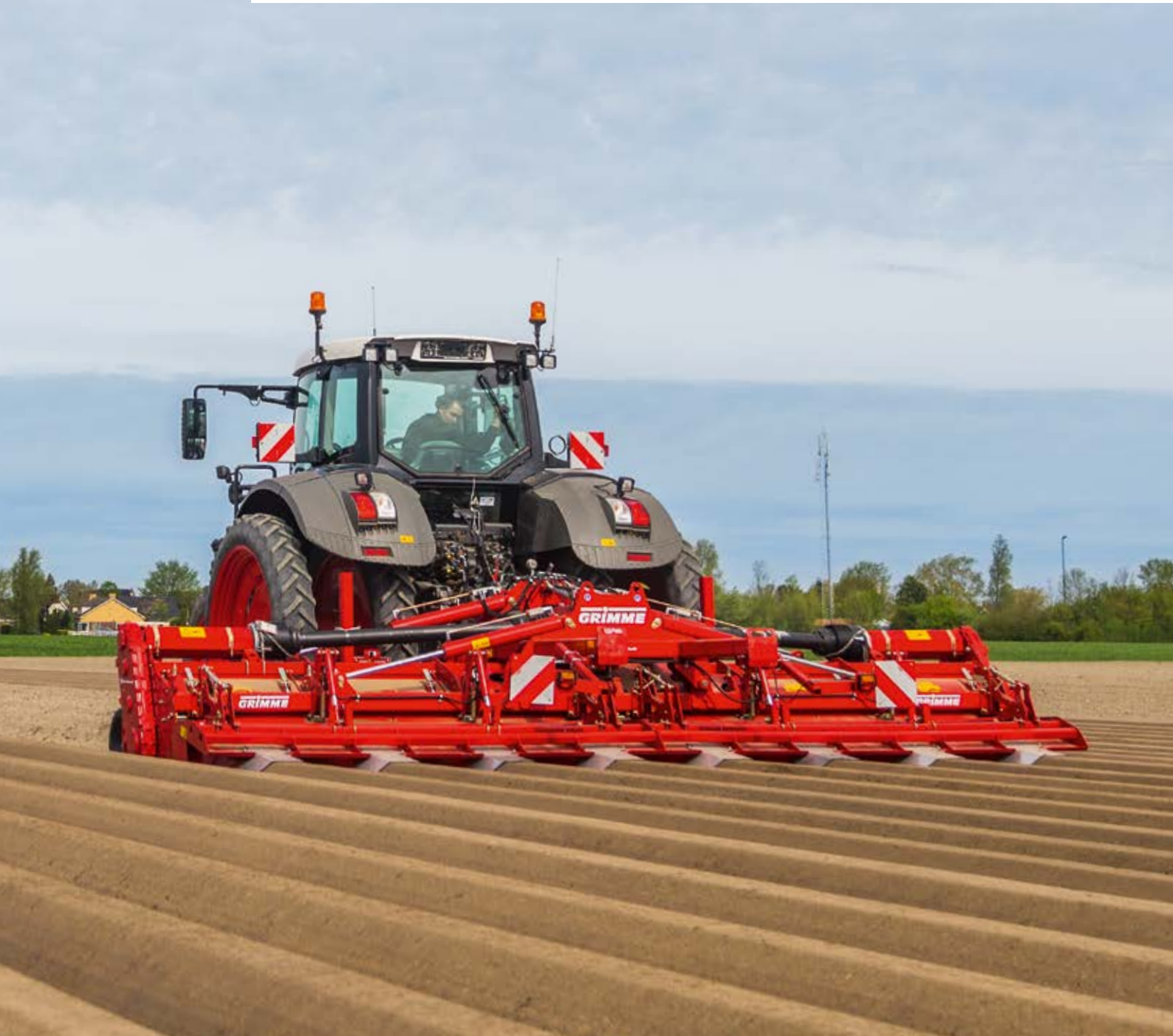
POTATO TECHNOLOGY
BEET TECHNOLOGY
VEGETABLE TECHNOLOGY

GRIMME

Machinery for active tillage

Full width rotary hillers and standard rotary hillers
to cultivate medium and heavy soils



