Due to the specially designed frame with high quality working tools an excellent intense mixing of the seedbed is achieved. Rough crumbling above and light soil below in combination with a good reconsolidation through the serrated crumbler provides excellent germination conditions with an optimal seed deposit.

The seedbed combination EXTREM is predominantly used for seedbed preparation in light or heavy soil after ploughing, depending on the tool equipment.

The „harrow-harrow“-combination is very well suited for heavy, wet and sticky soil conditions without stones. Two harrow-sections are mounted one behind the other, the front of the sections hang on chains.

The seedbed combination STANDARD, which is available without or with a 1-row serrated crumbler, is mostly used for towing.

The EXTREM is not suitable for the seedbed preparation of wintergreen vegetation areas nor for mixing in liquid manure nor for eliminating couch grass. For these kinds of tasks please refer to our VIBROSTAR and TAIFUN brochures!

**Standard equipment EXTREM**

2 ZW = Serrated crumbler ø 320 mm and 280 mm
2 FZ = Flat rod crumbler ø 380 mm and Serrated crumbler ø 320 mm
2 E = Harrow section instead of crumbler

Frame protected against vibrations with rubber suspension of the sections and crumblers
Working depth parallel adjustable via breadboard
Closed, compact steel-tube frame
Lower link bolts guided on both sides
Lower link and top link are provided with hardened wear-resistant bushings
Double-acting hydr. cylinders for folding
Hydr. lock block for fixing in transport position
Side wings adjustable – rigid or floating
Mounting category II + III
Screwed crumbler axles
Ball bearing mounted crumblers
Parking support
Transport width 3 m
Holder for track loosener and levelling plate
Operating instructions

**Optional equipment EXTREM**

Spring mounted track loosener
Track loosener with 70 mm duckfoot sweep
Arable harrow tine section with a line spacing of 40 mm instead of 48 mm
Side plate left and right
Trailed weeder tines 1-row ø 8 mm
Spring mounted levelling plate (spring mounted not possible with 2E), height and „dragging“ or „on hold“ adjustable
Warning signs with holder and lights
The increasingly precarious cost and labour situation of farmers requires equipment that is highly efficient and flexible and still yields top results. In seedbed preparation, mounted, trailed or semi-trailed machines are of great importance next to the PTO-driven machinery in all areas of secondary soil cultivation for grain, rape, potatoes and other row crops as well.

Neither the weather nor fertiliser or chemicals can undo damage caused by mistakes in seedbed preparation. Well-planned cultivation will get the soil into a state of mellowness which will best activate the mineral fertiliser. Neglecting field preparation can result in a massive increase in weeds leading to crop loss of 20% and more. Thus correct soil preparation is essential to create the best possible environment for the seeds to be planted and to supply enough nutrients and space for roots and micro-organisms.

Cultivation equipment should therefore provide
- a levelling of the surface
- adequate penetration of the working tools
- loosening and crumbling
- closing and reconsolidating the soil
GETTING JOY OUT OF SOIL PREPARATION

Only a perfect seedbed results in high yields. Therefore a precise setting of the machine is necessary.
The working depth is parallel adjustable in a breadboard.

**SIMPLY STRONG**

**INNOVATIVE, RELIABLE TECHNOLOGY**

EXTREM in **transport position**

The lower and top lift links are equipped with hardened bushings and the lower links are guided on both sides.

Also the **levelling plate** must be adapted exactly to the soil conditions: It is height-adjustable with a bolt. The integrated adjustment settings (‘drag’ or ‘grip’) will cause it to squash the clods, level the surface and even out the tractor tracks. The tools run very smoothly and the working depth remains exactly the same. The levelling plate is a useful tool especially for springtime seedbed preparation. A shear-off bolt protects it from overload.

The spring-suspended **track looseners** can be adjusted simply to the track width. In order not to bring too much soil moisture to the surface they shouldn’t be set too deep.

The **safety track looseners** are protected against overload with a pressure spring and feature a 70 mm duckfoot share as standard equipment. Recommended for stony soil.

