Einböck

When hoeing
is joy!

HOEING TECHNOLOGY

CAMERA STEERING SYSTEM
ROW-GUARD

ROW-CROP CULTIVATOR
CHOPSTAR

ROW-CROP CULTIVATOR
CHOPSTAR-TWIN

SPECIAL ROW-CROP CULTIVATOR
CHOPSTAR-VERSO

PREMIUM ROW-CROP CULTIVATOR
CHOPSTAR-PRIME

RIDGER
HILLSTAR

ROTATIVE CULTIVATOR
ROLLSTAR

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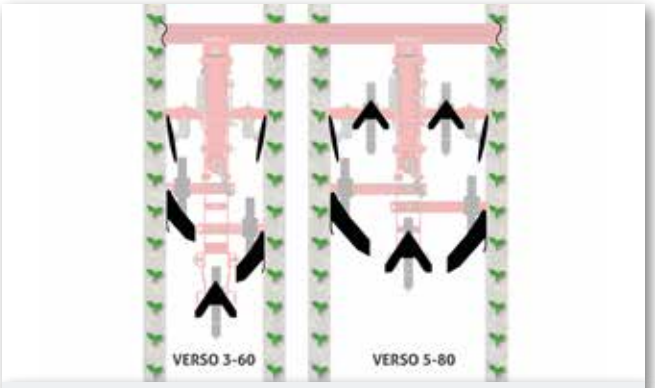
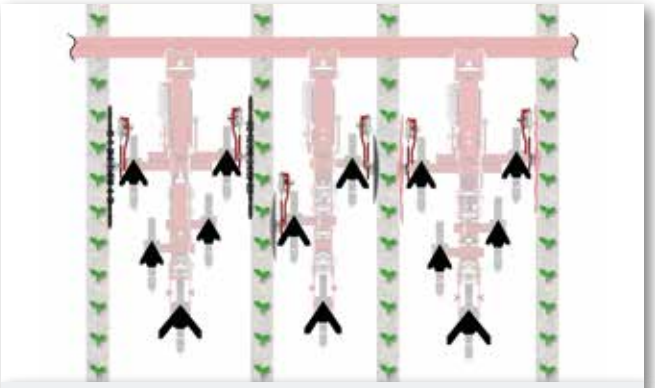


SPECIAL ROW-CROP CULTIVATOR CHOPSTAR-VERSO

PAGE 44-47

- ✓ Hoeing in crusted & challenging soils
- ✓ Working in mulch and no-till crops & high hectare output



PREMIUM ROW-CROP CULTIVATOR CHOPSTAR-PRIME

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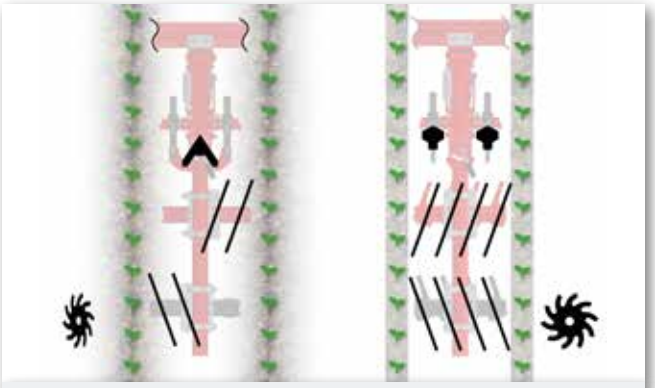
- ✓ Unique quick adjustments & new working tools
- ✓ Up to 50 cm / 20" parallelogram lifting height



ROTATIVE CULTIVATOR ROLLSTAR

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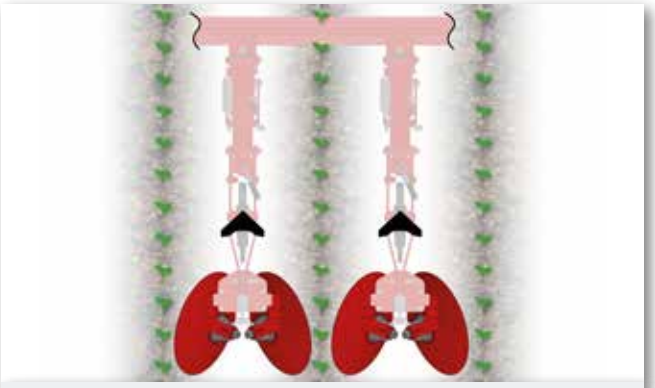
- ✓ Hoeing in row spacing up to 80 cm / 32" with rotating stars (rear)
- ✓ E.g. for corn, potato, soybeansbean, field bean, beet, ...



RIDGER HILLSTAR

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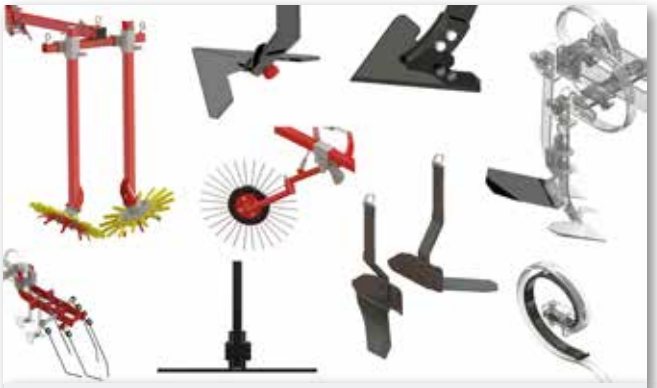
- ✓ For hilling crops on ridges up to 80 cm / 32"
- ✓ E.g. for potato



ACCESSORIES

PAGE 62-70

- ✓ Finger weeders, rotative weeders, SECTION-CONTROL, ...
- ✓ Various (special) shares, vibro tines, angle knives, ...

SOWING & FERTILIZING TECHNOLOGY OPTIONS

PAGE 71-73

- ✓ Pneumatic seeding box
- ✓ Front tank for liquids

ADVANTAGES OF HOEING

For the cultivated crop:

» Weeds are removed mechanically, which enables the crop to grow better
» Looser, damper soil promotes root growth in the cultivated crop
» Water is conserved through breaking up capillary action, which means more water for the cultivated crop
» Strain and leaf damage in the cultivated crop due to herbicide use is avoided
» Weeds in the row are covered in soil and the cultivated crop is earthed up

For the soil:

» Aerating the soil and breaking up crusts after heavy rainfall boosts soil moisture
» Mobilisation of nutrients and promotion of mineralisation, thus greater microorganism activity
» Gentle humus cultivation – shallow cultivation of the upper soil layer
» Incorporation of (organic) fertilizer – fertilizer mineralisation
e.g. incorporation of slurry, mineral fertilizers and urea
» Release of nutrients: "Twice weeded/hoed = once fertilized"

For the environment:

» Avoidance/reduction of herbicides and active substances
» Reduced usage of active substances and removal of resistant weeds
» Improved soil fertility and healthier, more resilient soils
» Protection of waters
» Safeguarding of biodiversity

Agriculture is the root of all education in the world!

Berthold Auerbach, politician / writer

HOEING TECHNOLOGY IN PRACTICE

Experience reports and information of the practical use of our hoeing technology you can find in our "Organic farming handbook". There you will find everything about weeding and hoeing as well as other topics related to "Fusion Farming".

Topics which might be interesting for you:
» When and how to hoe which crops
» Principles of hoeing such as time of operation or device settings
» Settings of finger weeders and rotor hoes
» Hoeing and weeding of grain, corn, soybeans, field beans, sugar beets, pumpkins, potatoes, ...

You can download the handbook at www.einboeck.at/en/know-how

TRACK WIDTH ON EINBÖCK HOES

Row spacing	Crop (examples)	Number of rows between the track		Example
		EVEN	ODD	
25 cm / 9.80"	Grain	150 & 200 cm 59.00" & 78.70"	175 & 225 cm 68.90" & 88.60"	Graphic 1; Graphic 2;
37,5 cm / 14.80"	Field bean, soybeans	150 & 225 cm 59.00" & 88.60"	180 cm / 70.90"	
45 cm / 17.70"	Beet, field bean, soybeans	180 cm / 70.90"	225 cm / 88.60"	
50 cm / 19.70"	Beet, soybeans, field bean, corn	200 cm / 78.70"	150 cm / 59.00"	Graphic 3; Graphic 4;
70 cm / 27.60"	Corn	150 cm / 59.00"	210 cm / 82.70"	
75 cm / 29.50"	Corn, potatoe	150 cm / 59.00"	225 cm / 88.60"	Graphic 5; Graphic 6;

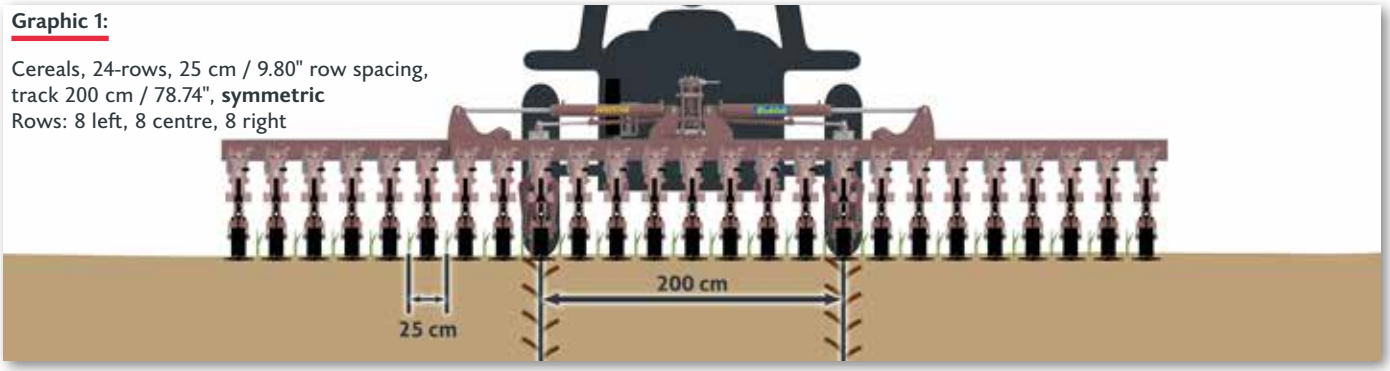
Number of total rows - rows between the track = even = **symmetric** (e.g. 12-4 = 8)
Number of total rows - rows between the track = odd = **asymmetric** (e.g. 8-3 = 5)

Number of rows **OUTSIDE** the track	Frame	Example
EVEN (e.g. 8 rows)	SYMMETRIC	Graphic 1; Graphic 4; Graphic 5;
ODD (e.g. 5 rows)	ASYMMETRIC	Graphic 2; Graphic 3; Graphic 6;

For highest precision und accuracy, a row-crop cultivator should work symmetrically!

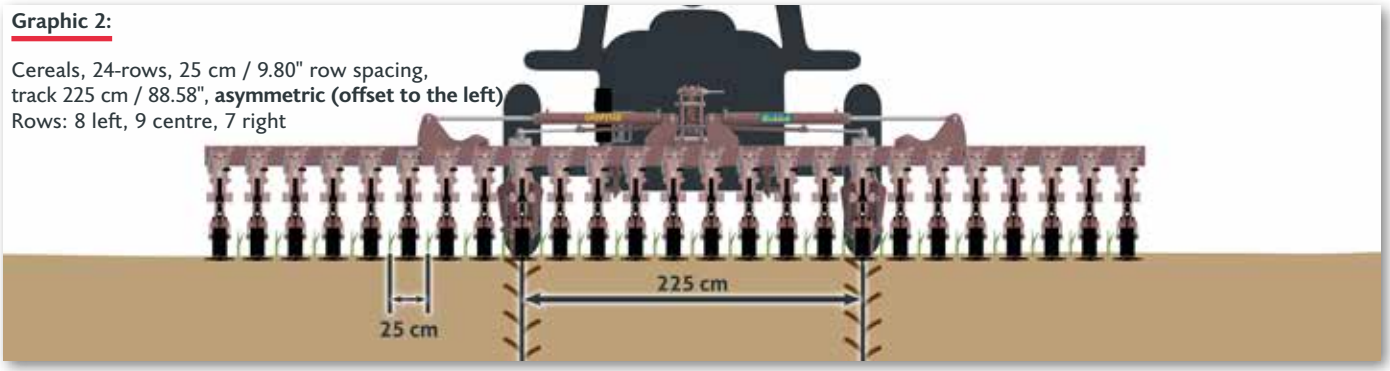
Graphic 1:

Cereals, 24-rows, 25 cm / 9.80" row spacing,
track 200 cm / 78.74", **symmetric**
Rows: 8 left, 8 centre, 8 right



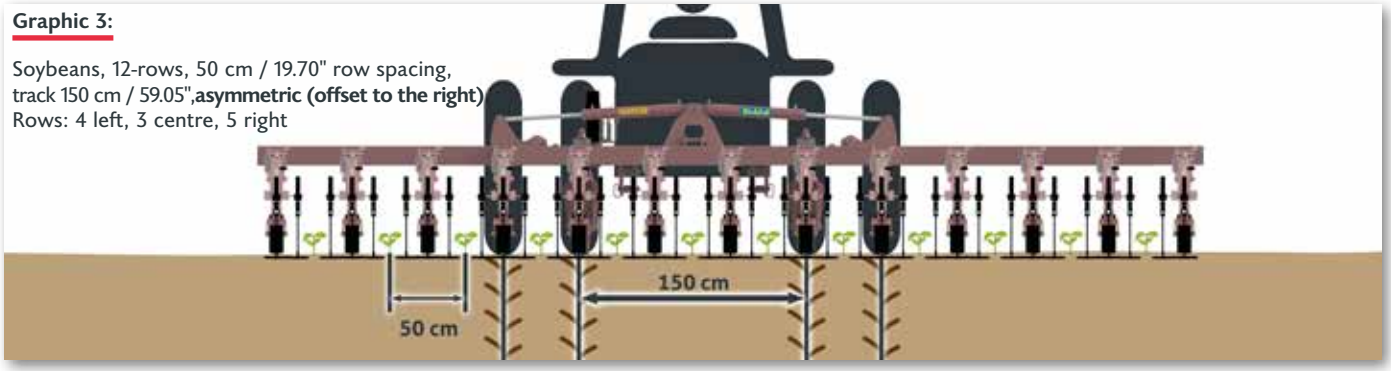
Graphic 2:

Cereals, 24-rows, 25 cm / 9.80" row spacing,
track 225 cm / 88.58", **asymmetric (offset to the left)**
Rows: 8 left, 9 centre, 7 right



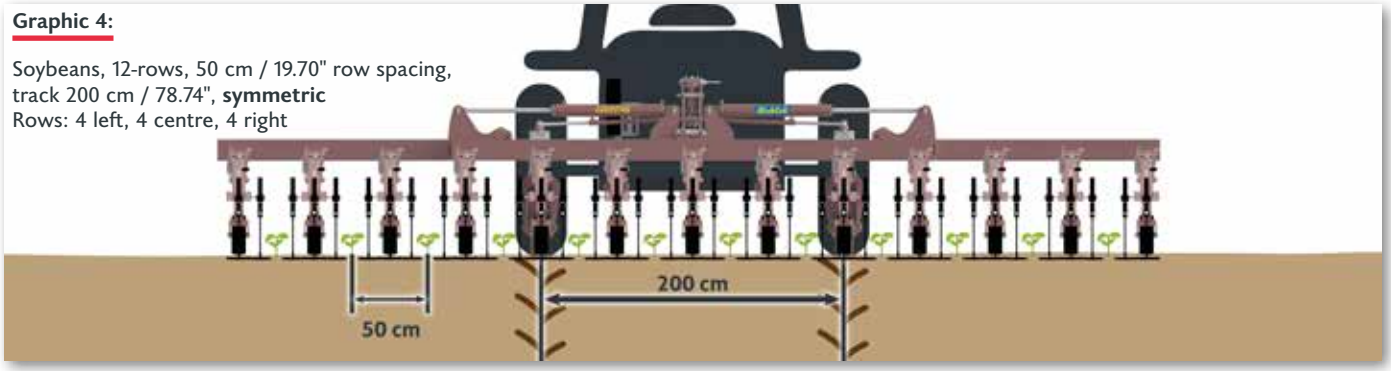
Graphic 3:

Soybeans, 12-rows, 50 cm / 19.70" row spacing,
track 150 cm / 59.05",**asymmetric (offset to the right)**
Rows: 4 left, 3 centre, 5 right



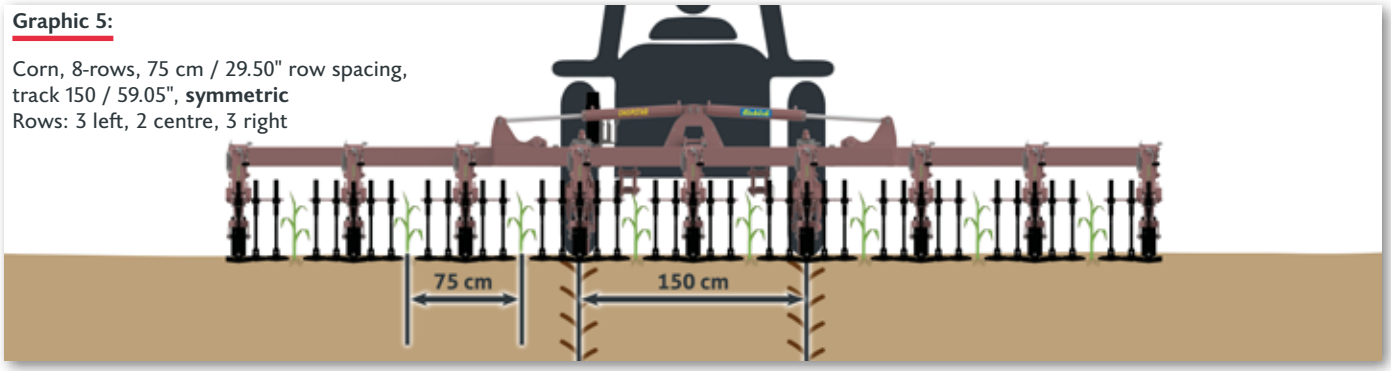
Graphic 4:

Soybeans, 12-rows, 50 cm / 19.70" row spacing,
track 200 cm / 78.74", **symmetric**
Rows: 4 left, 4 centre, 4 right



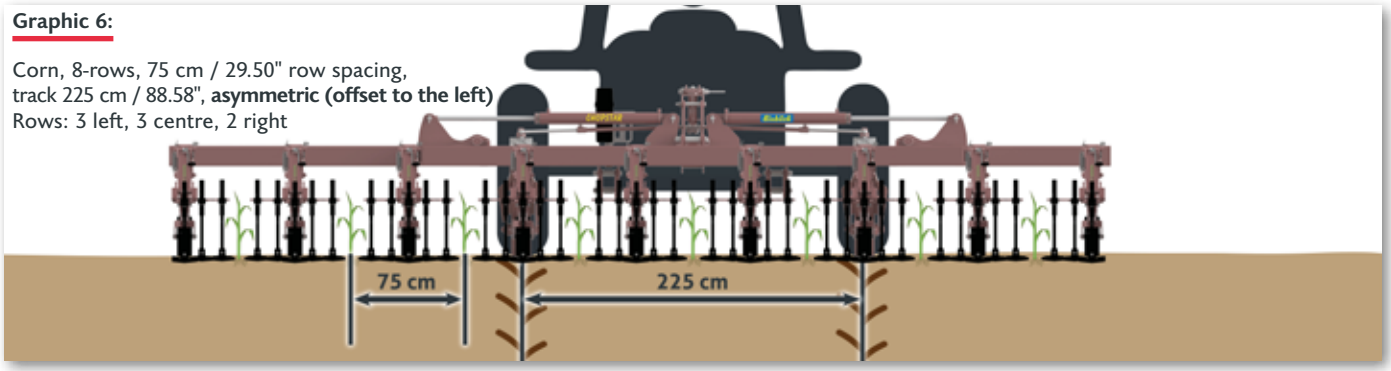
Graphic 5:

Corn, 8-rows, 75 cm / 29.50" row spacing,
track 150 / 59.05", **symmetric**
Rows: 3 left, 2 centre, 3 right



Graphic 6:

Corn, 8-rows, 75 cm / 29.50" row spacing,
track 225 cm / 88.58", **asymmetric (offset to the left)**
Rows: 3 left, 3 centre, 2 right

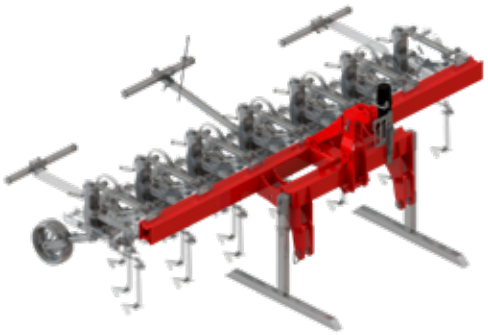


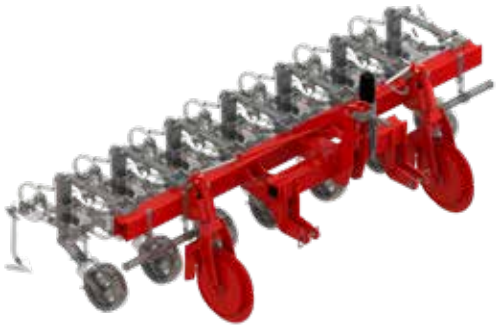
STRUCTURE OF EINBÖCK ROW-CROP CULTIVATORS

Strong frame for high loads

Rigid or hydraulically folding machines have a strong frame, on which the parallelograms are mounted. The special Einböck-profile-frame allows a fast and simple assembly of the parallelograms. Because of the special frame-form the frame can stand a very high number of hoeing seasons without any problems. Furthermore, the different row spacing can be adjusted quickly and infinitely variable.