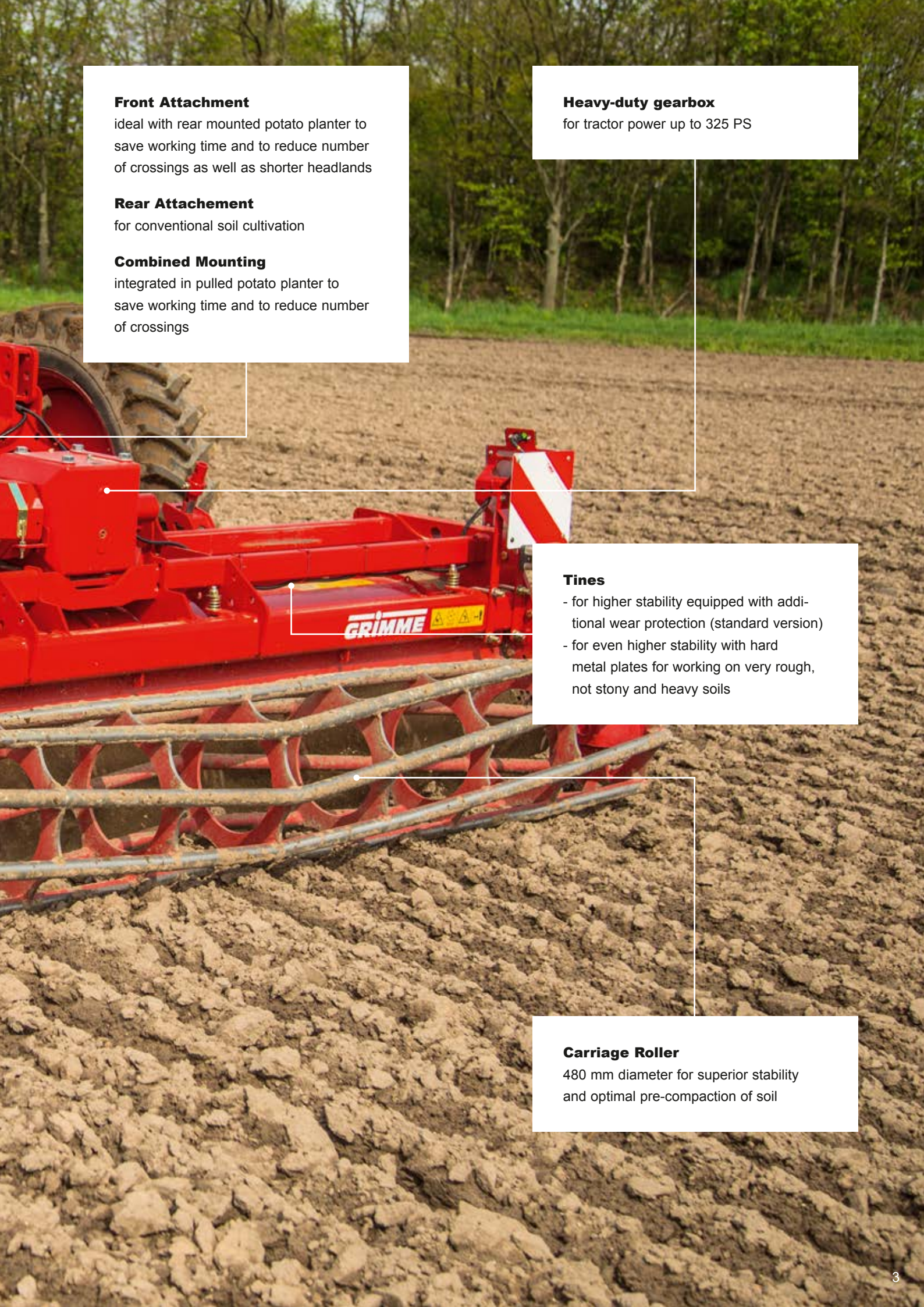
Full-width tiller GR

Special features at a glance:

Drive shaft with cam shut-down coupling
provides a low-wear overload protection, even with multiple triggering by stones or trash

Soil Retention plate
for pre-shaping ridges during use at tractor front to avoid compaction of the loose soil by the following tractor wheels

Smaller rotor diameter
for less power requirement compared to traditonal rotary hillers



Front Attachment
ideal with rear mounted potato planter to save working time and to reduce number of crossings as well as shorter headlands

Rear Attachement
for conventional soil cultivation

Combined Mounting
integrated in pulled potato planter to save working time and to reduce number of crossings

Heavy-duty gearbox
for tractor power up to 325 PS

Tines
- for higher stability equipped with additional wear protection (standard version)
- for even higher stability with hard metal plates for working on very rough, not stony and heavy soils

Carriage Roller
480 mm diameter for superior stability and optimal pre-compaction of soil

Variable use

Full-width tiller GR 300

The GR 300 front attachment (1), is ideally suited to be combined with a trailed 4-row potato planter. Convenient especially for short headlands and smaller acreage, a compact tractor implement combination is available for these requirements. The use of the GR 300 combined with a trailed potato planter (2) enables the handling of multitask processes in one crossing: Soil cultivation, fertilizing, crop protection, planting and ridge shaping (5-in-1). Due to a higher bunker capacity this combination is especially suited for bigger fields. Fat tires offer highest-possible ground compaction protection. The 4-row potato planter GL 420 Exacta (3) is a compact, mounted version including soil cultivation. Since the machine comes without tires, no more soil compaction develops between the rows.