The **working depth** is parallel adjustable in a breadboard.
SMOOTH RUNNING
FOR AN OPTIMAL SEEDBED

A hydraulic lock block enables a rigid setting of the side wings. This ensures an optimal levelling.

The side wings are adjustable from rigid to floating upwards via a pawl. The side wings are floating downwards, when a fastening is removed.

The frame is very well protected against vibrations via rubber suspensions of the sections and crumblers.

Technical data EXTREM

<table>
<thead>
<tr>
<th>Type</th>
<th>Weight approx. kg</th>
<th>Working width in cm</th>
<th>Sections</th>
<th>hp/kW</th>
<th>Line spacing mm/tines</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXTREM 400 E-2ZW</td>
<td>1.785</td>
<td>380</td>
<td>4</td>
<td>90/66</td>
<td>48/80</td>
</tr>
<tr>
<td>EXTREM 400 E-2FZ</td>
<td>1.785</td>
<td>380</td>
<td>4</td>
<td>90/66</td>
<td>48/80</td>
</tr>
<tr>
<td>EXTREM 400 G-2ZW</td>
<td>1.785</td>
<td>380</td>
<td>4</td>
<td>90/66</td>
<td>64/60</td>
</tr>
<tr>
<td>EXTREM 400 G-2FZ</td>
<td>1.785</td>
<td>380</td>
<td>4</td>
<td>90/66</td>
<td>64/60</td>
</tr>
<tr>
<td>EXTREM 400 2E3</td>
<td>1.785</td>
<td>380</td>
<td>8</td>
<td>90/66</td>
<td>48/160</td>
</tr>
<tr>
<td>EXTREM 400 KS-2FZ</td>
<td>1.785</td>
<td>380</td>
<td>4</td>
<td>90/66</td>
<td>105/36</td>
</tr>
<tr>
<td>EXTREM 500 E-2ZW</td>
<td>1.975</td>
<td>480</td>
<td>4</td>
<td>110/81</td>
<td>48/98</td>
</tr>
<tr>
<td>EXTREM 500 E-2FZ</td>
<td>1.975</td>
<td>480</td>
<td>4</td>
<td>110/81</td>
<td>48/98</td>
</tr>
<tr>
<td>EXTREM 500 G-2ZW</td>
<td>1.975</td>
<td>480</td>
<td>4</td>
<td>110/81</td>
<td>64/76</td>
</tr>
<tr>
<td>EXTREM 500 G-2FZ</td>
<td>1.975</td>
<td>480</td>
<td>4</td>
<td>110/81</td>
<td>64/76</td>
</tr>
<tr>
<td>EXTREM 500 2E3</td>
<td>1.975</td>
<td>480</td>
<td>8</td>
<td>110/81</td>
<td>48/196</td>
</tr>
<tr>
<td>EXTREM 500 KS-2FZ</td>
<td>1.975</td>
<td>480</td>
<td>4</td>
<td>110/81</td>
<td>105/46</td>
</tr>
<tr>
<td>EXTREM 600 E-2ZW</td>
<td>2.165</td>
<td>580</td>
<td>4</td>
<td>140/103</td>
<td>48/120</td>
</tr>
<tr>
<td>EXTREM 600 E-2FZ</td>
<td>2.165</td>
<td>580</td>
<td>4</td>
<td>140/103</td>
<td>48/120</td>
</tr>
<tr>
<td>EXTREM 600 G-2ZW</td>
<td>2.165</td>
<td>580</td>
<td>4</td>
<td>140/103</td>
<td>64/92</td>
</tr>
<tr>
<td>EXTREM 600 G-2FZ</td>
<td>2.165</td>
<td>580</td>
<td>4</td>
<td>140/103</td>
<td>64/92</td>
</tr>
<tr>
<td>EXTREM 600 2E3</td>
<td>2.165</td>
<td>580</td>
<td>8</td>
<td>140/103</td>
<td>48/240</td>
</tr>
<tr>
<td>EXTREM 600 KS-2FZ</td>
<td>2.165</td>
<td>580</td>
<td>4</td>
<td>140/103</td>
<td>105/56</td>
</tr>
<tr>
<td>EXTREM 700 E-2ZW</td>
<td>2.740</td>
<td>680</td>
<td>6</td>
<td>170/125</td>
<td>48/136</td>
</tr>
<tr>
<td>EXTREM 700 E-2FZ</td>
<td>2.740</td>
<td>680</td>
<td>6</td>
<td>170/125</td>
<td>48/136</td>
</tr>
<tr>
<td>EXTREM 700 G-2ZW</td>
<td>2.740</td>
<td>680</td>
<td>6</td>
<td>170/125</td>
<td>64/106</td>
</tr>
<tr>
<td>EXTREM 700 G-2FZ</td>
<td>2.740</td>
<td>680</td>
<td>6</td>
<td>170/125</td>
<td>64/106</td>
</tr>
<tr>
<td>EXTREM 700 2E3</td>
<td>2.740</td>
<td>680</td>
<td>12</td>
<td>170/125</td>
<td>48/272</td>
</tr>
<tr>
<td>EXTREM 700 KS-2FZ</td>
<td>2.740</td>
<td>680</td>
<td>6</td>
<td>170/125</td>
<td>105/64</td>
</tr>
<tr>
<td>EXTREM 800 E-2ZW</td>
<td>2.990</td>
<td>780</td>
<td>6</td>
<td>200/147</td>
<td>48/158</td>
</tr>
<tr>
<td>EXTREM 800 E-2FZ</td>
<td>2.990</td>
<td>780</td>
<td>6</td>
<td>200/147</td>
<td>48/158</td>
</tr>
<tr>
<td>EXTREM 800 G-2ZW</td>
<td>2.990</td>
<td>780</td>
<td>6</td>
<td>200/147</td>
<td>64/122</td>
</tr>
<tr>
<td>EXTREM 800 G-2FZ</td>
<td>2.990</td>
<td>780</td>
<td>6</td>
<td>200/147</td>
<td>64/122</td>
</tr>
<tr>
<td>EXTREM 800 2E3</td>
<td>2.990</td>
<td>780</td>
<td>12</td>
<td>200/147</td>
<td>48/316</td>
</tr>
<tr>
<td>EXTREM 800 KS-2FZ</td>
<td>2.990</td>
<td>780</td>
<td>6</td>
<td>200/147</td>
<td>105/74</td>
</tr>
</tbody>
</table>