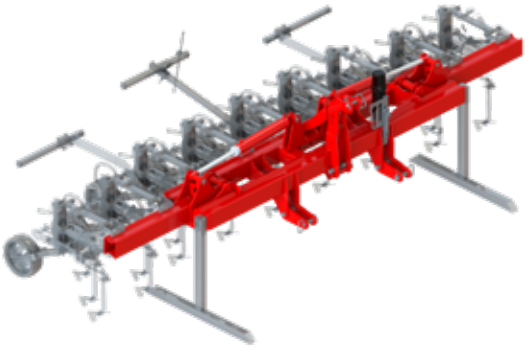
1. Frame for a front-mounted rigid machine

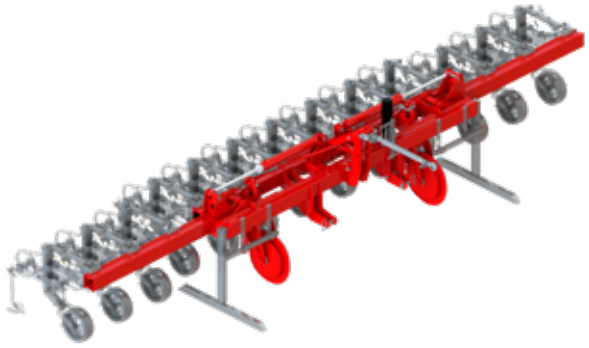




2. Frame for a rear-mounted rigid machine with upper-link-steering

3. Frame for a front-mounted machine, hydraulic folding





4. Frame for a rear-mounted machine, hydraulic folding with upper-link steering

5. Frame for a rear-mounted machine, with double folding for reduced transport width for large machines

HOEING FRAME IN XXL VERSION

Large machines with big working width (e.g. 72-row grain, 24-row beets, 16-row corn) are available in two different versions:

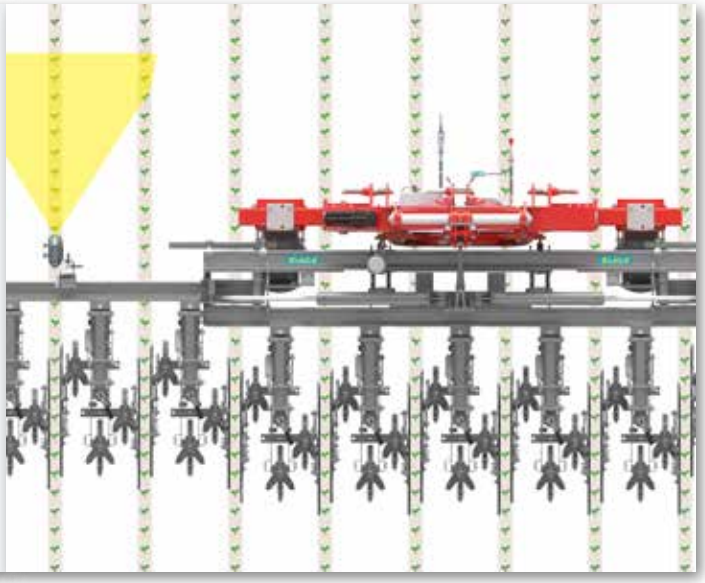
6. Frame for rear-mounted machine with extra-wide middle-frame

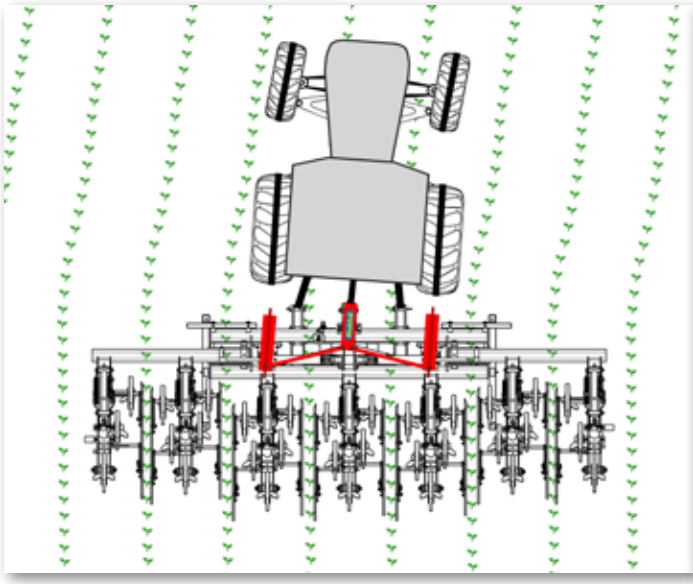
7. Frame for rear-mounted machine with trailing chassis

STEERING OF EINBÖCK ROW-CROP CULTIVATORS

AUTOMATIC SIDESHIFT FRAME WITH CAMERA-GUIDANCE

A ROW-GUARD sideshift frame can be mounted to each row-crop cultivator, also retro-fitted.





UPPER LINK STEERING

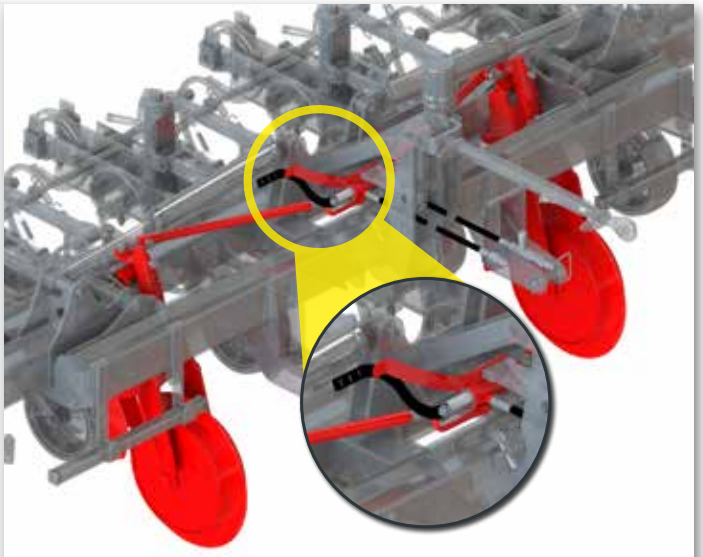
An automatic upper link steering system is mounted as standard on rear-mounted hoeing machines. This ensures precise hoeing even on hilly conditions and curves. Hoeing on hills with an incline of up to 6% is possible. Even in curves, the row-crop cultivator runs as close as possible behind the tractor track. Steering is done via gauge wheels. The implement does not need to be carried by the tractor. It is therefore used with position control and swinging lower links (approx. 7 cm / 2,80" each side). With the CHOPSTAR-TWIN, a ROW-GUARD sideshift frame with camera steering or hydraulic steering control is recommended so that the narrowest possible hoeing belt can be achieved.

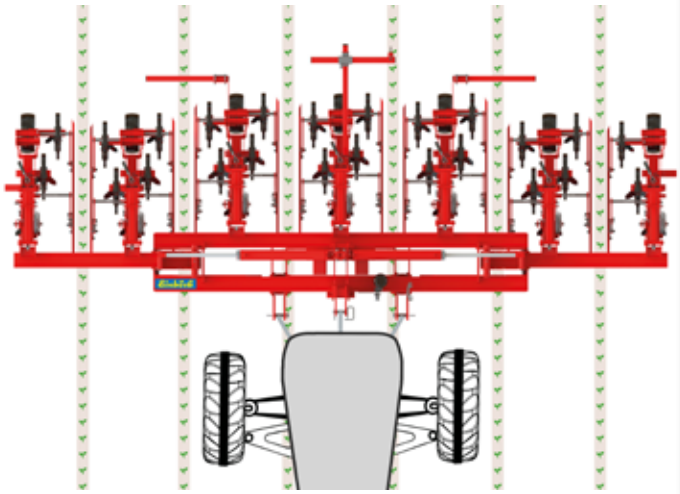
MANUAL HYDRAULIC STEERING

In order to increase the precision of a row-crop cultivator without camera steering or to reduce the width of the hoeing belt, a manual hydraulic steering is optionally available. This accessory allows a person to steer the row-crop cultivator independently from the tractor. The seat is positioned so that the best view on the crop row is guaranteed. The steering is hydraulically operated, so that even longer hoeing operations can be done. The hydraulic steering is not or only partially usable on machines with finger weeders and hydraulic lifting of the parallelograms.

HYDRAULIC UPPER-LINK STEERING SUPPORT

The effect of the upper-link steering can be increased hydraulically. At the headland the cylinder always has to be switched to the other direction. It is recommended for slopes over 6 %.





PUSHED SECTIONS ON FRONT MOUNTED MACHINE

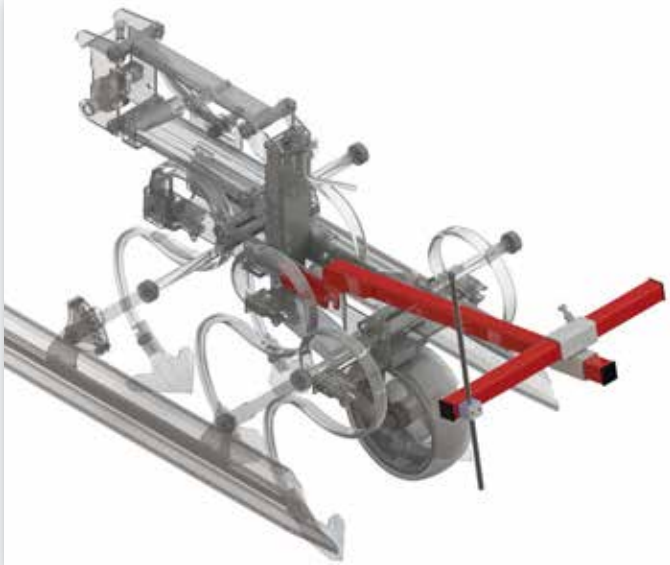
The front-mounted row-crop cultivator can be used without an extra front mounting support as the elements are strong enough to be operated in pushed position. This results that the row-crop cultivator is mounted very closely to the tractor, which has following advantages:

- Less side pull when working in hills
- More exact adaption of each separate element because the Farmflex-wheels are running in front of the element
- Reduced weight to reduce soil compaction
- Short distance between cultiavator and front axle, therefore higher precision in steering
- Advantage when driving curves during operation, as well as road transport
- Better visual control during operation and also road transport

There is a front mounting support available as an option in case needed (e.g. for ROLLSTAR rotative cultivators).

TRACK INDICATOR

Because the front-view to the crops is often restricted, front mounted machines come standard with a track indicator.



SPECIAL FEATURES

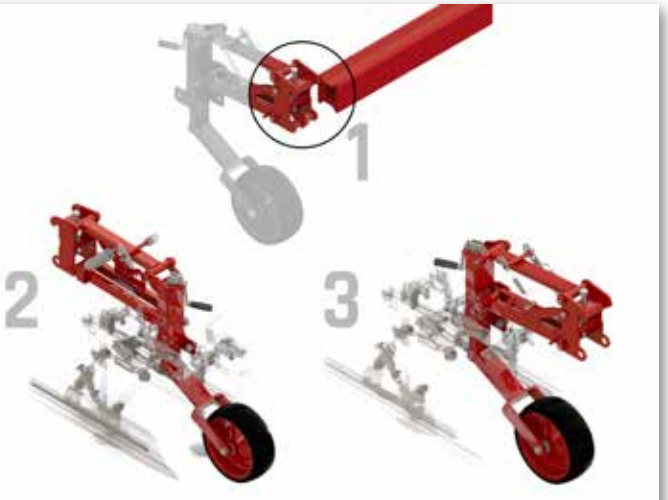
CHOPSTAR 1-30 | 3-60 | 5-90 | 10-150 | TWIN | VERSO | HILLSTAR | ROLLSTAR

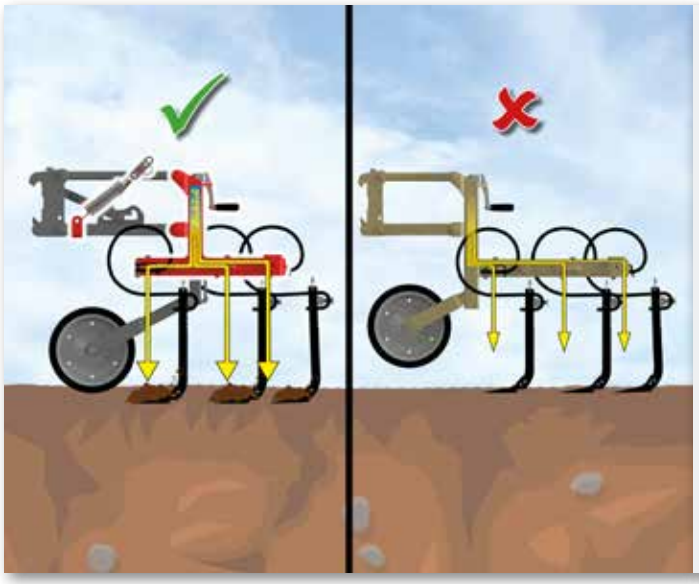
LONG PARALLELOGRAMS WITH RETRACTION SUPPORT

The wide parallelograms are equipped with retraction support and durable Farmflex feeler wheels. Furthermore they can be adjusted in the joints, this guarantees a high (side)stability and accuracy even after many years of use.

1. The parallelogram is fixed with a clamping lever to the frame
2. Parallelogram for front-mounted machines
3. Parallelogram for rear-mounted machines

The long parallelograms provide enough space to compensate unevenness of the fields on each element, on hills or pans. The retraction support, which you can adjust in three steps, guarantees a better penetration of the hoeing tools, also in hard crusted soils. This allows to work with increased working speed without vibration or jumping of the elements.





ARRANGEMENT OF THE HOEING ELEMENTS - RETRACTION SUPPORT OF THE PARALLELOGRAM

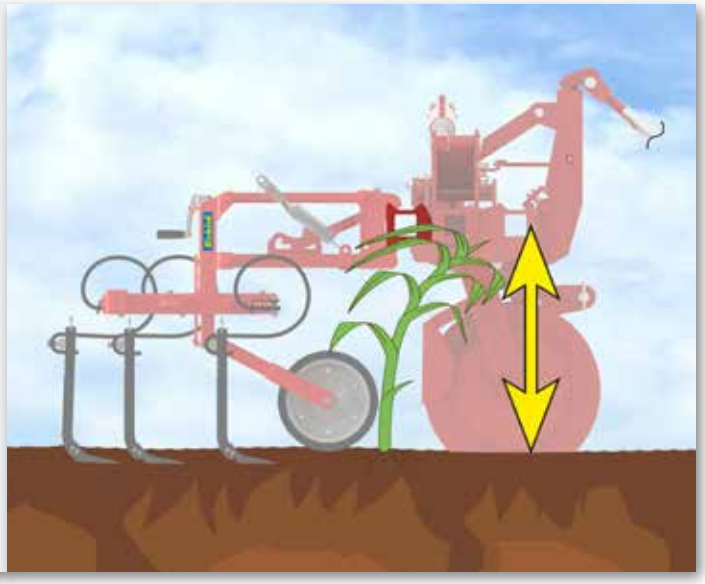
With the tine hoeing elements (e.g. beet, soybeans, field bean, corn, etc.) from 30 cm / 11.80" row spacing, the hoeing element is placed "under" the elongated parallelogram. It´s advantage is that the hoeing elements and tines are pulled in better even in soils with heavy crusts and hard soils. Due to the long parallelogram, less pressure is needed to push in the tines as if the hoeing elements would be placed "behind" the parallelogram. In addition, an adjustable retraction spring guarantees that the hoeing element gets pushed into the soil and maintains the set working depth.

HIGH PENETRATION FORCE OF HOEING ELEMENTS

All Einböck row-crop cultivator parallelograms are fitted with three-step adjustable retraction spring as standard. This allows a penetration pressure of up to 105 kg on each hoeing element (depending on the equipment, working position and spring preload). These adjustable springs ensure a smooth running of the hoeing elements even at high working speeds and safe penetration even into hard and crusted soils.

HIGH FRAME CLEARANCE

A frame clearance up to 70 cm / 27.60" makes working in bigger crops like corn, sunflowers, etc. possible. So efficient and careful hoeing / ridging up in late growth stage does not cause any problem.



BOLTED OR CLAMPED MOUNTING OF THE WORKING TOOLS

All working tools are bolted or clamped to the frame. This has the following advantages for the user:

- Always a tight fit (don't get loose) of the working tools, especially during working on the field
- Set distances or working depth are precisely maintained
- No deflection of the connections and minimal wear and tear
- Durable fixings/clamps withstand many hoeing seasons
- Fixing of the tools without clearance what results e.g. in exact guidance of the sweeps
- Allows very precise, infinitely variable adjustment

GAUGE WHEELS ON IMPLEMENTS WITH UPPER LINK STEERING

The gauge wheels ensure perfect guidance of the hoe and stability at hilly conditions. The tractor's front wheels are not relieved of load, as the weight of the machine is carried by the gauge wheels. Especially on hilly conditions, the gauge wheels help prevent the implement from drifting. Scrapers ensure that the gauge wheels do not become clogged.


Einböck

CAMERA STEERING SYSTEM
ROW-GUARD

CAMERA STEERING SYSTEM ROW-GUARD

The ROW-GUARD camera steering system steers the hoe with absolute precision along the crops via a sideshift frame. This guarantees precise and close work of the hoe even at high speeds and will relieve the driver. Even with very small plants (from approx. 2 cm / 0.80") as well as in different colors or with heavy weeds, the ROW-GUARD camera steering in organic and conventional cultivation brings increased precision.

The automatic camera steering can be conveniently set from the tractor via an operating terminal. With the help of different setting parameters, adapted to the crop (row spacing, number of rows in the camera's field of view, plant width and height), an appropriate grid is laid over the image. Based on this data, the hoe is centred exactly along the row with the help of the sideshift frame. This ensures a narrow hoeing belt which guarantees maximum weed control.

Precision can be increased - with camera and sideshift frame!