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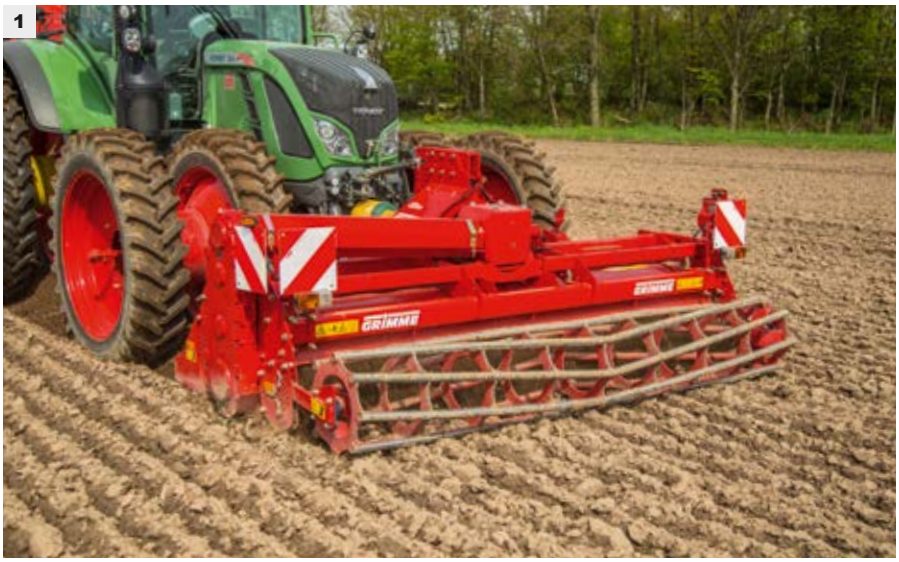

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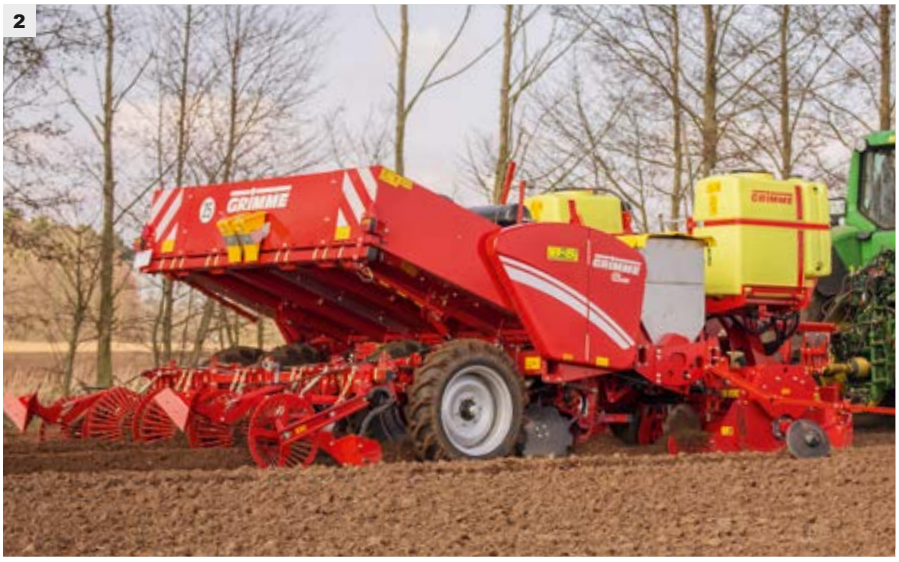

