram-guided, 3-row following weeder tine set is available for the rear tools (rollers or wheels). These ensure that pulled-out organic matter such as weeds or lost crop seeds are reliably left lying on the surface, where they can then dry.

HYDRAULIC ADJUSTMENT OF THE FOLLOWING WEEDER TINES

The inclination of the three-row following weeder tines can be adjusted hydraulically if desired, to provide an even higher level of comfort for the driver.





REINFORCEMENT SPRING

A double or reinforcing spring with wedge is optionally available for the HERKULES tine. This extra spring ensures that a constant working depth is maintained, especially with flat tillage. The reinforcing spring wedges itself into the HERKULES tine with even the slightest pre-tension, thus reducing the lateral movement of the tines. The vibrating effect of the spring loaded tines is retained. The double or reinforcing spring is particularly recommended for hard, heavy soils.



CARBIDE METAL SWEEPS & SHARES

Carbide metal sweeps & shares for HERKULES tines are optionally available in duckfoot 220 mm and narrow 53 mm versions.

Carbide metal sweeps for HERKULES tines offer a lot of advantages

- » The sweeps remain longer in their usual shape, resulting in a precise cut and good move even on dry ground
- » Service life is considerably increased especially in soil conditions with above-average wear
- » Less traction required due to sharp sweep tips
- » Time saving due to unnecessary changes of sweeps







SCRAPER BLADES

For an optimal result and perfectly even fields, an optional scraper blade is available for the left and right sides to prevent possible streaking during subsequent passes.

PNEUMATIC SEEDING BOX P-BOX-STI

The P-BOX-STI seeding box can be mounted on the flat cultivator for easy and simultaneous seeding of catch crops. It is electrically driven and operated from the tractor cab via the SPEED-TRONIC terminal. Suitable steps for filling are available as an option.





WARNING SIGNS

LED-lights and warning signs are available for the RAZOR, for both front and rear, to ensure safe road transport.

UNIVERSAL CULTIVATOR HURRICANE

The extremely user-friendly universal cultivator HURRICANE combines three types of machines in one. The HURRICANE is the ideal implement for stubble cultivation or for incorporation of cover crops. The implement promotes soil life, reduces erosion and ensures an extremely good soil structure. It also shows its strengths when breaking up compactions in deeper layers of the soil. The cultivator can also be used for intensive seedbed preparation.

The possible working depth can be adjusted between 4 cm (1.60") and 25 cm (9.80") with a tine adjustment in 4 rows and a line spacing of 20 cm (7.90") (depending on the kind of shares, following tools and soil conditions). Operation over the full surface can be achieved by choosing the correct shares. After tillage, the soil surface is levelled and reconsolidated. The machine is an extremely compact and manoeuvrable implement that can be used effectively on small and large areas. A seeder for sowing catch crops can be easily mounted and adjusted.







Type/ Working width cm / ft.	No. of beams	Tines	from HP/kW	Weight approx. kg / lbs
HURRICANE 260 / 8.50	4	13	100/74	950-1515 kg 2094-3340 lbs
HURRICANE 300 / 9.80	4	15	120/88	1010-1595 kg 2227-3517 lbs
HURRICANE 420 / 13.80	4	21	150/110	1840-2700 kg 4057-5953 lbs
HURRICANE 460 / 15.10	4	23	180/132	1950-2890 kg 4300-6372 lbs

STANDARD EQUIPMENT

- ✓ Rigid standard tines with shear-bolt stone protection
- ✓ Double diamond sweep 130 mm
- ✓ Line spacing 200 mm
- ✓ Adjustable tine angle (not possible with Goliath-tine)
- ✓ Tine arrangement in 4 rows (60 cm distance between tine rows)
- ✓ Lower links guided on both sides
- ✓ Lower and top link equipped with hardened bushings
- Hydraulic working depth adjustment 1 double acting hydr. valve needed
- ✓ Frame height see drawing
- ✓ Rear rollers ball bearing mounted & parallel guided
- ✓ From 4,2 m working hydraulically folding frame; locking in transport or working position via safety blocks (1 additional double acting hydr. valve needed)
- ✓ Sturdy tube frame made of 100 mm tube steel