Type	Weight approx. kg / lbs	for frame	Hoe kg / lbs	Mounting category front	Mounting category back	1 single acting hydraulic valve with permanent oil-flow and pressure-free return line
ROW-GUARD 500	390	< 6.99 m / 22.90 ft	≤ 2500 / 5511	II/28	II/28	1
ROW-GUARD 500 SR	530	< 12.2 m / 40.00 ft	≤ 3900 / 8598	III/36	III/36	1
ROW-GUARD 500 SRHD	960	> 12.2 m / 40.00 ft	> 4000 / 8818	III/36	III/36	1

STANDARD EQUIPMENT

- ✓ Sideshift-frame incl. Camera hard- & software with total offset of 500 mm / 19.69"
- ✓ Guidance shafts made of high-strength, coated metal for minimised wear and tear
- ✓ Camera with 2 vertically placed, high definition lenses with different exposure for improved operation in changing light conditions (connection cable, length 4 m)
- ✓ Control unit with touchscreen and integrated video-monitor | Universal holder for the tractor cab
- ✓ Claas-CultiCam "Professional-Package":
  - » Proportional hydr. valve instead of "Black-White" valve: dynamic control of the valve for smooth operation of the sideshift frame
  - » 3D-mode: the machine recognizes the row when the difference in height between crop and weeds is bigger 10 cm. Especially in fields with high weed infestation this is a big advantage
  - » Automatic recognition of height and angle position of the camera: comfortable adjustment of camera height. The actual camera height position and angle are shown in the display
  - » Colour options in the 2D-mode (green/yellow, green/blue, red)
  - » Automatic switching of offset
  - » High camera resolution
  - » Recognition of different row structures (single or multiple rows)
  - » Integrated chart for recommended camera height
  - » Saving of settings
  - » and many more
- ✓ Holder for camera for Einböck hoes
- ✓ Sensor on the upper link to determine the position of the 3 point linkage
- ✓ Upper and lower links guided on both sides
- ✓ Upper and lower links equipped with hardened bushings
- ✓ Quick couplers for quick changing of the inter-row crop cultivator
- ✓ Parking support when ordered without hoe
- ✓ Wheel sensor with holder and cable (length 3 m) suitable for the selected stabilising wheels

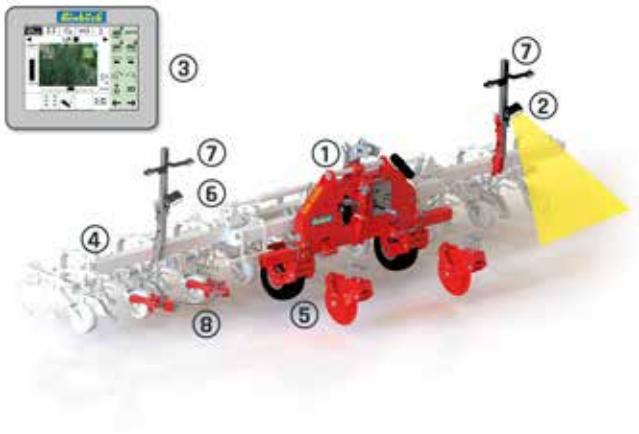
OPTIONS

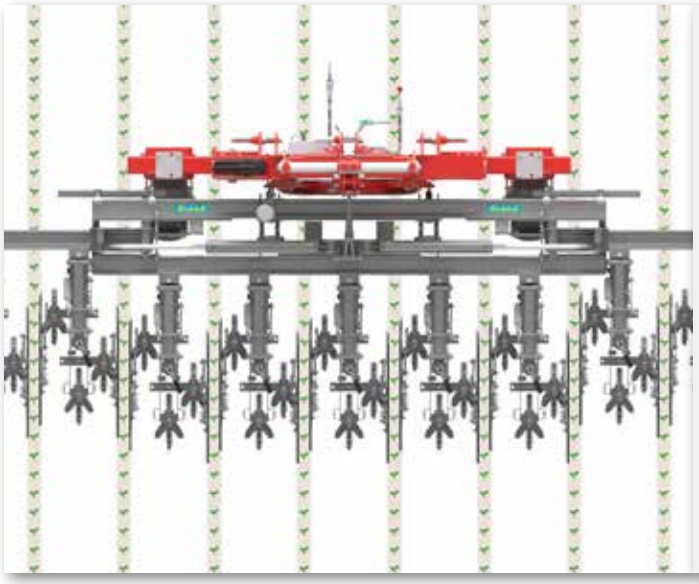
- » Stabilising wheels with high gauge wheel or rubber wheel
- » LED-lights
- » Mechanical feeler
- » Second camera for working with SECTION-CONTROL
- » Automatic swiveling camera holder
- » 7 pin signal cable
- » Observation camera with special lense

ADVANTAGES ROW-GUARD

CONCEPT

1. Linear **sideshift frame** with 50 cm sideshift (three different designs)
2. **Camera** with latest camera hardware detects the plant rows and steers the sideshift frame to the centimeter (1)
3. Independent **operating monitor** with the latest software technology recognizes 1-5 plant rows in HD and 2D/3D
4. Can be hitched to **different row-crop cultivators** and 100% compatible with Einböck hoeing technology
5. **Stabilizing wheels** made of rubber or wheel flange in different widths
6. **Second camera** for hoeing with SECTION-CONTROL (optional)
7. **LED lights** for hoeing during the night (optional)
8. **Mechanical feeler** for hoeing after row closure (optional)





SHORTEST CONNECTION OF SIDESHIFT FRAME AND ROW-CROP CULTIVATORS

Because of the narrow construction of the Einböck-linear-sideshift frame the centre of gravity remains very closely to the tractor. This construction offers the following advantages:

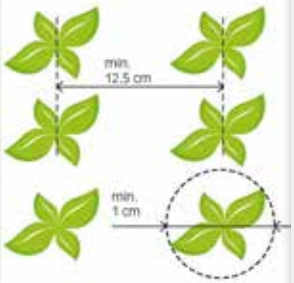
» Reduced axle load on the tractor and therefore reduced soil compaction
» The wider the construction of the sideshift frame, the higher the load on the rear axle and the lifting power requirement of the tractor increases
» The extremely narrow construction of the ROW-GUARD moves the centre of gravity only 20 cm / 7.90" to the rear
» Machines with parallelogram shifting extend the position of row-crop cultivator up to 80 cm / 31.50" and more to the rear
» Especially when fields are not straight or in hilly conditions the short construction is a big advantage

ONE SIDESHIFT FRAME = SEVERAL ROW-CROP CULTIVATORS

Simple and quick coupling and uncoupling of the Einböck sideshift frame allows to use different row-crop cultivators with only one sideshift frame.

LATEST VERSION OF HARD- AND SOFTWARE

- Highest level of quality and excellent construction of the sideshift frame
- Smooth and consistent movement because of the high-quality proportional valve
- Millimetre-accurate control of the linear sideshift frame
- State-of-the-art and intuitively operated touch-screen terminal
- 100% control of functionality before leaving the factory
- Spare connection for manual control like feeler or hand steering



RELIABLE PLANT RECOGNITION OF DIFFERENT ROW-CROPS

The system can be used in various crops with the following color modes: green/blue, green/yellow and red. From row spacing 12,5 cm / 4.90" and applicable from a plant size of 1 cm / 0.40" (depending on the crop)

FLEXIBLE POSSIBILITIES TO ADJUST THE CAMERA

- Number of rows 1-5
- Row spacing up to 1,5 m / 4.90 ft
- Quickly adjustable to different crop dimensions

ADVANTAGES ROW-GUARD

BEST VISIBILITY - EVEN IN FIELDS WITH HEAVY WEED INFESTATION AND SMALL CROPS

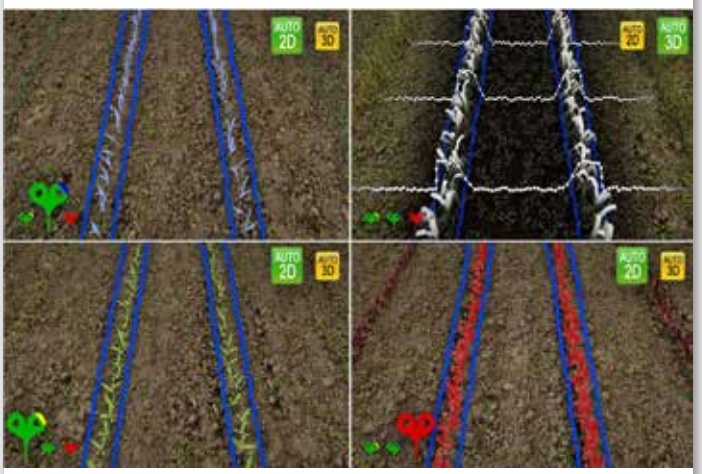
The software recognizes the plant rows even in case of heavy weed infestations and/or small plants. The settings can be adjusted easily on the conditions.

SPECIAL FEATURES:

- Proportional hydr. valve: dynamic control of the valve for smooth operation of the sideshift frame
- 3D-mode: the machine recognizes the row because of the difference in height between crops and weeds
- Automatic recognition of height and angle position of the camera: comfortable adjustment of camera height
- Color options in the 2D-mode (green/yellow, green/blue, red)
- Automatic switching of offset
- High camera resolution
- Recognition of different row structures (single or multiple rows)
- Integrated chart for recommended camera height
- Saving of settings

ADAPTATION OF THE CAMERA APPLICATION TO THE CULTURE

The camera setting can be adjusted to suit the color or height of the crop. You can choose between green/yellow (e.g. corn), green/blue (e.g. soybeans, vegetables) or red (vegetables e.g. beetroot) in 2D mode. The 3D mode can be used for corn, soybeans, sunflowers, etc., if the plant rows have a clear growth advance (approx. 10 cm / 3.90") over the weed. Correct adjustment to the crop further increases the accuracy of row guidance.



STABILISING WHEELS OF THE SIDESHIFT FRAME

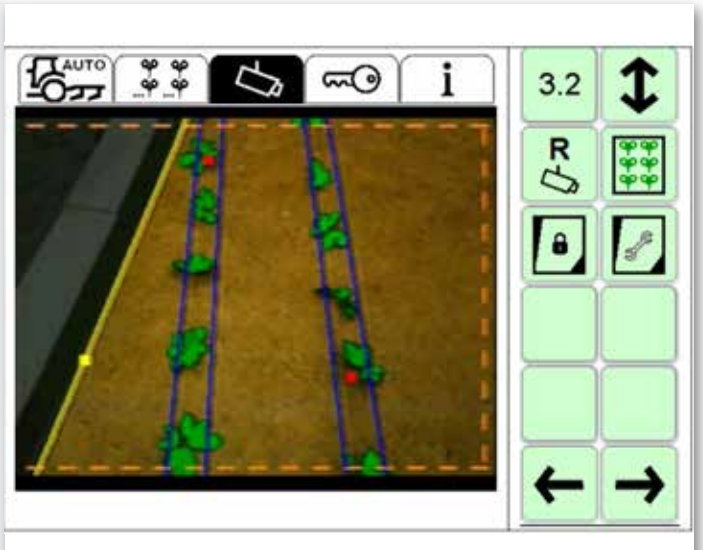
When ordering an Einböck row-crop cultivator height-adjustable stabilising wheels are included. The wheels can be adjusted to the track width of the tractor and the row distance. Depending on the type of soil you can choose between different rubber or metal gauge wheels.

3D-MODE

Rows can also be detected on the basis of the height difference. Especially in heavy weed-infested fields this additional option ensures additional precision.

CUTTING OF THE IMAGE

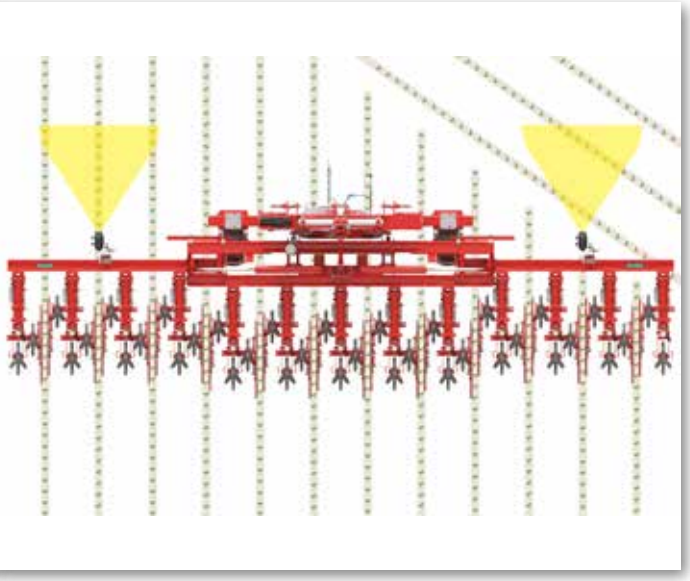
Tractor tracks or other elements in the image would prevent the ROW-GUARD from precise working (especially in smaller working widths). Therefore, it is possible to cut the image easily and quickly.



OPTIONS ROW-GUARD

MAXIMUM PRECISION - 2ND CAMERA (OPTIONALLY)

A row-crop cultivator can be controlled by two cameras simultaneously. Especially for very small crops, an additional camera, by looking on additional plant rows, ensures a great result. Especially for hoes with hydraulic lifting "Section Control": For example, on pointy rows at the headlands a row of plants always remains within the camera's field of view. This ensures hoeing until the last unworked row and guarantees a weed control on the full surface of the field.



MECHANICAL FEELER

- For sensing a crop row (row spacing > 35 cm / 13.8")
- Supports the ROW-GUARD shortly before or after row closure
- Called "cat-whiskers" in North America

LED-LIGHTS

For working at night or at dusk.

CAMERA HOLDER THAT IS SWIVELED IN AUTOMATICALLY

The optionally available swivel-in camera holder automatically swivels upwards when folding the machine and thus prevents a possible collision of the camera with the sideshift frame. Especially for smaller machines (e.g. 6-row, 70 cm), this practical accessory provides further convenience and operating safety.

ROW-GUARD HOTLINE

In case the operator needs help to correctly set the machine, a trilingual phone-hotline is available during the season of hoeing. Its number can be found in the operating instructions.

ROW-CROP CULTIVATOR CHOPSTAR 1-30

The CHOPSTAR 1-30 has 1 tine per hoeing element and can be used in row-crops with a row spacing of up to 30 cm / 11.80", e.g. cereals, field beans, lupins, etc. Depending on the conditions and the aim of the hoeing pass, weeder tines mounted behind the element or different sweeps (such as ultra-flat) can be mounted on the front or rear hoeing machine.

The precision of the CHOPSTAR 1-30 can be further optimized with the camera steering and the ROW-GUARD sideshift frame, the SECTION-CONTROL parallelogram lift and other additional options.

Type	Transport width in m / ft [2]	Frame length in m / ft mounting category	Tines	Hoe elements	from HP/KW [1]	Weight approx. kg / lbs
Rear mounted (Recommendation - use with camera steering system ROW-GUARD)						
EGS 12-rows RIGID	3.20/10.50	3.20/10.50 / II	13	13	40/30	700 kg 1543 lbs
EGS 16-rows HG [3]	3.00/9.80	4.20/13.80 / II	17	17	70/51	1200 kg 2645 lbs
EGS 24-rows HG [3]	3.00/9.80	6.20/20.30 / II	25	25	80/59	1560 kg 3439 lbs
EGS 32-rows HG [3, 4]	3.30/10.80	8.20/26.90 / II	33	33	90/66	2120 kg 4673 lbs
Front mounted						
EGS 12-rows RIGID	3.20/10.50	3.20/10.50 / II	13	13	40/30	680 kg 1499 lbs
EGS 16-rows HG [3]	3.00/9.80	4.20/13.80 / II	17	17	70/51	1100 kg 2425 lbs
EGS 24-rows HG [3]	3.00/9.80	6.20/20.30 / II	25	25	80/59	1450 kg 3196 lbs
EGS 32-rows HG [3]	3.30/10.80	8.20/26.90 / II	33	33	90/66	1940 kg 4276 lbs

1) HP/kW figures only valid for basic equipment
2) Depending on row spacing - details on request or on order confirmation
3) Hydraulic folding - triple-frame
4) 2 high-gauge-wheels instead of upper link steering and 1 rubber support wheel each on the outer wing

STANDARD EQUIPMENT

- ✓ Row distance variable between 20 cm / 8" and 30 cm / 12"
- ✓ Robust, durable special profile-tube frame with high frame height
- ✓ Lower links guided on both sides
- ✓ Rear mounted machines with auto top link steering, spindle and high-gauge wheels
- ✓ Front mounted machines with track indicator for improved guidance
- ✓ Conversion from rear to front mounting without extra charge - only possible in standard configuration
- ✓ Adjustable retraction support on each parallelogram
- ✓ Farmflex-feeler-wheels adjustable through spindles, ball bearing mounted, ø 300 mm / 100 mm wide
- ✓ Large-dimensioned, elongated, re-adjustable parallelogram
- ✓ Vibrotine 32 x 12 mm with holder 30 x 10 mm
- ✓ Hoeing element with 1 duckfoot sweep 180 mm

OPTIONS

- » Various vibro-tines & sweeps, carbide metal, etc.
- » Trailed weeder tines
- » Protection shields or discs
- » Hydraulic manual steering with seat
- » Hydraulic parallelogram lifting system SECTION-CONTROL
- » Camera steering ROW-GUARD
- » Pneumatic seeding box P-BOX-STI
- » Pneumatic front tank JUMBO-SEED
- » Pneumatic liquid front tank JUMBO-STREAM
- » Warning signs with holder and LED-light

✓ **For hoeing grain, peas, lupine, etc.**

To configure a machine tailored to your requests, please contact an Einböck consultant or the official responsible dealer!
A detailed and up-to-date overview of standard equipment, options and compatibility can be found at www.einboeck.eu
Technical data and dimensions are approximate and non-binding. We reserve the right to make changes to the construction and design!

CONCEPT CHOPSTAR 1-30

CONCEPT

- E.g. for grain, peas, rapeseed, lupines, ...
- Equipped with 1 vibrotine
- Row spacing: up to 30 cm / 11.80"
- Following elements: weeder tines
- Sweeps and tines: duckfoot sweeps, EINBÖCK-special-vibrotines, ultraflat sweeps
- Protection elements: without protection element, crop deflector shields or discs

INDIVIDUAL EQUIPMENT OF HOEING ELEMENTS

The row-crop cultivator with 1 tine per hoeing section is designed for hoeing of fields with a row distance of up to 30 cm / 11.80". This version is e.g. for grain, peas, rape or lupines. Furthermore you can use deflector elements to protect the plants from spilling (especially in early crop stage). Deflector plates are optionally available from a row distance of 25 cm / 9.80". From 30 cm / 11.80" you can also use deflector discs. The different tracking tools and sweep options can be found further back in the brochure. The big range of different hoeing tools make the CHOPSTAR to a row-crop cultivator, which can be adapted to every condition, crop or type of soil.

ROW-CROP CULTIVATOR CHOPSTAR 3-60

The CHOPSTAR 3-60 has up to 3 tines per hoeing element and can be used in row-crops with a row spacing of up to 60 cm / 23.60" (such as beets, soybeans, field beans, etc.). Depending on the conditions and the aim of the hoeing pass, a wide range of tools such as heaping elements, heaping sweeps, trailed weeder tines, finger weeders, etc. can be attached to the front or rear hoeing machine.
The precision of the CHOPSTAR 3-60 can be further optimized with the camera steering and the ROW-GUARD sideshift frame, the SECTION-CONTROL parallelogram lift and other additional options.