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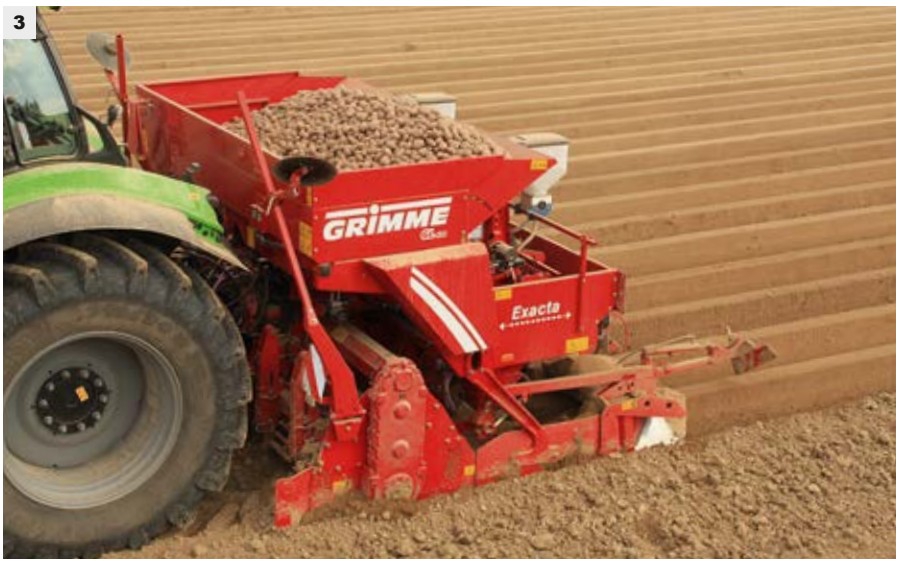
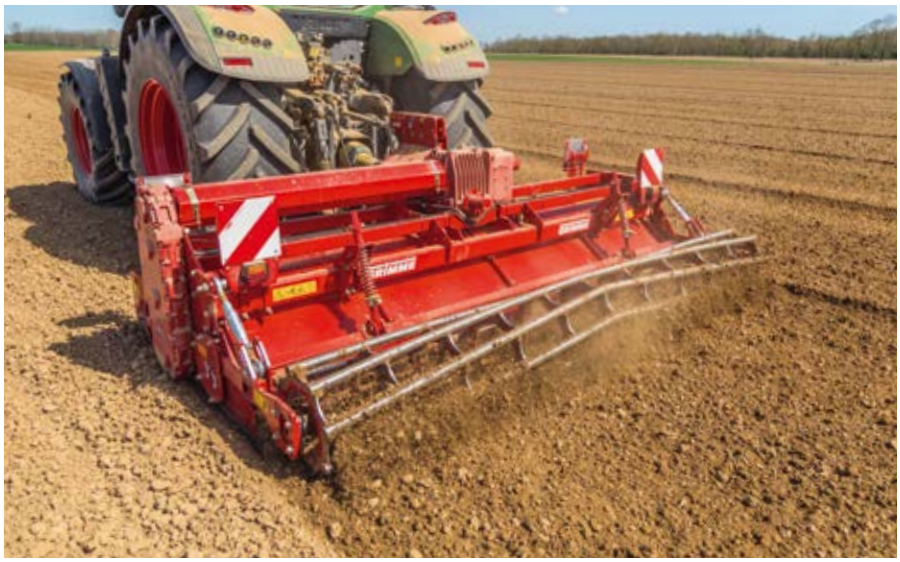
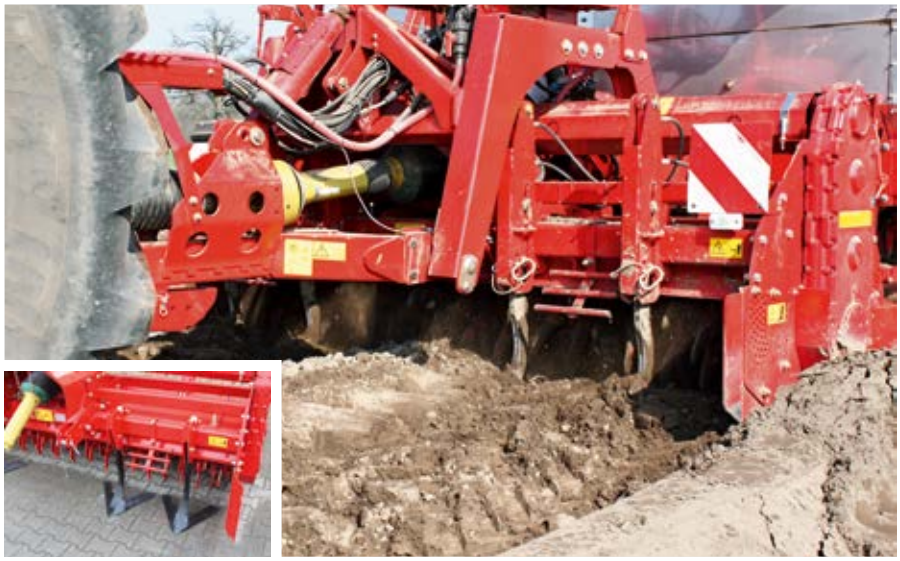




Variable use

GR 300 rear-mounted

The GR 300 may be also conventionally used as a rear-mounted rotary tiller for crushing clods and trash as well as for the inversion of grassland.



Fuel economy

Loosening tines

Available as an option, loosening tines behind the tractor track can be included in order to reduce the power demand of the rotary tiller.