Choice of crumblers:

- >> RF: Round rod crumbler ø 400 mm & flat rod crumbler ø 400 mm
- $^{\mbox{\scriptsize >\! >}} \quad$ RP47: Ring packer roller ø 470 mm with spring stripper & following weeder tines 2 rows ø 10 mm
- » RP58: Ring packer roller ø 575 mm with spring stripper & following weeder tines 2 rows ø 10 mm
- » N: Nova roller ø 575 mm with spring stripper & following weeder tines 2 rows ø 10 mm
- » DN: Double nova roller ø 575 mm (interlocking steel rings)
- F: Flat rod crumbler ø 400 mm
- R: Round rod crumbler ø 400 mm
- » R5: Round rod crumbler ø 500 mm

OPTIONS

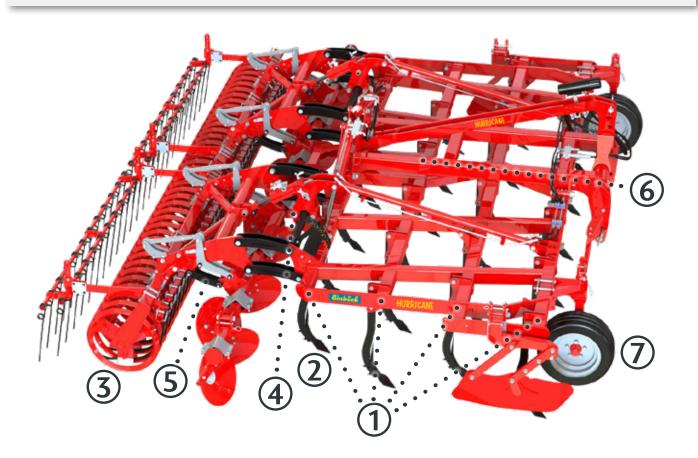
- » Double diamond sweeps with wing share
- » Duckfoot sweeps with guide plate
- » Narrow share
- » Sweeps with carbide tipping
- » Spring loaded tines GOLITAH
- » Side plate
- » Serrated or smooth levelling discs (optionally adjustable hydr.)
- » Rubber support wheels
- » Following weeder 1-row
- » Pneumatic seeder P-BOX
- » Warning signs with holder and LED-light



The professional among the universal cultivators. Perfect operation, minimum maintenance and easiest adjustment!

CONCEPT HURRICANE

- 1. Tine arrangement in 4-rows with a line spacing of 20 cm / 7.90"
- 2. Selection of different tines and sweeps the right tool for different types of soil or working depth (possible up to 25 cm / 9.80")
- 3. The correct rear roller for every type of soil and field of application
- 4. Convenient hydraulic adjustment of working depth, parallelogram-guided rear rollers
- 5. No need to readjust the star discs when changing the working depth as they are mounted on a parallelogram
- 6. Easy assembly of a seed box for distribution of inter crops
- 7. Support wheels for even smoother operation (option)



DETAILS & ADVANTAGES HURRICANE

PERFECTION THROUGH 4-ROW DESIGN AND HIGH FRAME CLEARANCE

The 4-row tine arrangement of the universal cultivator guarantees good incorporation of straw and organic matter. Due to the spacious frame design risk of clogging is very limited even when working in fields with heavy, sticky soils and a high amount of organic matter. The frame clearance of up to approx. 83 cm / 32.70" (depending on working depth) ensures sufficient space so the organic material can flow through (e.g. also in fields with a high amount of straw).





HYDRAULIC ADJUSTMENT OF WORKING DEPTH VIA THE REAR ROLLERS

Hydraulic adjustment of the working depth is included in the standard specification. A scale shows the working depth. This ensures convenient adjustment and perfect setting of the desired working depth.