✓ **For hoeing beets, soybeans, field beans, etc.**

Type	Transport width in m / ft [2]	Frame length in m / ft mounting category	Tines	Hoe elements	from HP/KW [1]	Weight approx. kg / lbs
Rear mounted						
ERS 3-row RIGID [8,9]	1.60/5.25	1.60/5.25 / II	10	4	30/22	335-385 kg 738-849 lbs
ERS 4-row RIGID [8,9]	2.00/6.60	2.00/6.60 / II	13	5	30/22	400-450 kg 882-992 lbs
ERS 5-row RIGID [8,9]	2.45/12.50	2.45/12.50 / II	16	6	30/22	460-515 kg 1014-1135 lbs
ERS 6-row RIGID [8,9]	3.00/5.60	3.00/5.60 / II	19	7	40/30	530-580 kg 1168-1279 lbs
ERS 7-row HG [9]	3.00/11.00	3.35/11.00 / II	22	8	50/37	730-780 kg 1610-1720 lbs
ERS 8-row HG [3,9]	3.00/11.00	3.80/12.50 / II	25	9	60/44	830-880 kg 1830-1940 lbs
ERS 12-row HG [3,9]	3.00/11.00	5.60/18.40 / II	37	13	70/51	1160-1210 kg 2557-2668 lbs
ERS 15-row HG [3, 6]	3.20/10.50	6.95/22.80 / II	46	16	90/66	1570 kg 3461 lbs
ERS 18-row HG [3, 7]	4.80/15.75	8.30/27.20 / III	55	19	130/96	1870 kg 4123 lbs
ERS 18-row HG [4]	3.00/11.00	8.30/27.20 / II	55	19	130/96	2060 kg 4542 lbs
ERS 24-row HG [3, 5]	6.70/21.98	11.00/36.00 / III	73	25	160/118	2360 kg 5203 lbs
ERS 24-row HG [4]	4.00/13.12	11.00/36.00 / III	73	25	160/118	2570 kg 5666 lbs

1) HP/kW figures only valid for basic equipment
2) Depending on row spacing - details on request or on order confirmation
3) Hydraulic folding - triple-frame
4) Hydraulic retraction - double folding frame, 4 air wheels 18x8.50 instead of upper-link steering Cat. II on 18 rows, Cat. III on 24 rows
5) 4 gauge wheels and 1 rubber support wheel on each side wing instead of upper-link steering
6) 2 gauge wheels and 1 rubber support wheel on each side wing instead of upper-link steering
7) 4 gauge wheels instead of upper-link steering
8) With intermediate block - flanged wheels in the tractor track
9) Also available as front version

STANDARD EQUIPMENT

- ✓ Row-distance variable up to 60 cm / 24"
- ✓ Robust, durable special profile-tube frame with high frame height
- ✓ Lower links guided on both sides
- ✓ Rear mounted machines with auto top link steering, spindle and high-gauge wheels
- ✓ Front mounted machines with track indicator for improved guidance
- ✓ Conversion from rear to front mounting without extra charge - only possible in standard configuration
- ✓ Adjustable retraction support on each parallelogram
- ✓ Farmflex-feeler-wheels adjustable through spindles, ball bearing mounted, ø 300 mm / 100 mm wide
- ✓ Large-dimensioned, elongated, re-adjustable parallelogram
- ✓ Vibro tine 32x12 mm with holder 30x10mm
- ✓ FULL hoeing element with 3 vibro tines: 2 duckfoot sweeps 140 mm and in the centre 1 duckfoot sweep 160 mm
- ✓ HALF hoeing element with 2 vibro tines: 1 duckfoot sweep 140 mm and in the centre 1 duckfoot sweep 160 mm

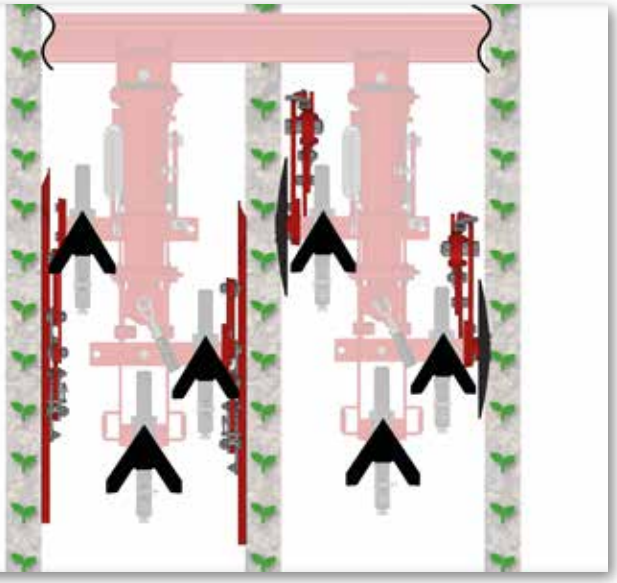
OPTIONS

- » Various vibro-tines, sweep widths, carbide metal sweeps, angle knives, heaping sweeps, etc.
- » Trailed weeder tines
- » Finger weeders
- » Rotation weeder element
- » Protection shields or discs
- » Hydraulic manual steering with seat
- » Hydraulic parallelogram lifting system SECTION-CONTROL
- » Camera steering ROW-GUARD
- » Pneumatic seeding box P-BOX-STI
- » Pneumatic front tank JUMBO-SEED
- » Pneumatic liquid front tank JUMBO-STREAM
- » Warning signs with holder and LED-light

CONCEPT CHOPSTAR 3-60

CONCEPT

- E.g. for beets, soybeans, peas, rapeseed, ...
- Equipped with up to 3 vibrotines
- Row spacing: up to 60 cm / 23.60"
- Following elements: weeder tines, rotative weeder or finger weeder
- Sweeps and tines: EINBÖCK-special-vibrotines, ultraflat sweeps, angle-knives, heaping shares, ...
- Protection elements: without protection elements, crop deflector shields or discs



INDIVIDUAL EQUIPMENT OF HOEING ELEMENTS

The hoeing section for a row distance up to 60 cm / 23.60" is equipped with up to 3 tines per element. This element is designed e.g. for beets, soybeans, field beans or rapeseed. Even when working in shallow working depth the vibro tines ensure perfect weed control by cutting the full surface in between the crop rows. Protection elements are responsible to protect the plants from spilling (especially in early crop stage). The different tracking tools and sweep options can be found further back in the brochure. This big range of different hoeing tools make the CHOPSTAR to a row-crop cultivator, which can be adapted to each condition, crop or type of soil.


CHOPSTAR

ROW-CROP CULTIVATOR CHOPSTAR 5-90

The CHOPSTAR 5-90 has up to 5 tines per hoeing element and is used in row-crops with up to 90 cm / 35.40" row spacing, such as corn, sunflowers, etc. Depending on the conditions and the aim of the hoeing pass, a variety of tools such as heaping elements, heaping sweeps, weeder tines mounted behind the elements, finger weeders etc. can be attached to the front or rear implement.
The precision of the CHOPSTAR 5-90 can be further optimized with the camera steering and the ROW-GUARD sideshift frame, the SECTION-CONTROL parallelogram lift and other additional options.

Designed for great hectare performance & durability!

Type/ Working width cm	Transport width in m / ft [2]	Frame length in m / ft mounting category	Tines	Hoe elements	from HP/KW [1]	Weight approx. kg / lbs
Rear mounted with deflector discs						
EMS 2-row RIGID [5,7]	1.60/5.25	1.60/5.25 / II	11	3	20/15	340-430 kg 750-948 lbs
EMS 4-row RIGID [7]	3.00/9.80	3.00/9.80 / II	21	5	40/30	430-560 kg 948-1235 lbs
EMS 4-row HG [3,7]	3.00/9.80	3.00/9.80 / II	21	5	50/37	570-840 kg 1257-1852 lbs
EMS 6-row RIGID [7]	4.40/14.40	4.40/14.40 / II	31	7	60/44	560-820 kg 1235-1808 lbs
EMS 6-row HG [3,7]	3.00/9.80	4.40/14.40 / II	31	7	60/44	860-1010 kg 1896-2227 lbs
EMS 7-row HG [3,7]	3.00/9.80	5.10/16.70 / II	36	8	70/51	940-1090 kg 2073-2404 lbs
EMS 8-row RIGID	5.80/19.00	5.80/19.00 / II	41	9	80/59	990 kg 2183 lbs
EMS 8-row HG [3,7]	3.20/10.50	5.80/19.00 / II	41	9	80/59	1020-1170 kg 2249-2580 lbs
EMS 12-row HG [3, 6]	4.80/15.75	8.60/28.20 / III	61	13	140/103	1810 kg 3991 lbs
EMS 12-row HG [4]	3.00/9.80	8.60/28.20 / II	61	13	140/103	2040 kg 4498 lbs
EMS 16-row HG [3, 6]	6.90/22.60	11.40/37.40 / III	81	17	160/118	2250 kg 4961 lbs
EMS 16-row HG [4]	4.00/13.00	11.40/37.40 / III	81	17	160/118	2500 kg 5512 lbs

1) HP/kW figures only valid for basic equipment
2) Depending on row spacing - details on request or on order confirmation
3) Hydraulic folding - triple-frame
4) Hydraulic retraction - double folding frame, 4 air wheels 18x8.50 instead of upper link steering - Cat. II
5) With intermediate block - flanged wheels in the tractor track
6) 4 gauge wheels instead of upper-link steering
7) Also available as front version

STANDARD EQUIPMENT

- ✓ Row-distance variable up to 90 cm / 36"
- ✓ Robust, durable special profile-tube frame with high frame height
- ✓ Lower links guided on both sides
- ✓ Rear mounted machines with auto top link steering, spindle and high-gauge wheels
- ✓ Front mounted machines with track indicator for improved guidance
- ✓ Conversion from rear to front mounting without extra charge - only possible in standard configuration
- ✓ Adjustable retraction support on each parallelogram
- ✓ Farmflex-feeler-wheels adjustable through spindles, ball bearing mounted, ø 300 mm / 100 mm wide
- ✓ Large-dimensioned, elongated, re-adjustable parallelogram
- ✓ Last tine with reinforcement spring and adjustable in height
- ✓ S-tines - sweep arrangement see below

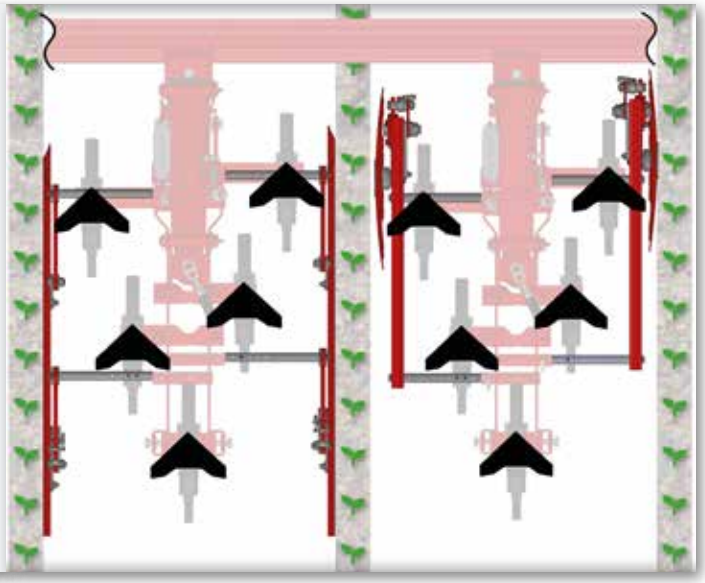
OPTIONS

- » Various vibro-tines, sweep widths, carbide metal sweeps, angle knives, heaping sweeps, etc.
- » Trailed weeder tines
- » Finger weeders
- » Rotation weeder element
- » Protection shields or discs; Rotary hoe crop-protection-star
- » Hydraulic manual steering with seat
- » Hydraulic parallelogram lifting system SECTION-CONTROL
- » Camera steering ROW-GUARD
- » Pneumatic seeding box P-BOX-STI
- » Pneumatic front tank JUMBO-SEED
- » Pneumatic liquid front tank JUMBO-STREAM
- » Warning signs with holder and LED-light

CONCEPT CHOPSTAR 5-90

CONCEPT

- E.g. for corn, sunflowers, sorghum, ...
- Equipped with up to 5 tines (S-tines or vibrotines)
- Row spacing: up to 90 cm / 35.40"
- Following elements: weeder tines, rotative weeder or finger weeder
- Sweeps and tines: Einböck-special-vibrotines, ultraflat sweeps, angle-knives, heaping shares, ...
- Protection elements: without protection elements, crop deflector shields, stars or discs



INDIVIDUAL EQUIPMENT OF HOEING ELEMENTS

The hoeing section for a row distance up to 90 cm / 35.40" is equipped with up to 5 tines per hoeing element. It is designed e.g. for corn or sunflowers. Protection elements are responsible to protect the plants from spilling (especially in early crop stage). The different tracking tools and sweep options can be found further back in the brochure. This big range of different hoeing tools make the CHOPSTAR to a row-crop cultivator, which can be adapted to each condition, crop or type of soil.

ROW-CROP CULTIVATOR CHOPSTAR 10-150

The CHOPSTAR 10-150 has two hoeing elements per row and up to 10 tines and can be used in row-crops with a row distance of up to 150 cm / 59", such as pumpkin, etc. Depending on the conditions and the aim of the hoeing pass, a variety of tools can be attached to the front or rear implement, such as heaping elements, heaping sweeps, weeder tines mounted behind the element, finger weeders, etc.

The precision of the CHOPSTAR 10-150 can be further increased with the camera steering and the ROW-GUARD sideshift frame, the SECTION-CONTROL parallelogram lift and other additional options.

Type	Transport width in m / ft [2]	Frame length in m / ft mounting category	Tines	Hoe elements	from HP/KW [1]	Weight approx. kg / lbs
Rear mounted with deflector discs						
EKS 2-row RIGID	3.00/9.80	2.55/8.40 / II	20	4	40/30	480 kg 1058 lbs
EKS 3-row HG [3]	3.00/9.80	4.05/13.30 / II	30	6	60/44	1000 kg 2204 lbs
Front mounted with deflector discs						
EKS 2-row RIGID	3.00/9.80	2.55/8.40 / II	20	4	40/30	440 kg 970 lbs
EKS 3-row HG [3]	3.00/9.80	4.05/13.30 / II	30	6	60/44	900 kg 1984 lbs

1) HP/kW figures only valid for basic equipment

2) For a row width of 150 cm / 4.90 ft

3) Hydraulic folding - triple-frame

STANDARD EQUIPMENT

- ✓ Row-distance variable up to 150 cm / 60"
- ✓ Robust, durable special profile-tube frame with high frame height
- ✓ Lower links guided on both sides
- ✓ Rear mounted machines with auto top link steering, spindle and high-gauge wheels
- ✓ Front mounted machines with track indicator for improved guidance
- ✓ Conversion from rear to front mounting without extra charge - only possible in standard configuration
- ✓ Adjustable retraction support on each parallelogram
- ✓ Farmflex-feeler-wheels adjustable through spindles, ball bearing mounted, ø 300 mm / 100 mm wide
- ✓ Large-dimensioned, elongated, re-adjustable parallelogram
- ✓ Last tine with reinforcement spring and adjustable in height
- ✓ S-tines
- ✓ Entire hoeing element - all duckfoot sweeps of 180 mm

OPTIONS

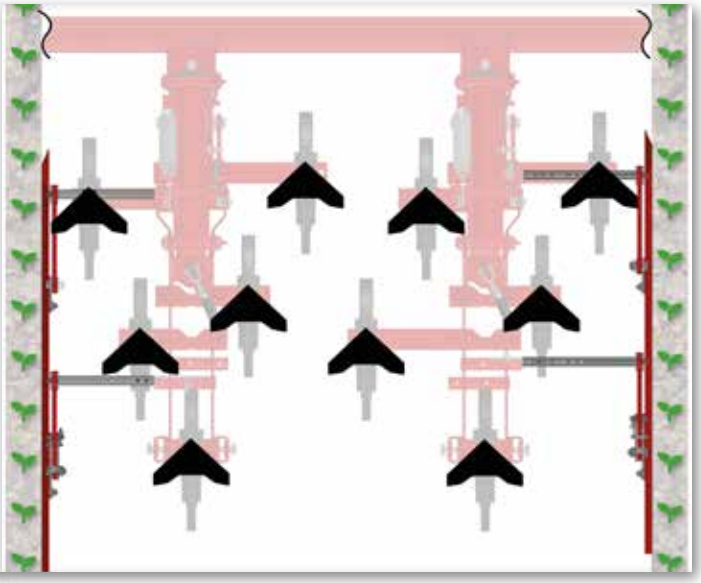
- » Various vibro-tines, sweep widths, carbide metal sweeps, angle knives, heaping sweeps, etc.
- » Trailed weeder tines
- » Finger weeders
- » Rotation weeder element
- » Protection shields or discs; Rotary hoe crop-protection-star
- » Hydraulic manual steering with seat
- » Hydraulic parallelogram lifting system SECTION-CONTROL
- » Camera steering ROW-GUARD
- » Pneumatic seeding box P-BOX-STI
- » Pneumatic front tank JUMBO-SEED
- » Pneumatic liquid front tank JUMBO-STREAM
- » Warning signs with holder and LED-light

✓ **For hoeing pumpkin in front or rear with many additional options such as protection plates or discs, finger weeders or camera steering.**

CONCEPT CHOPSTAR 10-150

CONCEPT

- E.g. for pumpkins, ...
- Equipped with up to 10 tines (S-tines or vibrotines)
- Row spacing: up to 150 cm / 59"
- Following elements: weeder tines, rotative weeder or finger weeder
- Tines: duckfoot sweeps, EINBÖCK-special-vibrotines, ultraflat sweeps, angle knives, heaping shares
- Protection elements: without protection elements, crop deflector shields or discs



INDIVIDUAL EQUIPMENT OF HOEING ELEMENTS

The hoe element for a row distance of up to 150 cm / 59" is equipped with up to 10 tines per element. These elements are designed e.g. to hoe pumpkins. Crop deflector shields are responsible to protect the plants from spilling (especially in early crop stage). The different tracking tools and sweep options can be found further back in the brochure. This big range of different hoeing tools make the CHOPSTAR to a row-crop cultivator, which can be adapted to each condition, crop or type of soil.

A front mounted hoe hooked up closer to the tractor is easier to steer!


CHOPSTAR

ROW-CROP CULTIVATOR CHOPSTAR-TWIN

The CHOPSTAR-TWIN precision hoe was developed for precise hoeing above the row. The hoeing parallelogram does not work between the rows, but is mounted directly above the row. This allows a very narrow hoeing belt, which makes it possible to hoe young crops very early and narrow at the same time.

This is achieved by two cutting disc adjustable in angle in combination with following angle knives: two Farmflex wheels running close to the crop row ensure an exact working depth of the hoeing elements. The CHOPSTAR-TWIN, in combination with the camera steering system ROW-GUARD, is perfectly suited as a precision hoe for special crops, cereals, soybeans, beets, corn, vegetables, herbs, etc.

For hoeing many arable crops such as corn, beet, soybeans or field beans and special crops (vegetables, herbs,...).