Smooth-running and low precompaction

Carriage roller 480 mm

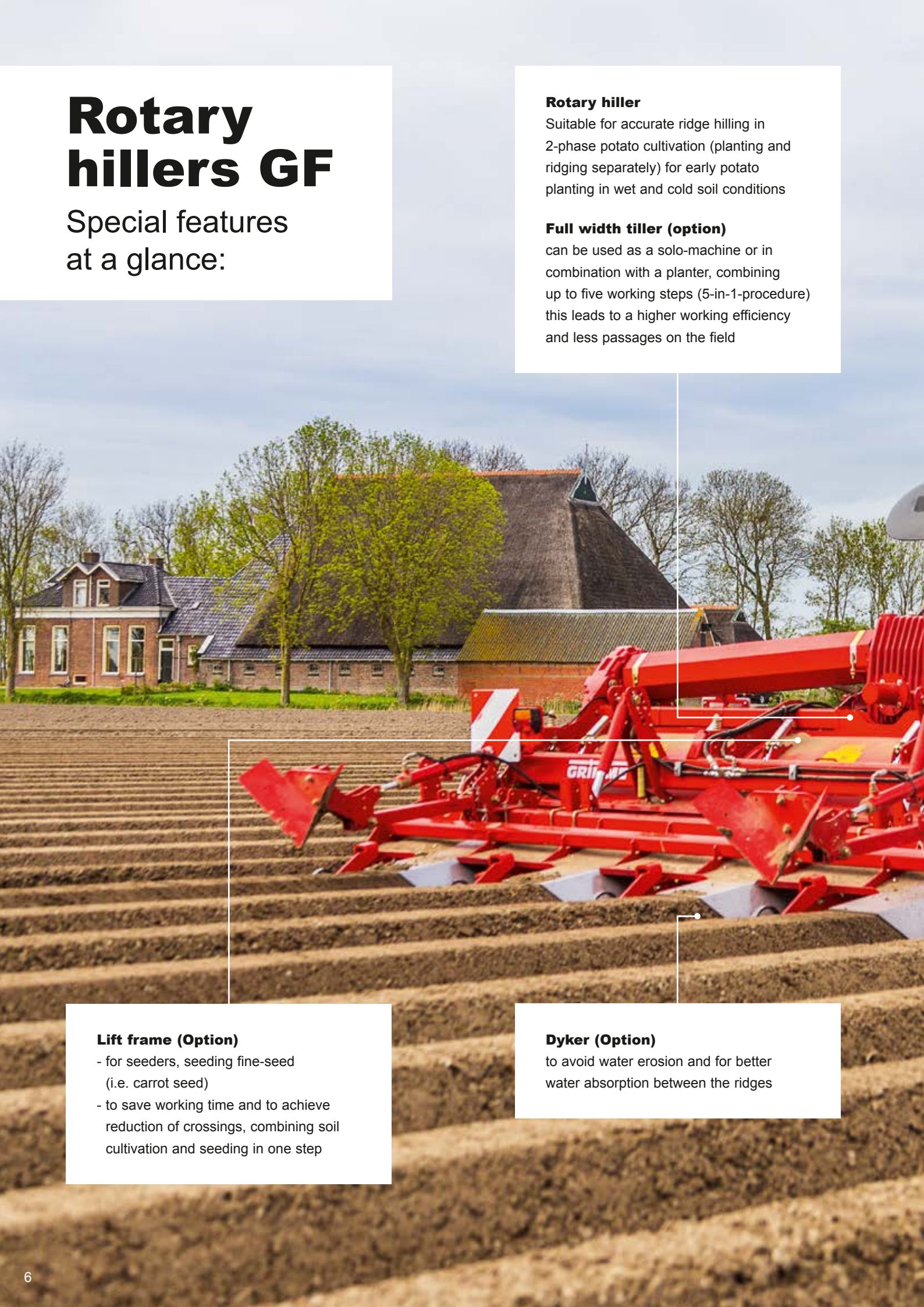
The large diameter carriage roller (480 mm) ensures high stability, low pre-compaction and a smooth low resistance rolling over the soil.

Rotary hillers GF

Special features at a glance:

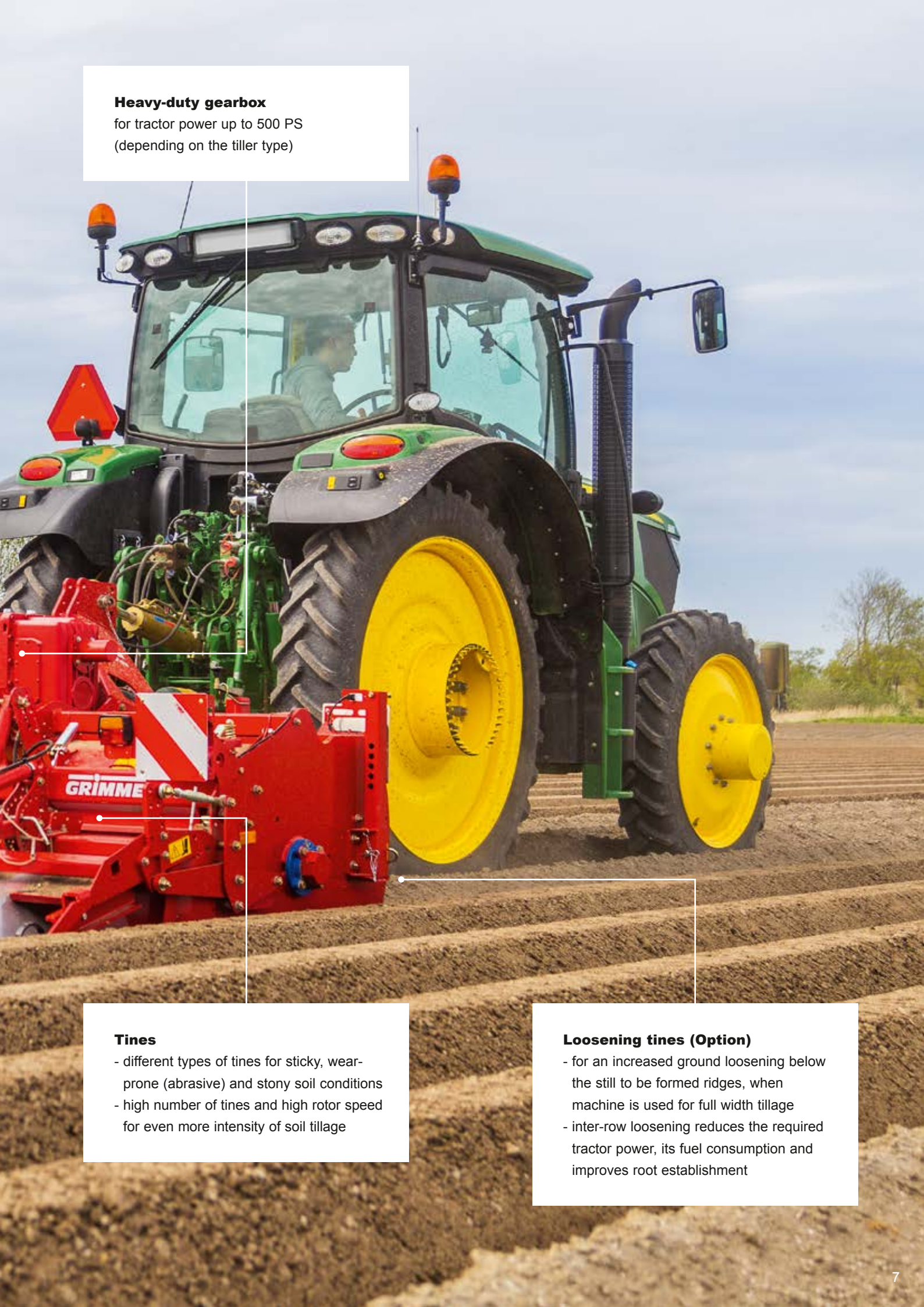
Rotary hiller
Suitable for accurate ridge hilling in 2-phase potato cultivation (planting and ridging separately) for early potato planting in wet and cold soil conditions

Full width tiller (option)
can be used as a solo-machine or in combination with a planter, combining up to five working steps (5-in-1-procedure) this leads to a higher working efficiency and less passages on the field



Lift frame (Option)
- for seeders, seeding fine-seed (i.e. carrot seed)
- to save working time and to achieve reduction of crossings, combining soil cultivation and seeding in one step

Dyker (Option)
to avoid water erosion and for better water absorption between the ridges



Heavy-duty gearbox
for tractor power up to 500 PS
(depending on the tiller type)