1. E = Arable harrow tine section
2. G = Mini seedbed tine section
3. 2E = 2x arable harrow tine section
4. KS = Special tine section
5. 2ZW = Serrated crumbler ø 320 mm and ø 280 mm
6. 2FZ = Flat rod crumbler ø 380 mm and serrated crumbler ø 320 mm
MODERN
SEEDBED PREPARATION
KNOW-HOW RESULTS IN SUCCESS

- Robust, closed profile frame with favourable centre of gravity, for a long product lifetime
- Low traction point for good penetration of the working tools as well as constant tool guidance
- Perfect traction force and lifting capacity transmission due to support of attachment bracket towards the back
- Optimal penetration even in heavy soil and exact control of working depth
- All bearings are lubricable and strongly stressed parts equipped with wear-resistant bushings
- Hydraulic folding, so no lateral swing will develop during transport; transport width always under 3.00 m
- The right working tool for every soil type and soil consistence
- Best crumbling with serrated crumbler
**E-2ZW**  
**Arable harrow tine section + Serrated crumbler ø 320 mm and ø 280 mm**

Arable harrow tine section, 5-rows, fix mounted, height adjustable  
+ little serrated crumblers for heavy soils and good crumblling

![Arable harrow tine section](image)

**G-2ZW**  
**Mini seedbed tine section + Serrated crumbler ø 320 mm und ø 280 mm**

Mini seedbed tine section, 5-rows, fix mounted, height adjustable  
+ little serrated crumblers for medium soils

![Mini seedbed tine section](image)