Type	Transport width in m / ft [2]	Frame length in m/ft. mounting category	Tines	Hoe elements	from HP/KW [1]	Weight approx. kg / lbs
Rear mounted (Recommendation - use with camera steering system ROW-GUARD)						
ETH 5-row RIGID [3]	2.30/7.50	2.00/6.60 / II	10	5	30/22	580 kg 1278 lbs
ETH 6-row RIGID	2.75/9.00	2.45/8.00 / II	12	6	40/30	610 kg 1344 lbs
ETH 8-row HG [4]	3.00/9.80	3.35/11.00 / II	16	8	60/44	940 kg 2072 lbs
ETH 12-row HG [4]	3.00/9.80	5.15/16.90 / II	24	12	70/51	1330 kg 2932 lbs
ETH 15-row HG [4, 7]	3.20/10.50	6.50/21.30 / II	30	15	90/66	1730 kg 3813 lbs
ETH 18-row HG [4, 8]	4.80/15.80	7.85/25.80 / III	36	18	130/96	2070 kg 4563 lbs
ETH 18-row HG [5]	3.05/9.80	7.85/25.80 / II	36	18	130/96	2260 kg 4982 lbs
ETH 24-row HG [4, 6]	6.70/22.00	10.55/34.60 / III	48	24	160/118	2650 kg 5842 lbs
ETH 24-row HG [5]	4.00/13.10	10.55/34.60 / III	48	24	160/118	2860 kg 6305 lbs

1) HP/kW figures only valid for basic equipment
2) Depending on row spacing - details on request or on order confirmation
3) Cannot be used with ROW-GUARD
4) Hydraulic folding - triple-frame
5) Hydraulic retraction - double folding frame, 4 air wheels 18x8.50 instead of upper-link steering Cat. II on 18 rows, Cat. III on 24 rows
6) 4 gauge wheels and 1 rubber support wheel on each side wing instead of upper-link steering
7) 2 gauge wheels and 1 rubber support wheel on each side wing instead of upper-link steering
8) 4 gauge wheels instead of upper-link steering

STANDARD EQUIPMENT

- ✓ Row-distance variable from 35 cm / 13.8"
- ✓ Robust, durable special profile-tube frame with high frame height
- ✓ Lower links guided on both sides
- ✓ Rear mounted machines with auto top link steering, spindle and high-gauge wheels
- ✓ Adjustable retraction support on each parallelogram
- ✓ Large-dimensioned, elongated, re-adjustable parallelogram
- ✓ Hoeing parallelogram mounted above the crop row
- ✓ Two adjustable Farmflex-feeler wheels, bearing mounted, ø 300 mm / 65 mm wide per parallelgoram
- ✓ "SMART-GRIP" quick adjustment & working tools: 2 vertical cutting discs, ø 220 mm adjustable in angle and Vibrotine 40x12 mm with holder 35x11mm and angle knife 120 mm incl. guiding plate or optionally rigid angle knife 120 mm incl. guiding plate

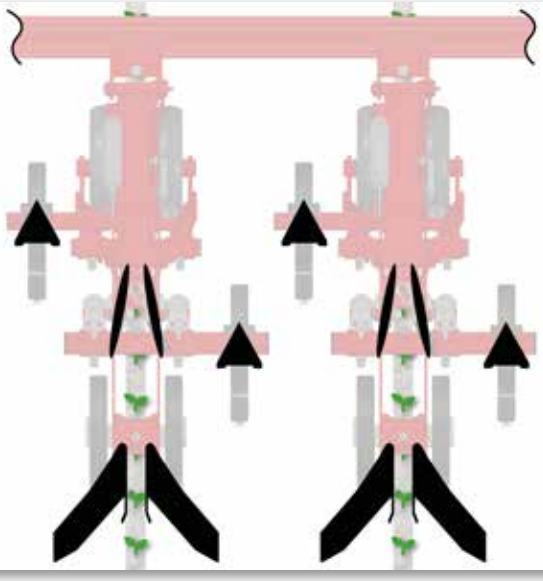
OPTIONS

- » Various vibro-tines, sweep widths, carbide metal sweeps, angle knives, heaping sweeps, etc.
- » Trailed weeder tines
- » Finger weeders
- » Rotation weeder element
- » Hydraulic manual steering with seat
- » Hydraulic parallelogram lifting system SECTION-CONTROL
- » Camera steering ROW-GUARD
- » Pneumatic seeding box P-BOX-STI
- » Pneumatic front tank JUMBO-SEED
- » Pneumatic liquid front tank JUMBO-STREAM
- » Warning signs with holder and LED-light

CONCEPT CHOPSTAR-TWIN

CONCEPT

- Precision row-crop cultivator for hoeing over the row
- Narrow hoeing belt with unworked area less than 5 cm / 1.90"
- E.g. for corn, soybeans, field beans, beets, ...
- Row spacing: up to 75 cm / 29.50"
- Equipped with 2 cutting discs and up to 4 tines (2 angle knives and up to 2 bypass-tines)
- Following elements: weeder tines, rotative weeder or finger weeder



TWIN-HOEING ELEMENT WITH VERTICAL CUTTING DISCS AND ANGLE KNIVES

The hoeing section is guided by two Farmflex-support wheels left and right of the row. It is equipped with two vertical cutting discs, which are followed by two angle knives. They are mounted on vibro-springs, so it is possible to work very closely and shallow to the crop. The result is that young crops can be hoed earlier, closer to the crop and with higher working speed than with standard row-crop cultivators without burying plants. In ideal conditions a hoeing belt of less than 5 cm / 1.90" can be realized. The CHOPSTAR-TWIN can be configured from 30 cm / 11.80" up to 75 cm / 29.50".

SMART-GRIP QUICK ADJUSTMENT FOR CHOPSTAR-TWIN

In order to enable the cutting discs and angle knives of the "TWIN" hoeing section to be adapted to different crops quickly, they come as a standard feature with the SMART-GRIP quick adjustment system. This saves time by quickly adapting the row-crop cultivator to a wide range of conditions while maintaining the best possible grip. The angle knives can be rigid or spring mounted.

WEED CONTROL OVER THE FULL SURFACE

The earlier and the closer to the row hoeing can take place, the easier the weed control in the row can be done (e.g. by finger weeders or rotative weeder elements). This ensures reduced weed pressure and supports a good establishment of the crop.

HOEING IN MULCH AND NO-TILL CROPS

The cutting discs in front of the angle knives allow to operate the machine in mulch or no-till, but also stip-till crops. The organic matter is cut close to the plant row what brings precise and quick hoeing without clogging.

SPECIAL ROW-CROP CULTIVATOR CHOPSTAR-VERSO

The special row-crop cultivator CHOPSTAR-VERSO has a pair of cutting discs and up to 5 vibro tines per hoeing element (of which two angle knives) mounted and can be used in row crops with a row distance of 45 cm/17.70" to 80 cm/31.50" (such as beets, soybeans, field beans, corn, sunflowers, etc.). Through the hollow discs clearing away from the plant as well as adjustable in angle in combination with trailing angle knives can be realised a very small hoeing band. This ensures that young stands can be hoed very early and at the same time narrowly and precisely. Depending on the cultivation conditions and the objective of the hoeing pass, different varities of working tools can be used, e. g. trailed weeder tines, finger weeder stars, roll stars, etc.

The camera steering system with the sideshift frame ROW-GUARD and the SECTION-CONTROL- parallelogram hydraulic lifting as well as further additional options can again perfected the precision of the CHOPSTAR-VERSO.

Type	Transport width in m / ft [2]	Frame length in m/ft. mounting category	Tines	Hoe elements	from HP/KW	Weight approx. kg / lbs
ERV 4-row RIGID [1]	2.00/6.60	2.00/6.60 / II	13	5	30/22	500 kg 1102 lbs
ERV 6-row RIGID [1]	3.00/9.80	3.00/9.80 / II	19	7	40/30	650 kg 1433 lbs
ERV 8-row HG [3]	3.00/9.80	3.80/9.80 / II	25	9	60/44	980 kg 2161 lbs
ERV 12-row HG [3]	3.00/9.80	5.60/9.80 / II	37	13	70/51	1360 kg 2998 kg
ERV 15-row HG [3,5]	3.20/10.50	6.95/10.50 / II	46	16	90/66	1750 kg 3858 lbs
ERV 18-row HG [4]	3.00/9.80	8.30/9.80 / II	55	19	130/96	2280 kg 5027 lbs
ERV 24-row HG [4]	4.00/13.10	11.00/13.10 / II	73	25	160/118	2860 kg 6305 lbs
EMV 4-row RIGID [1]	3.00/9.80	3.00/9.80 / II	21	5	40/30	675 kg 1500 lbs
EMV 4-row HG [3]	3.00/9.80	3.00/9.80 / II	21	5	50/37	890 kg 2000 lbs
EMV 6-row HG [3]	3.00/9.80	3.00/9.80 / II	31	7	60/44	1080 kg 2400 lbs
EMV 8-row HG [3]	3.20/10.50	3.20/10.50 / II	41	9	80/59	1270 kg 2800 lbs
EMV 12-row HG [3]	3.00/9.80	3.00/9.80 / II	61	13	140/103	2180 kg 4800 lbs
EMV 16-row HG [3]	4.00/13.10	4.00/13.10 / II	81	17	160/118	2690 kg 5900 lbs

1) With support - gauge wheels follow the tractor track
2) Depending on row spacing
3) Hydraulic retraction – triple-frame
4) Hydraulic retraction - double folding frame, 4 air wheels 18x8.50 instead of upper-link steering Cat. II on 18 rows, Cat. III on 24 rows
5) 2 gauge wheels and 1 rubber support wheel on each side wing instead of upper-link steering

STANDARD EQUIPMENT

- ✓ Row-distance variable up to 80 cm / 32"
- ✓ Robust, durable special profile-tube frame with high frame height
- ✓ Lower links guided on both sides
- ✓ Rear mounted machines with auto top link steering, spindle and high-gauge wheels
- ✓ Adjustable retraction support on each parallelogram
- ✓ Farmflex-feeler-wheels adjustable through spindles, ball bearing mounted, ø 300 mm / 100 mm wide
- ✓ Large-dimensioned, elongated, re-adjustable parallelogram
- ✓ Vibro tine 40x12 mm with holder 35x11 mm
- ✓ Optionally with "SMART-GRIP" quick adjustment or without cutting discs

CHOPSTAR 3-60

- ✓ Hoeing element with 3 vibro tines:
  2 angle knives 160 mm; 2 cutting discs; 1 duckfoot sweep 160 mm

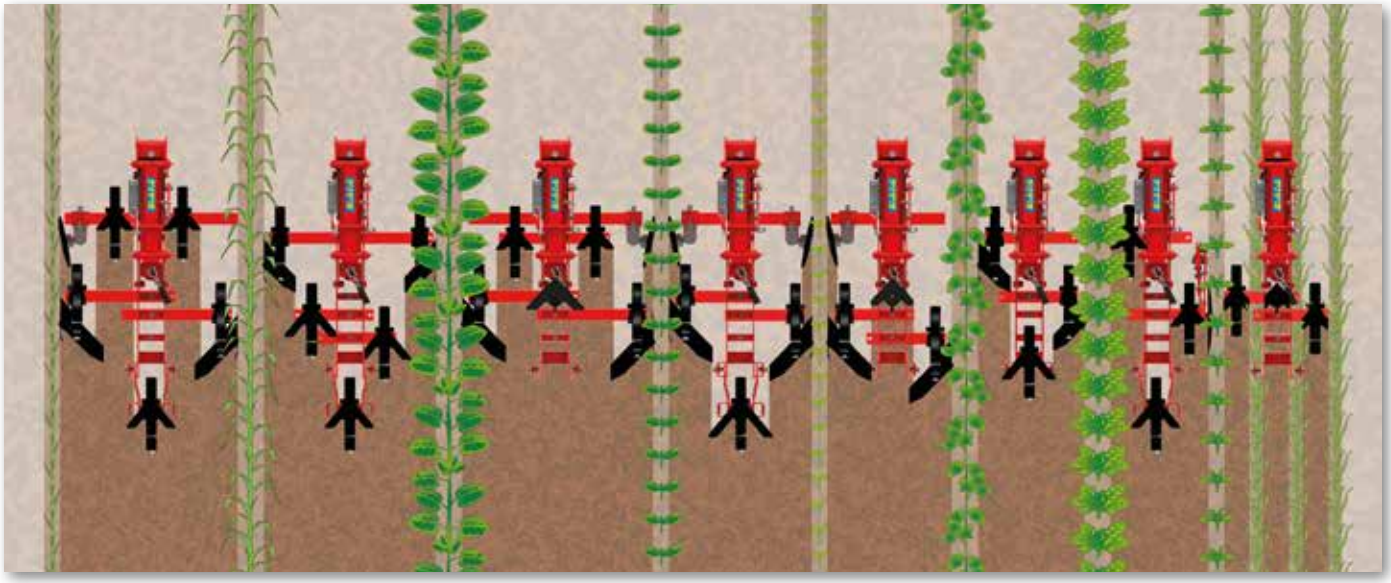
CHOPSTAR 5-90

- ✓ Hoeing element with 5 vibro tines:
  Row-distance ≤ 74:
  2 angle knives 160 mm; 2 cutting discs; 2 duckfoot sweeps 140 mm; 1 duckfoot sweep 200 mm
  Row-distance ≥ 75:
  2 angle knives 200 mm; 2 cutting discs; 2 duckfoot sweeps 140 mm; 1 duckfoot sweep 200 mm

OPTIONS

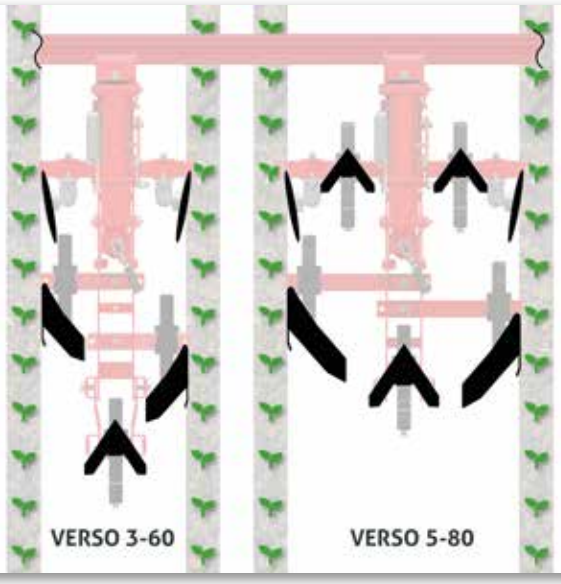
- » Various vibro-tines, sweep widths, carbide metal sweeps, angle knives, heaping sweeps, etc.
- » Trailed weeder tines
- » Finger weeders
- » Rotation weeder element
- » Protection shields or discs; Rotary hoe crop-protection-star
- » Hydraulic manual steering with seat
- » Hydraulic parallelogram lifting system SECTION-CONTROL
- » Camera steering ROW-GUARD
- » Pneumatic seeding box P-BOX-STI
- » Pneumatic front tank JUMBO-SEED
- » Pneumatic liquid front tank JUMBO-STREAM
- » Warning signs with holder and LED-light

CONCEPT CHOPSTAR-VERSO



CONCEPT

- E.g. for beets, soybeans, field beans, rapeseed, corn, sunflowers, sorghum, cereals, ...
- **Possible equipment:** 1 pair cutting discs und up to 5 sweeps on different positions; of which up to two angle knives
- **Possible row distance:** 45 to 80 cm / 17.7" to 31.5"
- **Trailed elements:** trailed weeder tines, rotative weeder elements or finger weeder
- **Sweeps and tines:** Einböck special vibrotines, ultraflat sweeps, angle knives, heaping sweeps, ...

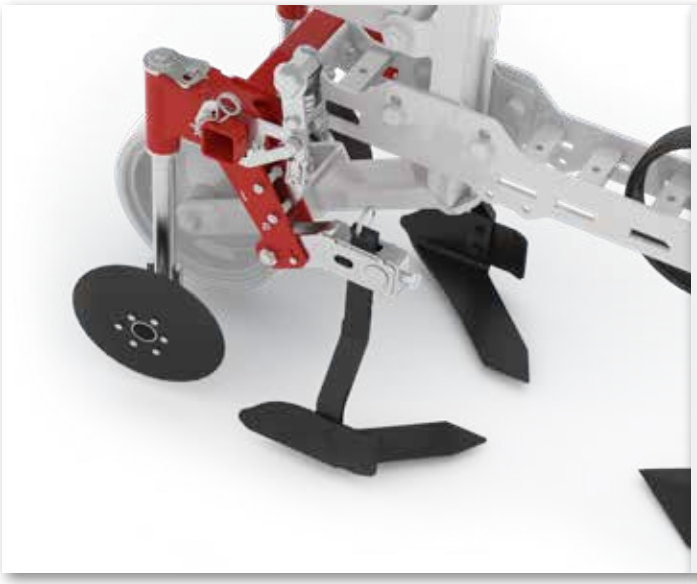


SPEED, FLEXIBILITY & PERFECTION: THE VERSO ADVANTAGES AT A GLANCE

- Hoeing in mulch, no-till or strip-till
- Very high working speed - with the cutting discs, hoeing is possible even at a very early stage of growth
- Very narrow "hoeing belt" - perfectly prepared for finger weeders or rotative weeders
- Great flexibility as well as adaptation to crop size
- Low wear and fuel consumption thanks to the cutting discs
- High retraction force - CHOPSTAR TWIN concept (cutting discs + angle knives)

HIGH PROFITABILITY AS WELL AS PRECISION

The VERSO-hoe element is ideally suitable for hoeing in mulch crops as well as a lot of organic matter. Depsite the smallest hoeing belt a very high working speed can be achieved because of the "clearing" cutting discs, which in turn increases the economic efficiency and profitability of the machine enormously. The hoe element can be individually adjusted to the crop size and similar to the TWIN concept an extreme immersing power. Wear and tear as well as the needed fuel requirement can also reduced by the rolling as well as cutting work tools.



SMART-GRIP QUICK ADJUSTMENT FOR CHOPSTAR-VERSO

In order to enable the cutting discs and angle knives of the "VERSO" hoeing section to be adapted to different crops quickly, they can be optionally mounted on the SMART-GRIP quick adjustment system. This saves time by quickly adapting the row-crop cultivator to a wide range of conditions while maintaining the best possible grip. The angle knives can be rigid or spring mounted.

PREMIUM ROW-CROP CULTIVATOR CHOPSTAR-PRIME

The premium row-crop cultivator CHOPSTAR-PRIME can be equipped with up to 5 vibro-tines per hoeing element and is used in row crops with a row distance of 25 cm/9.80" to 90 cm/35.40" (such as beets, soybeans, field beans, corn, sunflowers, etc.). Centerpiece of the PRIME is a central quick-locking system, which allows all tine carriers to be quickly adapted to the crop or adjusted to the actual field conditions. Depending on the operating conditions and the hoeing aim, a wide range of working tools such as trailed weeder tines, finger weeder stars, roll stars, crop protection elements, etc. can be attached. These also have a quick adjustment and it is easy to switch between the different attachments. A SECTION-CONTROL parallelogram lift of up to 50 cm/20" perfects the row-crop cultivator.

With the camera steering ROW-GUARD shifting frame and other additional options, the operation of the CHOPSTAR-PRIME can be further perfected.