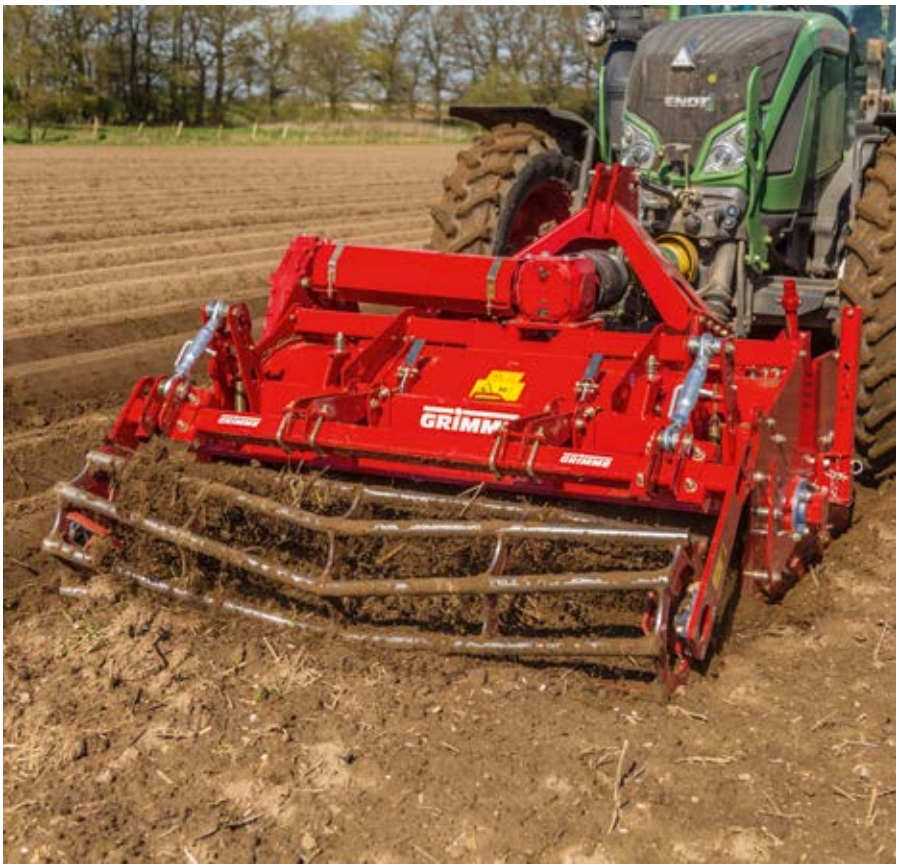
Tines
- different types of tines for sticky, wear-prone (abrasive) and stony soil conditions
- high number of tines and high rotor speed for even more intensity of soil tillage

Loosening tines (Option)
- for an increased ground loosening below the still to be formed ridges, when machine is used for full width tillage
- inter-row loosening reduces the required tractor power, its fuel consumption and improves root establishment

Cultivating and planting in a single pass

Rotary tiller GF 200 – front mounted

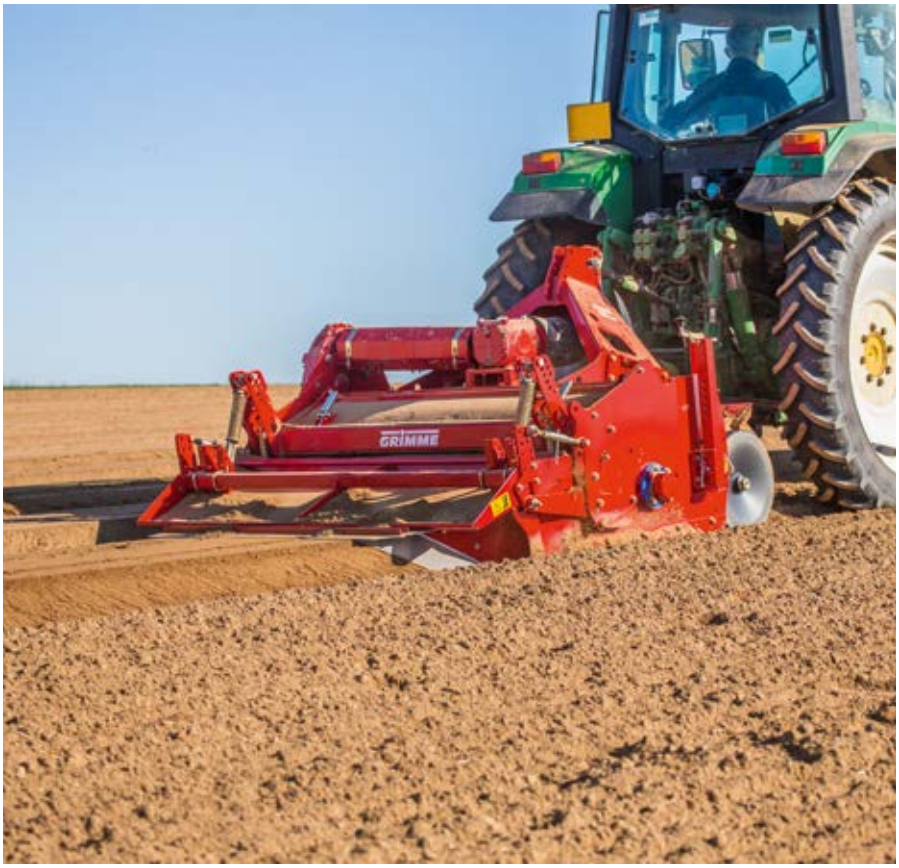
The front mounted rotary tiller GF 200 is used to prepare soils with a high amount of clods. Its main use is in combination with a 2-row potato planter. In this way it is possible to realise an economic planting and cultivation in a single pass.