WIDE CHOICE OF SWEEPS ENSURES THE AVAILABILITY OF THE CORRECT TOOL FOR CHANGING CONDITIONS

The universal cultivator comes with 130 mm / 5.12" double diamond shares as standard. Optional wing shares (224 mm / 8.82") can be mounted in combination with them. For more shallow operation or to ensure an even greater overlap, 250 mm / 9.84" wide duckfoot sweeps incl. guide plates can be mounted. For deeper tillage, narrow shares (55 mm / 2.17") are availabe.

(In the picture from the left to the right)

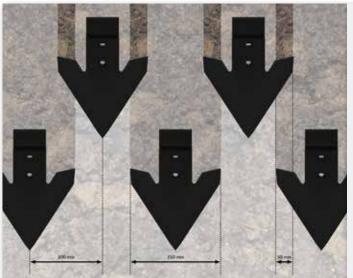


ADVANTAGES HURRICANE

TRAILED WEEDER TINES FOR VARIOUS DIFFERENT CONDITIONS

In order to achieve an ideal working result, various different trailed weeder tines are required. With a total of 8 different rollers the ideal cultivator for various different conditions can be specified.





OVERLAPPING OF DUCKFOOT SWEEPS = OPERATION OVER THE FULL SURFACE

Overlapping duckfoot sweeps are needed to cut the full surface of the field. 250 mm / 9.84" wide sweeps are available as an option. On 20 cm / 7.90" line spacing an overlap of 50 mm / 1.97" (25 %) is guaranteed with these sweeps (see graphic). This generous overlap ensures that the entire surface of the field is cultivated, even when the cultivator is set to a shallow working depth. This secures emerged weeds are controlled mechanically.

ASSEMBLY OF SEEDING BOX

A seeding box (P-BOX-STI) can be mounted on the cultivator in all different working widths so catch crops can be sown quickly and easily. The even distribution and positioning of the deflector plates ensures a safe emergence of the green cover or catch crop.



NO RE-ADJUSTMENT OF THE LEVELLING DISCS NECESSARY

The star discs are mounted on the parallelogram which carries the rear roller. If the working depth is changed, they do not have to be readjusted. To enable fine adjustment nevertheless, adjustment spindles are fitted to the levelling discs.





MANY WELL-CONCIEVED OPTIONS AND SOLUTIONS

To make a cultivator a professional and user-friendly tool, the HURRICANE has been designed with lot of well considered and practical detail solutions. The frame construction (tube in tube) and the combination of the different working tools make the universal cultivator a highly efficient tool for modern agriculture.

DURABLE FRAME CONSTRUCTION

The modern and stable frame construction ensures an extremely robust machine. Thus, the universal cultivator is designed to be extremely durable and always produces excellent work results even after many seasons of use.



DETAILS HURRICANE

HYDRAULIC FOLDING

The universal cultivator is folded by means of two separate side wings. This makes it easy to park the machine in a spacesaving manner. By means of a hydraulic safety locking block, the HURRICANE locks automatically in working and transport position.







LOWER LINKS WITH A CHOICE OF TWO MOUNTING HEIGHTS

To meet different tractor sizes the HURRICANE is equipped with two mounting positions with bushings and anti-rotation pins on the lower links. Mounting category: CAT II up to 3 m / 9.80 ft., from 4.2 m / 13.80 ft. working width CAT III.

DEFLECTOR PLATES

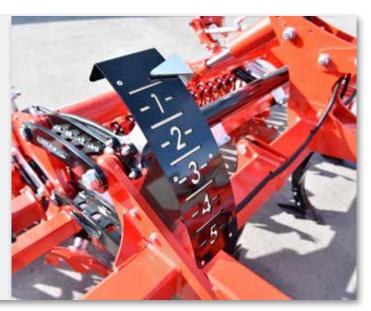
Deflector plates for interrupting the earth flow in the first row of tines directly behind the tractor, this prevents the tractor from serious soiling.