Type	Transport width in m/ft. [2]	Frame length in m/ft mounting category	Tines	Hoe elements	from HP / kW	Weight approx. kg / lbs
ERP 4-row RIGID [1]	2.00 / 6.60	2.00 / 6.60 / II	13	5	30/22	514 / 1133
ERP 6-row RIGID [1]	3.00 / 9.80	3.00 / 9.80 / II	19	7	40/30	670 / 1477
ERP 8-row HG [3]	3.00 / 9.80	3.80 / 12.50 / II	25	9	60/44	990 / 1942
ERP 12-row HG [3]	3.00 / 9.80	5.60 / 18.40 / II	37	13	70/51	990 / 2183
ERP 15-row HG [3,6]	3.20 / 10.50	6.95 / 22.50 / II	46	16	90/66	1770 / 3902
ERP 18-row HG [4]	3.00 / 9.80	8.30 / 27.20 / II	55	19	130/96	2300 / 5071
ERP 24-row HG [4]	4.00 / 13.10	11.00 / 36.10 / III	73	25	160/118	2880 / 6349
EMP 4-row RIGID [1]	3.00 / 9.80	3.00 / 9.80 / II	21	5	40/30	575 / 1268
EMP 4-row HG [3]	3.00 / 9.80	3.00 / 9.80 / II	21	5	50/37	870 / 1918
EMP 6-row HG [3]	3.00 / 9.80	4.40 / 14.40 / II	31	7	60/44	1060 / 2337
EMP 7-row HG [3]	3.00 / 9.80	5.10 / 16.70 / II	36	8	70/51	1140 / 2513
EMP 8-row HG [1]	3.20 / 10.50	5.80 / 19.00 / II	41	9	80/59	1230 / 2712
EMP 12-row HG [3,7]	4.80 / 15.70	8.60 / 28.20 / III	61	13	140/103	1900 / 4189
EMP 12-row HG [4]	3.00 / 9.80	8.60 / 28.20 / II	61	13	140/103	2130 / 4696
EMP 16-row HG [3,7]	6.90 / 22.60	11.40 / 37.40 / III	81	17	160/118	2370 / 5225
EMP 16-row HG [4]	4.00 / 13.10	11.40 / 37.40 / III	81	17	160/118	2620 / 5776

1) with intermediate frame - wheels with gauge flange following the tractor track
2) Depending on row distance
3) hydraulic folding – triple-frame
4) hydraulic folding - double folding frame, 4 air wheels 18x8.50 instead of upper link steering - Cat. II
5) 4 wheels with gauge flange instead of upper-link steering, with 1 rubber wheel on each outer wing
6) 2 wheels with gauge flange instead of upper-link steering, with 1 rubber wheel on each outer wing
7) 4 wheels with gauge flange instead of upper-link steering

STANDARD EQUIPMENT

- ✓ Row-distance variable up to 90 cm / 36" - prices calculated on 45 cm / 17.7" row-distance Depending on the configuration & equipment
- ✓ Robust, durable special profile-tube frame with high frame height
- ✓ Lower links guided on both sides
- ✓ Rear mounted machines with auto top link steering, spindle and high-gauge wheels
- ✓ HOEING ELEMENT "PRIME": Maximal comfort, fiability and durability
- ✓ Hightest flexibility in the use of the working tools and their possible combinations
- ✓ Well dimensioned parallelogram for maximal adjustment in height
- ✓ Adjustable retraction support on each parallelogram
- ✓ Jockey wheel Farmflex, ball bearing, ø 300 mm / 100 mm width, excenter quick adjustment device
- ✓ Vibro tine 32x12 mm with holder 30x10mm
- ✓ FULL hoeing element with 3 vibro tines: 2 duckfoot sweeps 140 mm and in the centre 1 duckfoot sweep 160 mm
- ✓ HALF hoeing element with 2 vibro tines: 1 duckfoot sweep 140 mm and in the centre 1 duckfoot sweep 160 mm
- ✓ Half hoeing element extensible to 5 vibrotines (only 3 mounted)
- ✓ Quick adjustment of the 2 vibrotine bars (4 in option) - perfect fixing by clamp

OPTIONS

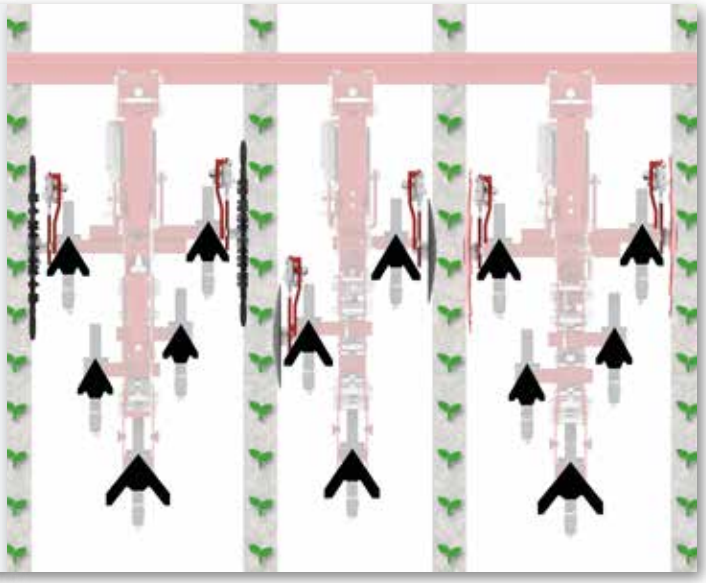
- » Mounting tools as weeder tines, finger how, heaping discs, rotation-weeder element adjustable rapidly with a single bolt
- » The following tools directly mounted on the hoeing element
- » Finger hoe (option) with parallelogram and quick adjustment device "SMART-GRIP"
- » Protection shields or discs; Rotary hoe crop-protection-star
- » Quick adjustment of the crop deflectors (option) – distance to tines or plant and in height easy and fast adjustable
- » Crop defelctor plates and crop defelctor discs guided in a parallel way and rotary hoe crop protection star as option
- » Equipped with cutting discs and angle knives - "VERSO"
- » Hydraulic parallelogram lift SECTION-CONTROL with up to 50 cm / 20" lifting height and simultaneous lifting of parallelogram and the following tool
- » Various vibro-tines, sweep widths, carbide metal sweeps, angle knives, heaping sweeps, etc.
- » Hydraulic manual steering with seat
- » Hydraulic parallelogram lifting system SECTION-CONTROL
- » Camera steering ROW-GUARD
- » Pneumatic seeding box P-BOX-STI
- » Pneumatic front tank JUMBO-SEED
- » Pneumatic liquid front tank JUMBO-STREAM
- » Warning signs with holder and LED-light

To configure a machine tailored to your requests, please contact an Einböck consultant or the official responsible dealer!
A detailed and up-to-date overview of standard equipment, options and compatibility can be found at www.einboeck.eu
Technical data and dimensions are approximate and non-binding. We reserve the right to make changes to the construction and design!

CONCEPT CHOPSTAR-PRIME

CONCEPT

- e.g. for beet, soybean, field bean, rapeseed, corn, sunflower, sorghum millet,...
- PRIME equipment: up to 5 tines
- row distance PRIME: up to 90 cm/35.40"
- trailing element: trailed weeder tines, rotative weeder, hilling discs or finger weeders
- shares and tines: Einböck special vibro-tines, ultraflat sweeps, angle knives, heaping sweeps,..
- protection elements: without, shields or discs



THE "PRIME" QUICK ADJUSTMENT HIGHLIGHTS

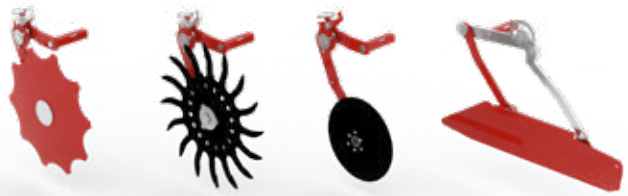
- quick adjustment of the tine carriers - a central clamping mechanism releases and fixes all tine holders at the same time
- quick adjustment of the protection elements - distance to the tine or plant as well as height can be quickly adapted
- quick adjustment of the finger weeders SMART-GRIP - adjust both finger weeders by opening just 1 lever at the same time
- quick adjustment of the trailed weeder tines - adjust width and aggressivity comfortably
- quick change units of the following working tools - quick change between hilling discs, finger weeders or trailed weeder tines

THE PARALLELOGRAM

The specially wide designed "PRIME" parallelograms come standard with a three-stage adjustable retraction support and durable, height-adjustable Farmflex feeler wheels. The retraction pressure of the "PRIME"- hoeing section is up to 105 kg per hoeing element (depending on equipment, working position and spring tension). These adjustable springs ensure smooth running of the hoeing elements even at high working-speed and secure retraction even in hard and crusted soil.

THE HOEING SECTION

The "PRIME"-hoeing section for a row distance of up to 90 cm/35.40 can be equipped with up to 5 tines. The four front tine carriers are losened at the same time, so the distance to each other or to the plant row can be quickly adjusted. The hoeing element is placed centrally under the parallelogram. This has the advantage that the tines pull in better in heavily encrusted, hard soils. In comparison to having the element positioned "behind" the parallelogram the leverage effect is reduced and less pressure on the tines is needed to enter the ground. In addition, a three-stage adjustable retention spring guarantees that the hoeing element retracts into the soil and maintains the adjusted working depth.



THE CROP PROTECTION ELEMENTS

The crop protection elements (discs or shields) secure (especially in the early growth stage) the plants from being buried. The "PRIME"-crop protection elements are adjustable in height and can be easily lifted up in case they are not needed. In addition, the distance to the tines, as well as to the plant row can be quickly adapted.

CUTTING DISCS & ANGLE KNIVES FOR CHOPSTAR-PRIME

With cutting discs & angle knives, the CHOPSTAR-PRIME can hoe even closer away from the crop without damaging the plants. For this purpose, a cutting disc & angle knife combination is mounted on the tine carrier. This special equipment saves time by quickly adapting the row-crop cultivator to a wide range of conditions, such as in mulch seeding. The angle knives can be rigid or spring mounted.

TRAILED WORKING TOOLS
CHOPSTAR-PRIME

THE FOLLOWING WORKING TOOLS

The holder of the following elements has been perfected, so it is possible to quickly change between different tools. This helps to save a lot of time during the hoeing season to adjust the machine to different crops or growth stages.

THE FINGER WEEDERS WITH "SMART-GRIP"-ADJUSTMENT

The finger weeders are equipped with an additional parallelogram to enable a perfect ground adaptation. In addition, the aggressivity of the finger weeders could be adjusted by a spring. Each pair of finger weeder stars could be set up quickly to the field condition by the "SMART-GRIP"-quick adjustment mechanism.

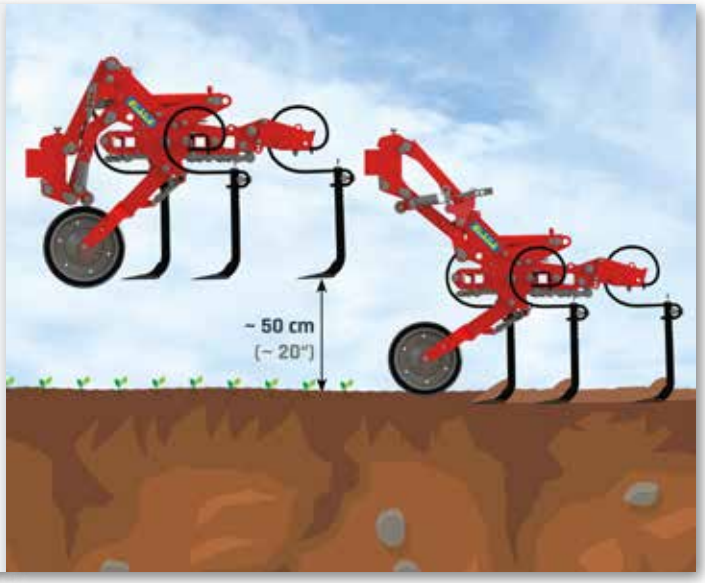
ADJUSTABLE WEEDER TINES

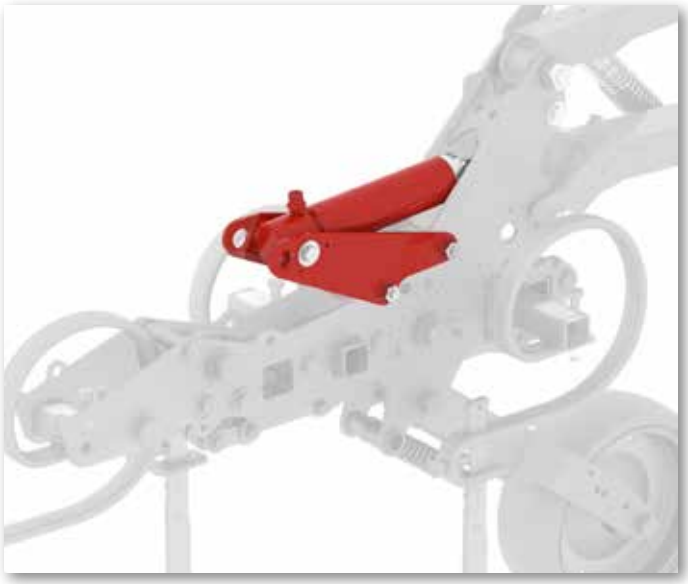
To pull weeds to the surface and ensure they dry out adjustable weeder tines can be mounted to the element. They clean the roots of the weeds from soil and at the same time they level the cultivated area. The outer tines on the element can be positioned to direct the earth flow either to or away from the crop row. Even weeding in the row to control weeds is possible, e.g. operation like a torsion hoe. In addition the following weeder tines ensure good seed-to-soil contact when intercrops are seeded.

SECTION-CONTROL
CHOPSTAR-PRIME

HYDRAULIC LIFTING SECTION-CONTROL

The section of the CHOPSTAR-PRIME has a lifting height of up to 50 cm/20" (depending on the machine configuration and soil conditions) and can automatically be controlled by GPS via SECTION-CONTROL, or manually by switches. Lifting the sections ensures no crop is damaged at the headlands when the fields are not square. This option is especially recommended for contractors or farms with a lot of misshaped fields.





ROLLSTAR CULTIVATOR ROLLSTAR

The ROLLSTAR has star-shaped discs and can be used in row-crops such as potatoes, corn, vegetables, etc. Depending on the hoeing width, the machine is equipped with a larger or smaller number of hoeing stars. In combination with a hill weeder, the ROLLSTAR is also perfect as a hoe for hill crops.

Rotative hoeing in corn and potato!

Type	Transport width in m / ft. [2]	Frame length in m/ft. mounting category	Hoe elements	Hoe stars	from HP/KW [1]	Weight approx. kg / lbs
Corn version						
EMR 2-row RIGID [5]	1.90/6.20	1.60/5.20 / II	3	16	20/15	550 kg 1213 lbs
EMR 4-row RIGID [5]	3.30/10.80	3.00/9.80 / II	5	32	40/30	820 kg 1808 lbs
EMR 4-row HG [3]	3.00/9.80	3.00/9.80 / II	5	32	50/37	1080 kg 2380 lbs
EMR 6-row RIGID	4.70/15.40	4.40/14.40 / II	7	48	60/44	920 kg 2029 lbs
EMR 6-row HG [3]	3.00/9.80	4.40/14.40 / II	7	48	60/44	1180 kg 2602 lbs
EMR 8-row HG [3]	3.20/10.50	5.80/19.00 / II	9	64	80/59	1450 kg 3197 lbs
Potatoe version						
EKR 2-row RIGID [5]	1.90/6.20	1.60/5.20 / II	3	8	20/15	520 kg 1147 lbs
EKR 3-row RIGID [5]	2.50/8.20	2.30/7.50 / II	4	12	30/22	490 kg 1081 lbs
EKR 4-row RIGID	3.30/10.80	3.00/9.80 / II	5	16	40/30	750 kg 1654 lbs
EKR 4-row HG [3]	3.00/9.80	3.00/9.80 / II	5	16	50/37	1010 kg 2227 lbs
EKR 6-row RIGID	4.70/15.40	4.40/14.40 / II	7	24	60/44	800 kg 1764 lbs
EKR 6-row HG [3]	3.00/9.80	4.40/14.40 / II	7	24	60/44	1060 kg 2337 lbs
EKR 8-row HG [3]	3.20/10.50	5.80/19.00 / II	9	32	80/59	1450 kg 3197 lbs
EKR 12-row HG [4]	3.20/10.50	8.60/28.20 / II	13	48	140/103	2000 kg 4410 lbs

1) HP/kW figures only valid for basic equipment
2) Depending on row spacing - details on request or on order confirmation
3) Hydraulic folding - triple-frame
4) hydraulic retraction - double folding frame, folds to 3 m / 9.80 ft transport width with 4 air wheels 18x8.50 instead of upper link steering - Cat. II
5) With intermediate block - flanged wheels in the tractor track

STANDARD EQUIPMENT

- ✓ "Row distance infinitely adjustable between 60 / 23.6" and 75 cm / 29.53"
- ✓ Height-adjustable pre-loosening tine with wide sweeps per hoe element
- ✓ Robust, durable special profile-tube frame with high frame height
- ✓ Lower links guided on both sides
- ✓ Rear mounted machines with auto top link steering, spindle and high-gauge wheels
- ✓ Adjustable retraction support on each parallelogram
- ✓ Large-dimensioned, elongated, re-adjustable, reinforced parallelogram
- ✓ Farmflex-feeler-wheels adjustable through spindles, ball bearing mounted, ø 300 mm / 100 mm wide
- ✓ Active wear resistance of the heoing stars due to special material mixture
- ✓ Hoeing stars with angular roller bearing – individually removable

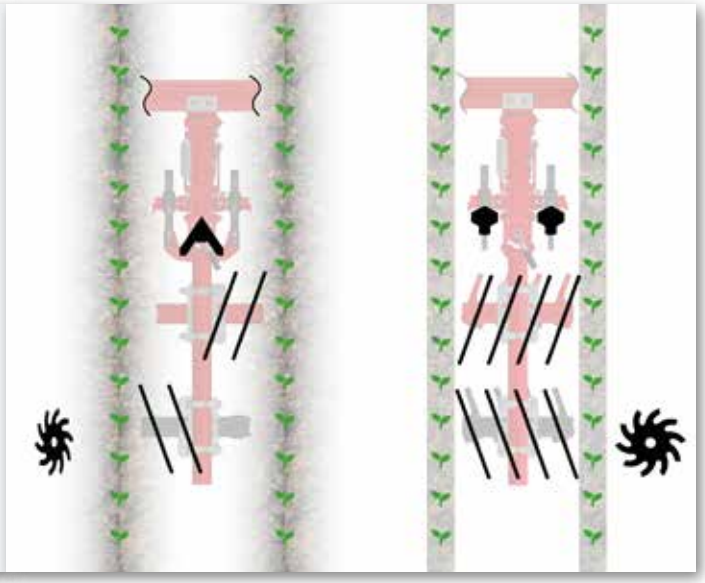
OPTIONS

- » Reinforced bearings for large scale farms and communities or when working in sandy soil
- » Protection shields or discs; Rotary hoe crop-protection-star
- » Front mounting support with steering support wheels
- » Guided hill-weeder with parallelogram and comb weeder (3 part)
- » Hydraulic manual steering with seat
- » Hydraulic parallelogram lifting system SECTION-CONTROL
- » Camera steering ROW-GUARD
- » Pneumatic seeding box P-BOX-STI
- » Pneumatic front tank JUMBO-SEED
- » Pneumatic liquid front tank JUMBO-STREAM
- » Warning signs with holder and LED-light

CONCEPT ROLLSTAR

CONCEPT

- Hoeing for row spacing up to 80 cm / 31.50" with roll-stars (rear-mount)
- E.g. for corn, potatoes, soybeans, field beans, beets,...
- Aggressive hoeing and crust breaking without clogging in fields with organic matter
- Corn-version: 8 stars (per row) and 2 S-tines
- Potatoe-version: 4 stars (per row) and 1 vibro-tine



HOEING WITH ROLL-STARS

To ensure hoeing without clogging, even in aggressive operation, the row cultivator can be equipped with ROLLSTAR-hoeing sections. It is developed for hoeing of hill crops, but it also can be used for field crops, if the row distance is wider than 40 cm / 15.70". Optional protection shields are responsible to protect the plants from spilling (especially in early crop stage). To break up the soil and to guarantee the stars can enter the soil easily, there are S-tines at the corn-version and vibro-tines at the potato-version of the ROLLSTAR element. Depending on the crop there are different setups of the hoeing-elementsavailable:

1. Field crops: corn, sunflowers, beets, soybeans, ...
2. Hill crops: potatoes, ...

WEAR-RESISTANT HOEING STARS

Because of the perfect choice of the material, the hoeing stars are extremely wear-resistant and they can stand many years of operation.

BEARING MOUNTED AND INDIVIDUALLY REMOVABLE

Each hoe star is equipped with an angular roller bearing (this increases the stability) and it is adjustable and individually removable.

RIDGER HILLSTAR

The HILLSTAR is a ridger for hill-crops with large, concave discs. These machines are used to push soil up in hill-crops. A pre-loosening tine breaks up the soil and the inclined discs transport the earth, pulled down by erosion, up the hill again. So a perfect maintenance of the hill-crops (e.g. potatoes) can be reached.

Due to the large smooth discs no hair roots of the crop close to the surface are harmed. The discs have high quality, maintenance free bearings and can be ideally adjusted in the angle. The optional guided hill-weeder (3 sections) additionally fights weeds.

Heaping causes regulation and burying of weeds!