**2E**  
**2x Arable harrow tine sections**

Two arable harrow tine sections, 5-rows, front mounted on chains, rear guided,  
for heavy, sticky soils without stones up to a working depth of 8 cm

![2x Arable harrow tine sections](image)
**THE RIGHT COMBINATION FOR A SUPERIOR PERFORMANCE**

**E-2FZ** *Arable harrow tine section + Flat rod crumbler ø 380 mm and Serrated crumbler ø 320 mm*

Arable harrow tine section, 5-rows, fix mounted, height adjustable + big flat rod and serrated crumbler for medium soils, flat rod crumbler ensures high load capacity

![E-2FZ](image1)

**G-2FZ** *Mini seedbed tine section + Flat rod crumbler ø 380 mm and Serrated crumbler ø 320 mm*

Mini seedbed tine section, 5-rows, fix mounted, height adjustable + big flat rod and serrated crumbler für light to sandy soils, flat rod crumbler ensures high load capacity

![G-2FZ](image2)

**KS-2FZ** *Special straight tine section + Flat rod crumbler ø 380 mm and Serrated crumbler ø 320 mm*

Special tine section, straight, 4-rows, fix mounted, height adjustable + big flat rod and serrated crumbler higher clearance, deeper working, light harvest residues possible

![KS-2FZ](image3)
Seedbed combination **STANDARD** with 1-row serrated crumbler and turned sections with arable harrow tines (for towing) hung in robust frame construction.

On the **STANDARD** seedbed combination with a working width of 3.90 m to 4.90 m the side wings will be **locked mechanically with a bolt**.

All **STANDARD** models are foldable to a transport width of under 3 m.

---

**Serial equipment STANDARD**

- Arable harrow tine section, turnable, (= version for stony soil)
- Lower lift links guided on both sides from 4.9 m working width
- Lower and top lift links are equipped with hardened bushings
- Mounting category CAT II until 4.90 m / II + III from 5.80 m
- Optional crumbler ø 280 mm
- Pressure bar for pushing down the sections
- Screwed crumbler axles
- Parking support
- Transport width 2.2 m - 2.9 m
- Holding device for track loosener and levelling plate
- Operating instructions

**Optional equipment STANDARD**

- Spring mounted track loosener
- Levelling plate adjustable "dragging" or "on hold"
- Safety board on both sides
- Warning signs with holder and lights

---

**Technical data STANDARD**

<table>
<thead>
<tr>
<th>Type, Working width in cm</th>
<th>Sections</th>
<th>hp/kW</th>
<th>Line spacing mm /Tines</th>
<th>Weight approx. kg</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STANDARD 390</strong></td>
<td>4</td>
<td>75/55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arable harrow tine sections, without crumbler</td>
<td>48/80</td>
<td>580</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arable harrow tine sections, 1-row crumbler ø 280 mm</td>
<td>48/80</td>
<td>770</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>STANDARD 490</strong></td>
<td>4</td>
<td>95/70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arable harrow tine sections, without crumbler</td>
<td>48/100</td>
<td>700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arable harrow tine sections, 1-row crumbler ø 280 mm</td>
<td>48/100</td>
<td>930</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>STANDARD 590</strong></td>
<td>6</td>
<td>115/85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arable harrow tine sections, without crumbler</td>
<td>48/120</td>
<td>1,020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arable harrow tine sections, 1-row crumbler ø 280 mm</td>
<td>48/120</td>
<td>1,290</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Requires double-acting hyrd. remote, final position lock on the hydr. cylinder
2 no quick coupling bar

Technical data and specifications are approximate and without obligation. Construction and design are subject to change.
On the STANDARD seedbed combination the harrow section is turnable, as the STANDARD will be used predominantly for towing.

Dimension of tines:
- Square 20x20 mm with M16
- Clearance 220 mm

This inexpensive yet robust arable harrow tine combination with simple hyd. folding (tines show to the outside) is designed for tractors from 75 to 115 hp. The STANDARD has been doing a very good job for years especially in towing.
Related brochures

- TAIFUN - Universal fine cultivator
- VIBROSTAR - Universal seedbed combination