INDICATOR FOR THE POSITION OF THE HYDRAULIC WORKING DEPTH SETTING

A clear indicator is mounted so that the position of hydraulic working depth adjustment can be conveniently seen from the tractor.





ADJUSTMENT OF THE TINE INCLINATION

The tines can be adjusted in their inclination to ensure optimum penetration in different soil conditions and with different share types. The adjustment screw is also the shear-off stone protection. The cultivator shaft made of 60x25 mm / 2.36x0.98" material meets all requirements. (Adjustment not possible with GOLIATH leaf spring tine).



The design with 4 beams ensures perfect mixing and the hydraulic working depth adjustment guarantees maximum comfort!

OPTIONS HURRICANE

SIDE PLATE TO PREVENT RIDGES

The side plate, which has a special position for road transport, is recommended for an even surface after operation of the machine.





SERRATED LEVELLING DISCS

Serrated levelling discs behind the last row of tines are available upon request. They level the soil in front of the rear roller, therefore they ensure uniform tillage. They are available with hydraulic folding as an option.

RUBBER SUPPORT WHEELS

The rubber support wheels mounted on the first beam of the frame ensure precise maintenance of the working depth and smoother operation of the machine. These can be adjusted quickly and easily by means of a gearwheel adjustment.



UNCOMPLICATED DISTRIBUTION OF CATCH CROPS

With the pneumatic seeding box P-BOX-STI all common seeds and their mixtures can be distributed very simply from approx. 1 kg / ha. The seeds are pneumatically transported via hoses to the distribution plates, which spread it exactly. The seeding box is adjusted via an operating terminal in the tractor - the metering roller is driven by an electric motor. Spreading is also possible with the mechanical seeders (DRILLBOX, MECHANICBOX) on rigid machines.











TINES HURRICANE

STANDARD TINE WITH DIAMOND SHAPED SWEEP 130 MM / 5.12" WIDE

The special shape of the tine breaks up the soil, preventing smearing of the soil pores (other share types and widths available).



DOUBLE DIAMOND SHARE WITH WING SHARE

The diamond-shaped sweep with a width of 13 cm / 5.10° is mounted as standard. Wing sweeps with a total width of 22.4 cm / 8.80° can be added quickly and easily to these sweeps. With the wing sweeps, it is possible to cut through the entire surface at a low working depth.



DUCKFOOT SWEEP WITH GUIDE PLATE

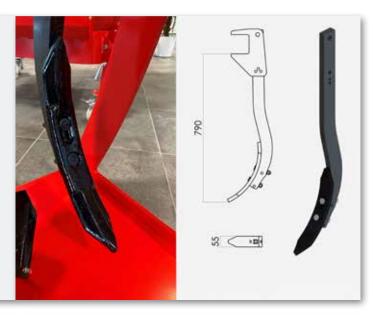
The duckfoot sweep with guide plate is recommended for shallow cultivation. The duckfoot sweep with a width of 250 mm / 9.84" guarantees in any case a full-surface cutting and is ideally suited for the first stubble cultivation. The volunteer grain and weed seeds are not buried, but emerge quickly and can easily be regulated. The guide plate ensures optimum mixing of the organic matter with soil.





NARROW SHARE IN ADDITION TO THE DIAMOND SHAPED SWEEP

The narrow share with a width of 5.5 cm / 2.20" is used for deep tillage, soil loosening and incorporation of straw. They can be used at a working depth between 12 and 25 cm (4.70-9.80")





CARBIDE METAL SWEEPS

Carbide metal sweeps are available as an option for the HURRICANE. The carbide-tipped duckfoof, diamond shaped or narrow sweeps have got the following advantages:

- » Sweeps keep their initial shape longer, resulting in a precise, sharp cut and better retraction in the soil
- » Less force required thanks to persistently sharp points of the sweeps
- » Longer life time and time saving fewer sweep replacements necessary





THE RIGHT ROLLER HURRICANE

F: FLAT ROD CRUMBLER Ø 400 MM / 15.75"

Perfect crumbling for medium-heavy soil.