Type	Transport width in m / ft [2]	Frame length in m/ft. mounting category	Tines	Hoe elements	from HP/KW [1]	Weight approx. kg / lbs
EHG 2-row RIGID [1]	1.65/5.20	1.60/5.20 / II	3	3	20/15	360 kg 793 lbs
EHG 4-row RIGID	3.00/9.80	3.00/9.80 / II	5	5	40/30	600 kg 1322 lbs
EHG 4-row HG [3]	2.80/9.20	3.00/9.80 / II	5	5	50/37	720 kg 1587 lbs
EHG 6-row RIGID	4.40/14.40	4.40/14.40 / II	7	7	60/44	850 kg 1873 lbs
EHG 6-row HG [3]	3.00/9.80	4.40/14.40 / II	7	7	60/44	980 kg 2160 lbs
EHG 8-row RIGID	5.80/32.20	5.80/32.20 / II	9	9	80/59	1040 kg 2292 lbs
EHG 8-row HG [3]	3.20/10.50	5.80/32.20 / II	9	9	80/59	1350 kg 2976 lbs
EHG 12-row HG [3, 5]	4.80/15.70	8.60/28.20 / II	13	13	120/88	1580 kg 3483 lbs
EHG 12-row HG [4]	3.00/9.80	8.60/28.20 / II	13	13	140/103	2100 kg 4629 lbs

1) HP/kW figures only valid for basic equipment
2) Depending on row spacing - details on request or on order confirmation
3) Hydraulic folding - triple-frame
4) hydraulic retraction - double folding frame, folds to 3 m / 9.80 ft transport width with 4 air wheels 18x8.50 instead ofupper link steering - Cat. II
5) 4 gauge wheels instead of upper-link steering
6) With intermediate block - flanged wheels in the tractor track

STANDARD EQUIPMENT

- ✓ Row distance infinitely adjustable between 65 / 25.59" and 70 cm / 27.56"
- ✓ Pre-loosening tine with sweep 180 mm per hoe element
- ✓ Robust, durable special profile-tube frame with high frame height
- ✓ Lower links guided on both sides
- ✓ Rear mounted machines with auto top link steering, spindle and high-gauge wheels
- ✓ Adjustable retraction support on each parallelogram
- ✓ Large-dimensioned, elongated, re-adjustable, reinforced parallelogram
- ✓ Farmflex-feeler-wheels adjustable through spindles, ball bearing mounted, ø 300 mm / 100 mm wide
- ✓ Entire hoeing element - with duckfoot sweep 180 mm and hilling double disc
- ✓ Half hoeing element - with duckfoot sweep 180 mm and single disc
- ✓ Separate depth adjustment of the hilling discs in a breadboard
- ✓ Hilling discs laterally adjustable
- ✓ Exact adjustment of the angle of the hilling discs

OPTIONS

- » Guided hill-weeder with parallelogram and comb weeder (3 part)
- » Hydraulic manual steering with seat
- » Hydraulic parallelogram lifting system SECTION-CONTROL
- » Camera steering ROW-GUARD
- » Pneumatic seeding box P-BOX-STI
- » Pneumatic front tank JUMBO-SEED
- » Pneumatic liquid front tank JUMBO-STREAM
- » Warning signs with holder and LED-light

CONCEPT HILLSTAR

CONCEPT

- Heaping element for hill-crops
- E.g. for potatoes, ...
- Row spacing: hill-crops up to 80 cm / 31.50"
- Equipped with 1 S-tine and two discs

ADJUSTABLE HILLING DISCS

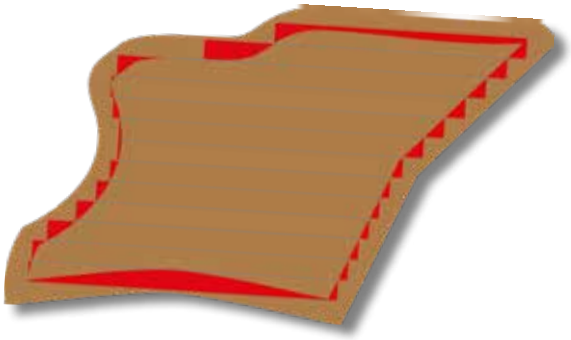
The hoe section of the HILLSTAR is equipped with big, concave discs so the soil can be pushed up in hill crops. For different hill shapes the discs can be adjusted in angle and height. The S-tine with duckfoot-sweep breaks the soil in front of the disc to get enough lose soil for maintaining the hills.

SECTION-CONTROL FOR ROW-CROP CULTIVATORS

CHOPSTAR 1-30 | 3-60 | 5-90 | 10-150 | TWIN | VERSO | HILLSTAR | ROLLSTAR

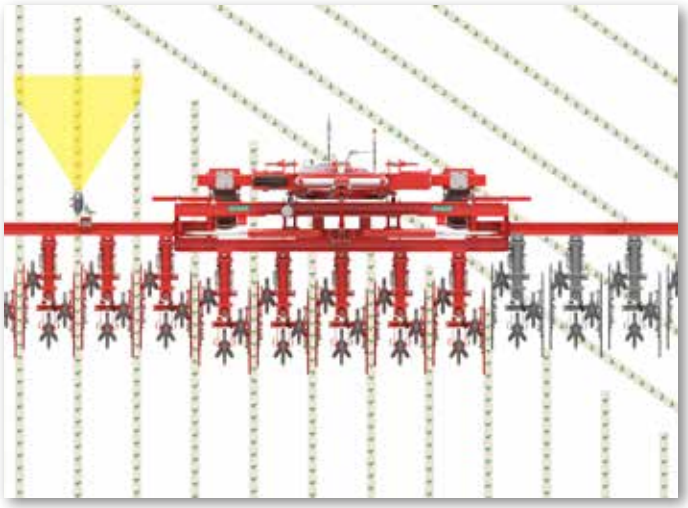
Section-Control – hydraulic lifting sections

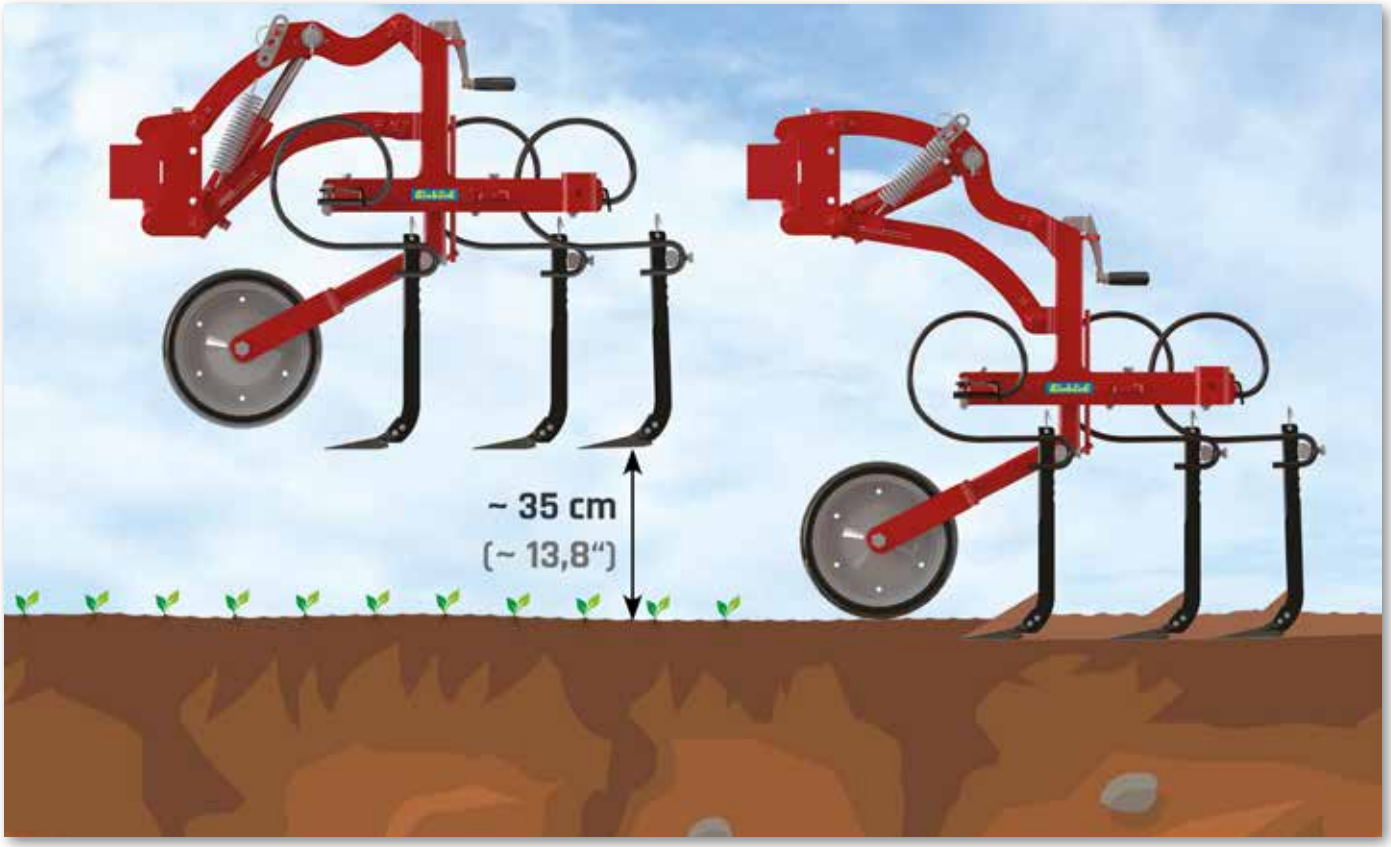
The hydraulic parallelogram lift has up to 35 cm / 13.80" lift height (depending on machine configuration and soil conditions) and is controllable by GPS or pressure switch.



Even with misshapen areas, nothing is hoed out at the headland. This option is especially recommended for contractors or farms with a lot of misshapen areas.

Hydraulic lifting is also possible for finger weeders.






Einböck

FINGER WEEDERS

CHOPSTAR 3-60 | 5-90 | 10-150 | TWIN | VERSO | ROLLSTAR

The finger weeders allow weeds to be pulled out and spilled between plants. They cannot be adjusted in angle to each other, as the fingers move parallel to the ground in the row of plants anyway when adjusted correctly. Finger weeders are also available for front machines

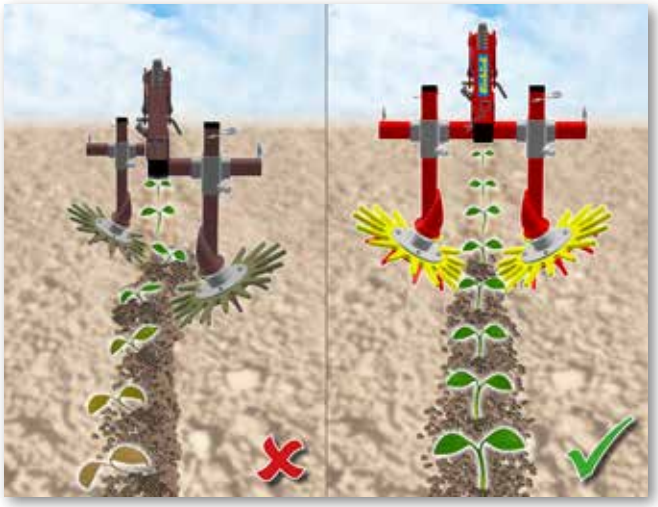
A spring-loaded holder ensures optimal and 100 % retraction of the finger weeders. This is necessary so that they can work perfectly even on crusty or uneven surfaces. There are three different designs of finger weeder hardness, depending on the crop and soil conditions.

A parallel arrangement as well as separate finger weeder holders per row are important for a clean working of the finger weeders. Especially with the CHOPSTAR-TWIN, a perfect working result is achieved, as the finger weeders can work the narrow, unworked hoeing belt cleanly and over the entire surface.

Finger weeder for double folding frames

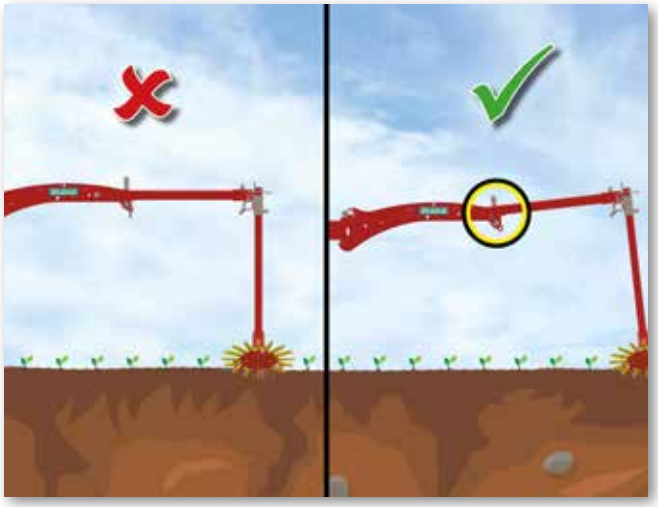
Special finger weeder holders are available to ensure that the transport width of machines with double folding is kept as narrow as possible despite the finger weeders. Like all Einböck finger weeders, these have a separate holder on which a parallelogram is mounted that guides the stars to the left and right of the row of plants. Despite the different design, they achieve the same perfect results as the standard holders.

You can find more info on setting the finger weeders in our "Organic Farming Handbook"!

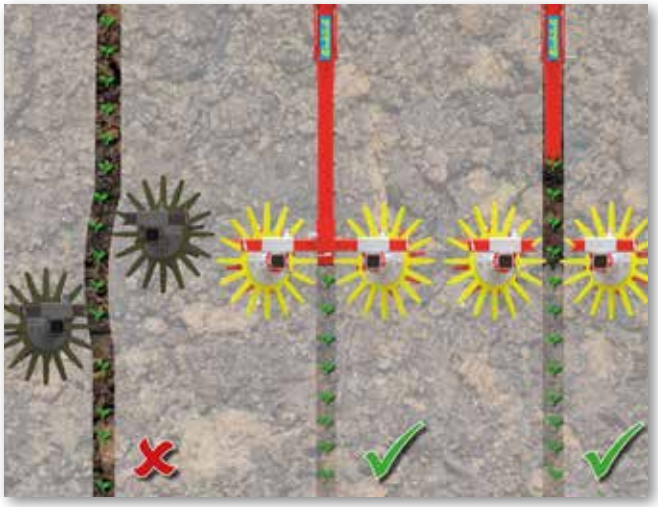


Finger weeders must be guided in parallel arrangement

Equal working depth of both finger weeders due to common extension arm



A preloaded spring ensures consistent working quality of the finger weeders



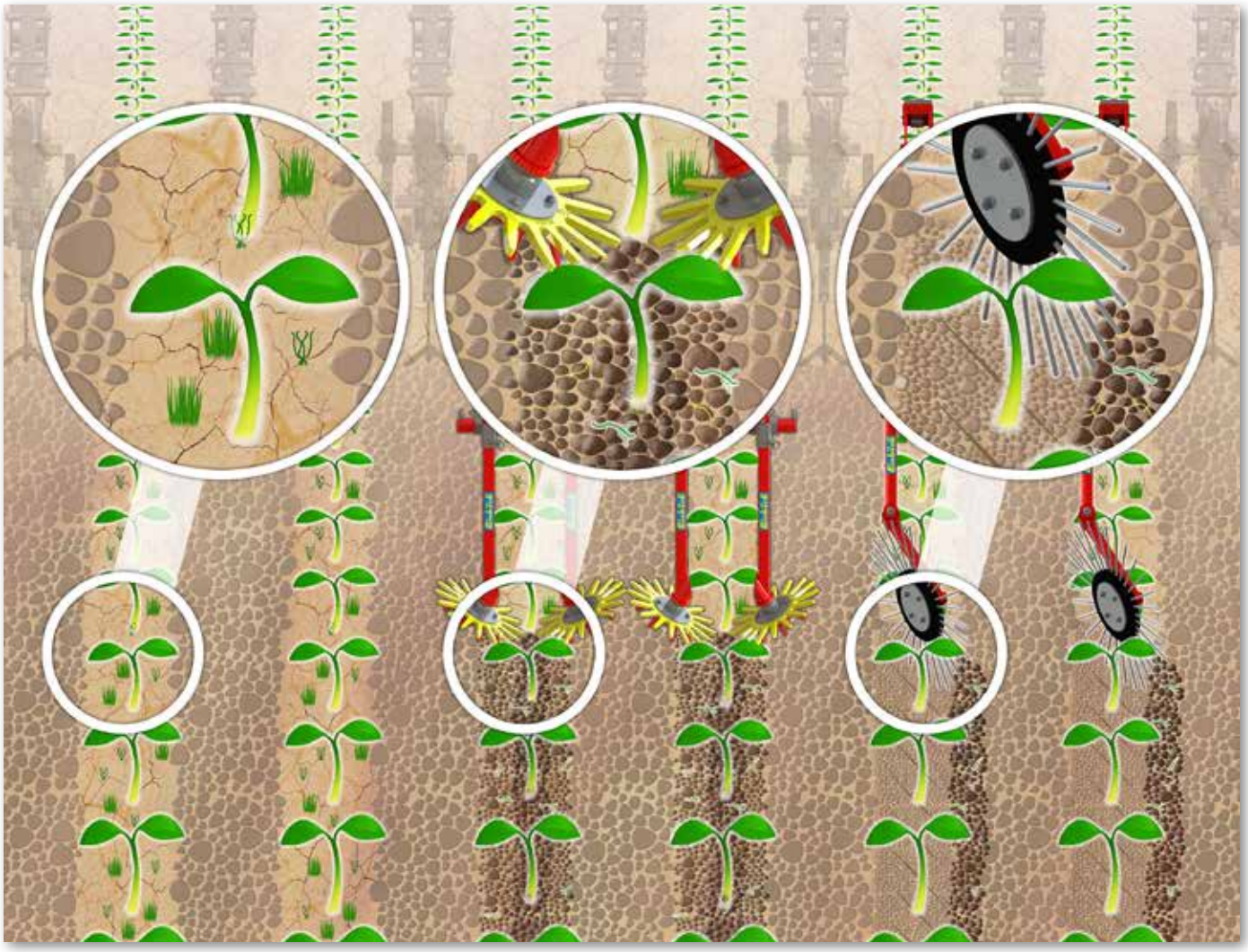
No sideshift of the plant row due to parallel arrangement

ROTATION WEEDER ELEMENT

CHOPSTAR 3-60 | 5-90 | 10-150 | TWIN | VERSO | ROLLSTAR

ROTATION WEEDER ELEMENT

Similar to the finger weeder the rotation weeder element works the unworked hoeing-strip close to / in the row. The rotating stars "comb" weeds out of the row. The rotation weeder element is used in mulch-till and fields with organic matter, because it works without clogging. The holder on which the rotative weeder element is mounted is the same as the one of the finger weeder. Therefore both options can be exchanged easily.