R: ROUND ROD CRUMBLER Ø 400 MM / 15.75"

Optimal crumbling on medium-heavy soil and good load-capacity on light soil.



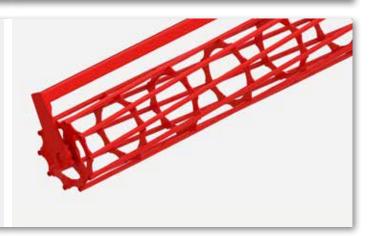
RF: ROUND ROD/FLAT ROD CRUMBLER Ø 400 MM / 15.75"

Good crumbling, good levelling and reconsolidation as well as exact depth control. For medium-heavy soil, universally applicable.



R 5: ROUND ROD CRUMBLER Ø 500 MM / 19.69"

High load capacity, good reconsolidation and best suited for very light soil. Optimal for seedbed preparation in sandy soil.



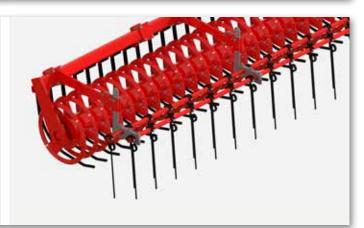
RP 58: RINGPACKER ROLLER, Ø 575 MM / 22.64"

On the ringpacker roller the distance between the rings is 12,5 cm / 4.90", therefore it achieves reconsolidation in strips of 12.5 cm / 4.90". Due to the wedge-shaped reconsolidation, the soil is compressed in the lower area and all cavities are closed, while the upper soil layer remains loose as well as a fine structure is maintained. Due to its high load-capacity, it is ideally suited for all soil types. Spring strippers between the rings prevent the roller from clogging.



RP 47: RINGPACKER ROLLER WITH CLEANER, Ø 470 MM / 18.50"

Same as RP 58 roller, but with Ø 470 mm / 18.50" and lower weight.



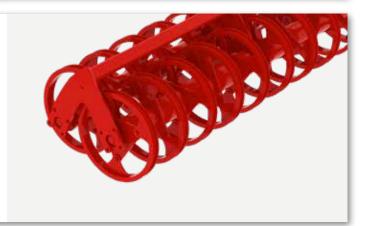
N: NOVA ROLLER Ø 575 MM / 22.64"

The nova roller achieves reconsolidation in strips with a distance of 17 cm / 6.70". Through the U-profile rings, which deliberately fill with soil, soil rolls on soil. This very soil-friendly reconsolidation ensures a rough surface structure. Its high load- capacity makes it ideally suited for all soil types. Scrapers between the rings level the soil and prevent the roller from clogging.



DN: DOUBLE NOVA ROLLER Ø 575 MM (INTERLOCKING STEEL RINGS)

The double nova roller has the same design as the single nova roller and works in a similar way. It brings the same advantages as the nova roller to the field. The two interlocking steel rings allow the rollers to clean each other.



SIMPLE MOUNTING OF A SEEDING BOX

The P-BOX-STI or P-BOX-MD seeder, for seeding of intercrops or catch crops etc., can be mounted on a lot of Einböck machines. In addition to various additional options for the seeder, steps for filling are available as well.

Pneumatic seeder P-BOX-STI

- » Precise, electrically controlled, metering and dosing via operating monitor
- » Grassland reseeding or fertilizer application
- » Seeding of intercrops or cover crops
- » Application of many different seed varieties
- » Can be mounted on many cultivators, weeders, etc.

















OUR HANDBOOKS

THE HANDBOOK OF ORGANIC FARMING

- » Proven practices: Our decades of experience and that of our customers worldwide are graphically illustrated in this handbook.
- » In-depth knowledge: Through detailed descriptions of topics such as tillage, catch crops or crop rotations, as well as tips and suggestions on organic farming, we would like to encourage you to think outside the box.
- » The latest technology: The techniques and settings prescribed in the book will help you get the most out of your machines.
- » 10 cultivation instructions: The manual contains 10 detailed cultivation instructions graphically explaining the best time for use.





THE HANDBOOK OF FUSION-FARMING

- » Combined weed control: The manual is the perfect guide for combined weed control. It combines the advantages of conventional and organic cultivation methods.
- » Mechanics & chemistry: Tips and tricks from mechanical and chemical weed control are presented. These applications lay the foundation for sustainable and successful arable farming.
- » Cultivation instructions: You will find instructions on weeding, hoeing and spraying in 5 different crops for a versatile and effective application of the Fusion-Farming method.

THE HANDBOOK OF GRASSLAND CARE

- » Problems and solutions: The Grassland Care Handbook deals with challenges such as increasing dryness, weed infestation or nutrient deficiency and offers practical solutions for grassland farmers.
- » Maintenance & reseeding of grassland: We show detailed instructions on maintenance and reseeding with effective methods that can increase the quality and yield of grassland in the long term.
- » Practical examples with data, facts and figures: Practical examples with well-founded data, facts and figures not only impart theoretical knowledge but also provide practical insights with successful grassland care strategies.



EINBÖCK AT A GLANCE

100% DESIGNED & MANUFACTURED IN AUSTRIA

- » We are a fourth-generation, owner-managed family business
- » Our development and production site is located entirely in Dorf, in the Innviertel region in Austria
- » We stand for 100% in-house production expertise: from cutting and further processing to welding, painting, and assembling our red machines.
- » Energy-self-sufficient production, e.g., with photovoltaic systems, wood chip heating, etc., awarded the "German Sustainability Award."



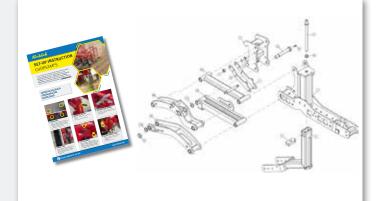


FROM THE FIELD, FOR THE FIELD!

- » We continuously develop our technology further in collaboration with our global customers
- » For over 90 years and four generations, we have stood for trustworthiness, reliability, honesty, hands-on mentality and common sense
- » We are consultants and partners, working together with farmers around the world to find the best solutions
- » We have been at home in the mechanical weed control segment for over 45 years

ORIGINAL SPARE PARTS

- » Decades of spare and wear part availability
- » Perfect fit and compatibility
- » Highest quality standards
- » Competent and prompt advice
- » Online spare and wear parts catalog, operating and set-up instruction, and much more at www.einboeck.at/en/help





CUSTOMER SERVICE

- » Practical service with maximum reliability
- » Rapid support even during peak season
- » An answer to every question
- » Expert advice and support for questions about machine settings

Related brochures regarding "organic farming & mechanical weed control":



WEEDING TECHNOLOGY

- **Tined weeder** AEROSTAR-CLASSIC
- Precision tined weeder AEROSTAR-EXACT
- Premium tined weeder AEROSTAR-FUSION
- **Rotative** weeder **AEROSTAR-ROTATION**

HOEING TECHNOLOGY

- » Row-crop cultivator CHOPSTAR's
- » Camera steering system **ROW-GUARD**
- » Rotary hoe ROTARYSTAR





GRASSLAND CARE

- Grassland seeder

ORGANIC FARMING

- » Guide to mechanical weed control
- » Tips and interesting facts about weeding and hoeing technology
- » With FUSION FARMING to success















© Einböck GmbH Schatzdorf 7 4751 Dorf an der Pram Austria

> +43 7764 6466 0

+43 7764 6466-390

☑ info@einboeck.at