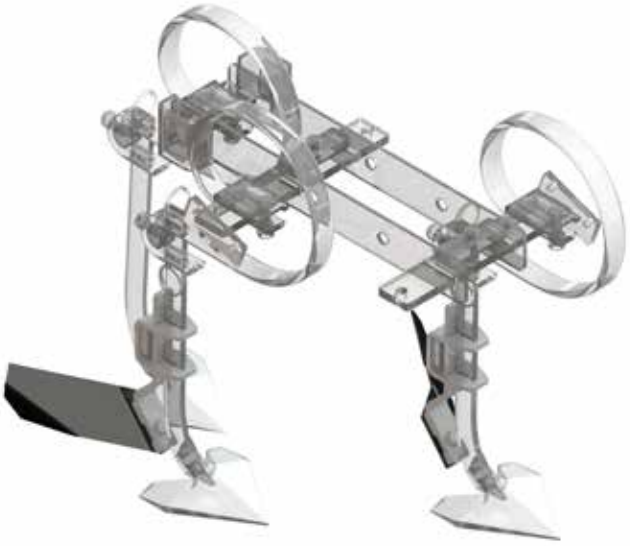


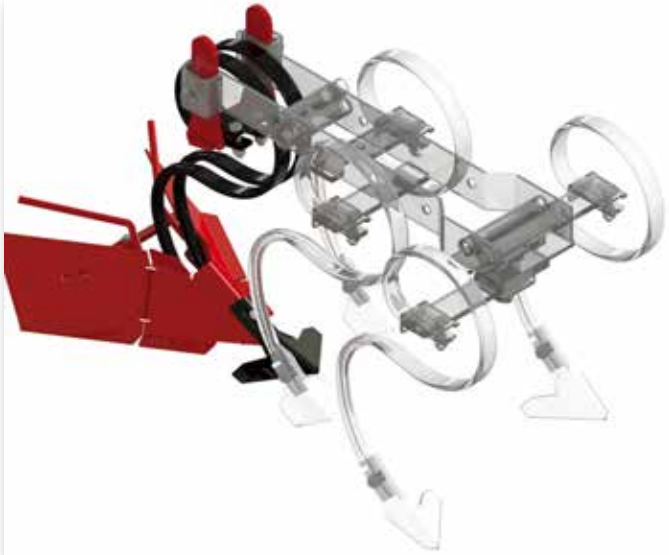
HEAPING ELEMENTS

CHOPSTAR 1-30 | 3-60 | 5-90 | 10-150 | VERSO

HEAPING SHARES FOR VIBRO-TINES

Heaping shares are used for hilling up plant rows in late crop stage (e.g. last use with soybeans). This strengthens the crop plant (and root) and buries weeds in the row.





HILLING ELEMENT

This hilling element can be mounted instead of the rear tine for aggressive hilling of the CHOPSTAR 5-90 to maintain potato hills or other hill crops.

HILLING DISCS

For some crops precise and effective hilling is necessary. This is possible with these hilling discs which can be very precisely adjusted. They cannot be combined with following weeder tines, rotative weeder elements or finger weeders.

TINES, SHARES & KNIVES

CHOPSTAR 1-30 | 3-60 | 5-90 | 10-150 | TWIN | VERSO | PRIME

WIDE RANGE OF DIFFERENT WIDTHS OF DUCKFOOT SWEEPS FOR THE VIBROTINES

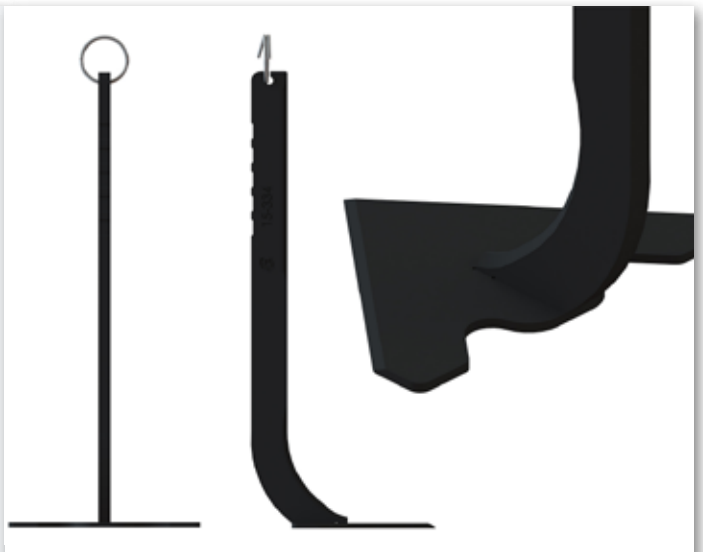
The flat position of the sweeps which can be mounted on the vibrotines, enables the machine to cut the full surface between the rows in a shallow working depth, which is important for effective weed control. According to the row distance, crop and consistency of the soil the vibrotines with **32x12 mm** (1.26" x 0.47") can be equipped with duckfoot sweeps in the widths of 80 up to 300 mm (3.14" up to 11.8"). To change the working depth easily the holders are equipped with slotted groves. The duckfoot sweeps are mounted with screws to the holders, which ensure a secure mounting, but nevertheless they can be changed quickly.

EINBÖCK-SPECIAL-VIBROTINES WITH DUCKFOOT SWEEPS

The flat position of the sweeps which are mounted on the vibrotines allows to cut the entire surface even at a shallow working depth, what is important for effective weed control. Duckfoot sweeps for the **40 x 12 mm** (1.57" x 0.47") vibrotines are available from 80 mm to 300 mm (3.14" x 11.8") width to meet different row spacings, crop and soil conditions.
Slotted grooves on all holders ensure easy adjustment of height position and working depth. The extremely wear-resistant duckfoot sweeps are mounted with a single bolt, what ensures a safe fixing, but they still can be replaced quickly.

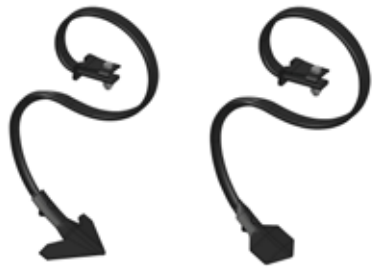
EINBÖCK-SPECIAL-ULTRAFLAT DUCKFOOT SWEEPS

To enable a clean and flat cut, extra flat Einböck special duckfoot sweeps with lowest possible earth movement are available as an additional option. These are offered in the following widths: 80 up to 220 mm (3.15 - 8.6")
They are available for the 30x10 mm (1.2x0.4") holder and can be mounted on the 32x12 mm (1.2x0.5") and 40x12 mm (1.6x0.5") vibro-tine.
Like all Einböck holders, they also have slotted grooves for easy adjustment of the working depth. This special-ultraflat duckfoot sweep is specially recommended for row-crop cultivators working in narrow row spacing, e.g. grain.



S-TINE

For deeper work there are S-tines with 100 mm or 180 mm (3.93" or 7.08") duckfoot sweeps instead of the standard vibrotines. (Standard CS 5-90)



CARBIDE METAL DUCKFOOT SWEEPS FOR S-TINE, VIBRO-TINE 32 X 12 MM / 1.2" X 0.5" AND VIBRO-TINE 40 X 12 MM / 1.6" X 0.5"

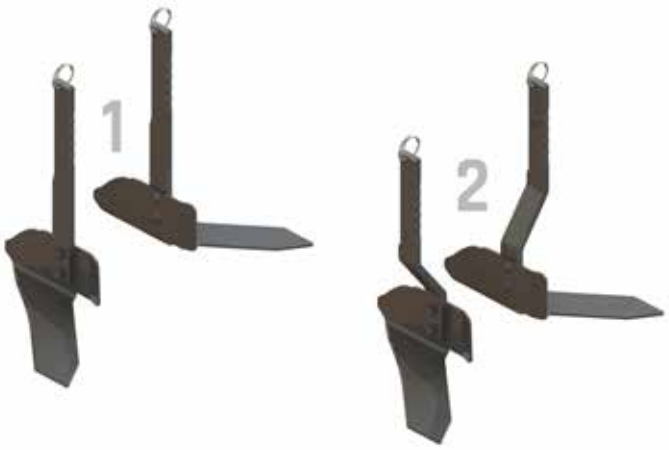
The screwed coupling is the same as for the standard sweeps. During processing the carbide tips or carbide plates are soldered to the special base bodies of the sweeps and then coated. The sweeps are 100 % compatible and adapted to all Einböck tines & holders - no tolerances and compromises in fitting accuracy.

Carbide metal sweeps offer the following advantages:

- Service life is significantly increased - especially in soil conditions with above-average wear
- Time saving due to not having to change sweeps
- Sweeps stay in their usual shape longer, thereby an exact cut and a good feed even in dry soil is achieved
- Less traction is required due to sharp sweep tips, and the sweeps are also self-sharpening thanks to the beaver tooth effect
- Especially recommended for contractors or big farms.

ANGLE KNIVES

Straight (1) or offset angle (2) knives are available on request. They are cutting the soil near the plant row and guide the earth flow away from the row. They cut weeds near the row, but minimise the risk of burying. The unworked hoeing-strip can be cleaned by accessories such as finger weeders or rotative weeder elements. Angle knives can be mounted on Einböck-special-vibrotines with duckfoot sweeps (40x12) and 35x11 holder and are offered in the following widths: 120 up to 200 mm (4.70" up to 7.90").



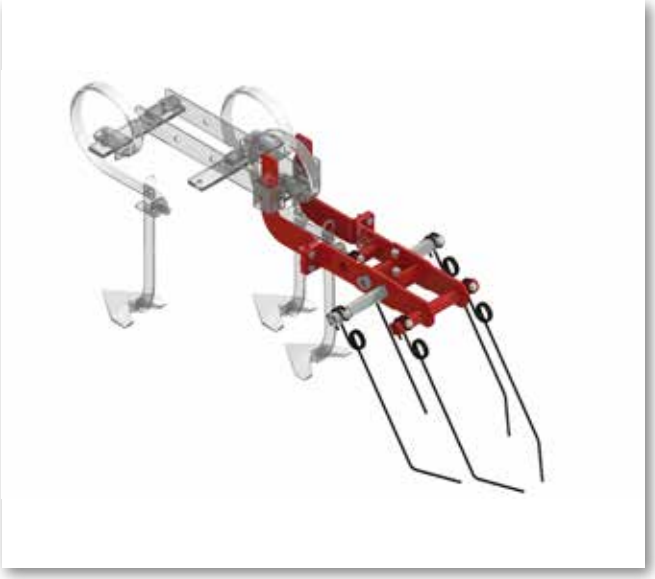
TRAILED WEEDER TINES

CHOPSTAR 1-30 | 3-60 | 5-90 | VERSO

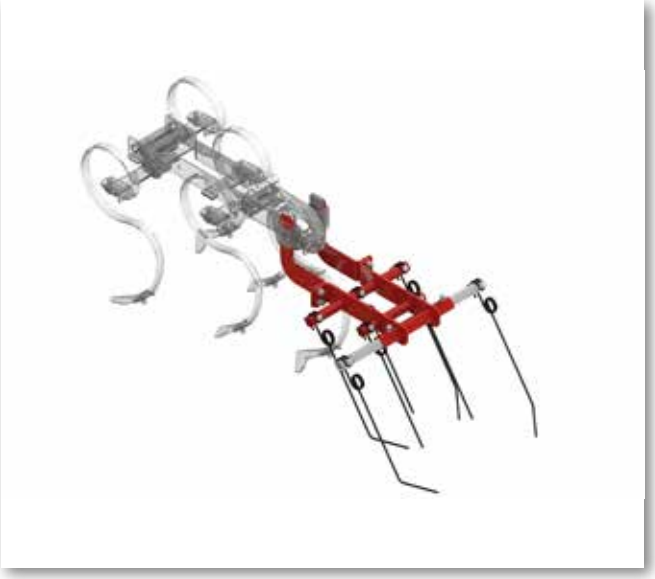
Adjustable weeder tines

Adjustable weeder tines can be mounted for pulling weeds to the surface and ensure they dry out. They clean the roots of the weeds from soil and the same time they slightly level the cultivated areas. The outer tines on the element can be exchanged to direct the earth flow either to or away from the crop row (principle of torsion hoe). This also enables a slight hilling effect.

CHOPSTAR 1-30



CHOPSTAR 3-60



CHOPSTAR 5-90

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 all hoeing models. 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.

Underseeding fixes nutrients, improves soil structure, builds up humus, protects against erosion, suppresses weeds and increases above- and below-ground biodiversity in the field.

PNEUMATIC FRONT TANK JUMBO-SEED

The combination of the pneumatic front tank JUMBO-SEED with a rear mounted machine such as the row-crop drill CHOPSTAR-SEEDER, row-crop cultivator CHOPSTAR or tined weeder AEROSTAR ensures ideal distribution of weight, therefore reduces ground pressure and saves time. The metering is carried out via up to 4 seeding units, which can be closed by sliders as required. This allows the front tank to be individually adapted to the required number of distribution plates or rows or to the working width of the rear unit.

The powerful hydraulic fan distributes fertilizer or seeds (such as grain, beans, rape, grass seed, catch crops, clovers, mixtures, etc.) to the rear of the tractor to the distribution heads, where they are split to the required number of outlets (depending on number of rows or working width). The seeding rate is controlled from the tractor via the STI control system and ensures a precise, uniform distribution.

Pneumatic front tank JUMBO-SEED

- Effective fertilizing or seeding
- Can be combined with various different rear implements
- Saves work steps & reduces soil compaction
- Four seeding units
- Perfect weight distribution

FRONT TANK JUMBO-STREAM

As much as necessary, as little as possible: that is the goal of modern "fusion farming". With the new JUMBO-STREAM front tank for liquids, we now offer further solutions for combined weed control. In combination with the proven CHOPSTAR row-crop cultivators, the new front tank enables efficient mechanical weed control, as well as simultaneous band spraying or fertilizing.
Accuracy of fit and 100% compatibility: When setting up and adapting the front tank to a wide variety of row-crop cultivators, we can count on our decades of experience as a hoeing technology specialist. Each JUMBO-STREAM front tank is individually adapted to the row-crop cultivator and configured accordingly, guaranteeing complete compatibility and operational reliability. The combination of JUMBO-STREAM and CHOPSTAR row-crop cultivator with the ROW-GUARD camera steering system results in a powerful and effective solution for weed control in row crops.

JUMBO-STREAM product features

- Front tank with 1100 l
- Hydraulic pump
- Intuitive ISOBUS handling
- Optional: SECTION-CONTROL single row control via ISOBUS and GPS
- Parking wheels for easy movement
- Cleaning the hoses with clear water directly from the tractor cab
- Level is measured electronically
- Optimized filling and cleaning of the tubes
- 2 x 65 l clean water tank for cleaning of tank and pumps, with rotation nozzle for internal cleaning of the tank, hand wash tank

EINBÖCK AT A GLANCE

"100 % made by EINBÖCK in AUSTRIA"

» **In-house development from the idea to serial production:** We have over 90 years of experience in designing agricultural machinery.

» **From users for users:** 75 % of our sales and product management team are farmers, so we develop practice-oriented, user-friendly machines and adjustment options. Our top priority is to provide the right machines and suitable product specifications.

» **Suppliers from the region and Central Europe:** Long-lasting relations with our suppliers ensure a consistent quality of raw materials and components, as well as supply reliability.

» **Manufacturing exclusively in Dorf an der Pram in Upper Austria:** Our high vertical range of manufacture guarantees the best quality and long working life. "100 % made by Einböck in Austria" ensures superior quality in all areas of production.

» **Practical trials of all machines on our own test fields:** Before prototypes are turned into serial production, they have to withstand extensive tests on fields and roads. This allows us to achieve absolute precision and reliability.

» **After-Sales-Service:** A decades-long supply of wear and spare parts ensures a maximum service life of the machines as well as direct and close contact with customers.

Einböck-values

» **Sustainability and environmental protection:** Environmentally friendly production of sustainable products

» **Consulting and service:** Sharing of acquired knowledge and first-class customer service

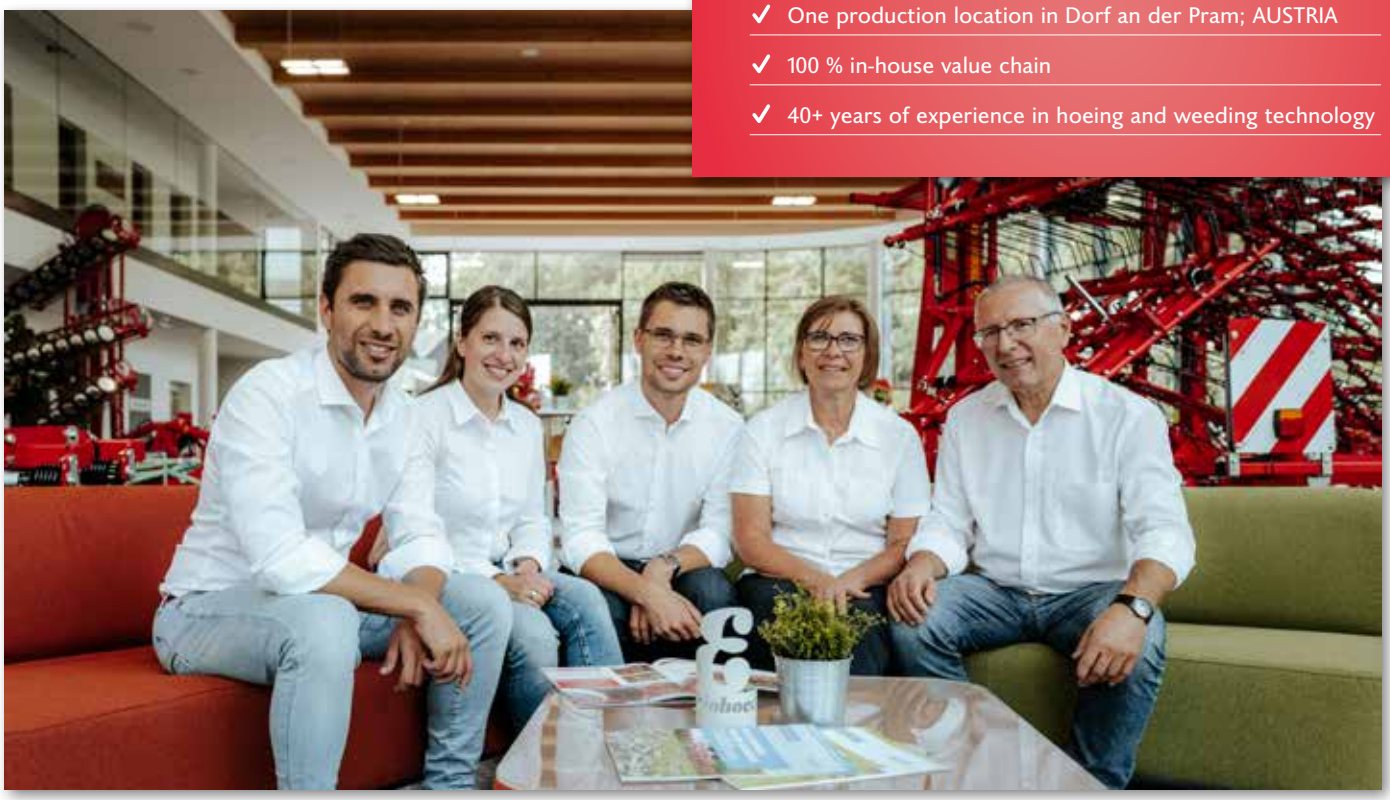
» **Reliability and quality:** Keeping promised delivery dates and selling high quality products

» **Honesty and loyalty:** Collaboration with customers, suppliers, employees, partners, dealers, etc. at eye level

Our goal is the production of market-oriented, user-friendly, innovative, environmentally friendly and high-quality products!

Family Einböck, management in 3rd & 4th generation

- ✓ Foundation 1934
- ✓ Owner-managed family business
- ✓ One production location in Dorf an der Pram; AUSTRIA
- ✓ 100 % in-house value chain
- ✓ 40+ years of experience in hoeing and weeding technology



WWW.EINBOECK.EU

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

TILLAGE

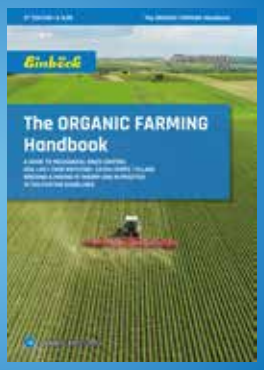
- » **Seedbed cultivator** VIBROSTAR
- » **Blade cultivator** TAIFUN
- » **Universal cultivator** HURRICANE
- » **Seedbed combination** EXTREM

ROTARY HOE ROTARYSTAR

- » Break crusts
- » Regulate weeds
- » Aerate soil

ORGANIC FARMING

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



EINBÖCK

Einböck GmbH
Schatzdorf 7
4751 Dorf an der Pram
Austria

+43 7764 6466 0
+43 7764 6466-390
info@einboeck.at