Rear attachment – flexible use and operation

Rotary Hiller GF 200

The rear-mounted GF 200 is a 2-row rotary tiller with a working width of 1.50 m or 1.80 m, which is normally used as a rotary hiller. Optionally, it can be equipped with clamps and tines for full width tillage in conventional row growing or for bed-cultivated potato growing.



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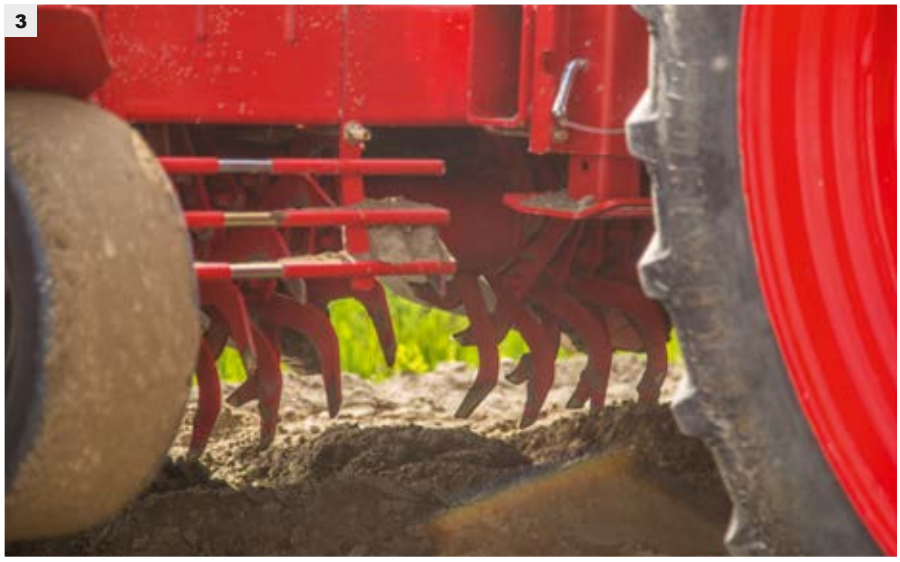

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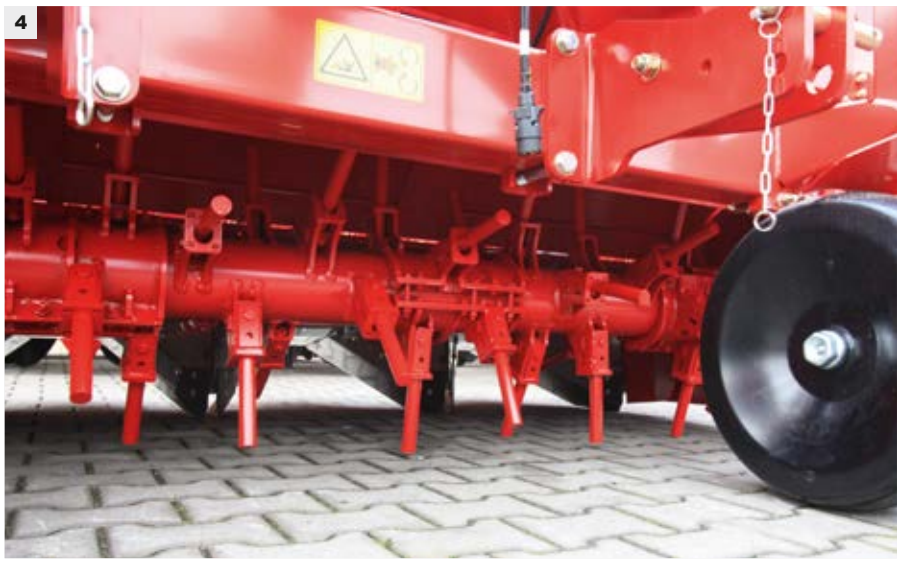


Suitable tines for every type of soil

Tines

There are tines available for all fields of application and requirements – make your choice.

Tines (1) with surface-treatment (hardened) belong to the standard equipment of all Grimme rotary tillers. They have additional wear protection for extended utilisation periods.

Hard metal tines (2) have a highly wear-resistant coating, so-called widia plates, that are vacuum-soldered. They are not suitable for stony conditions.

There are narrow tines (3) available, if amount of tines needs to be increased. The higher amount of tines is recommended for heavy and sticky soils to get a fine crumbled structure.

Spikes (4) are especially designed for soils with high content of stones and stones up to fist-size (> 5 cm). The spikes are easy to replace, because they are fastened by a single screw.

Great variety of equipment

Rotary Hiller GF 400

The 4-row rotary hiller GF 400 is designed and developed for various purposes. It can be used as a solo-machine for conventional rotary hilling (1) as well as for full width tilling (2) and the third alternative is the use in combination with a 4-row potato planter (3). In the case, that the machine combination of tiller and planter shall be used as a “5-in-1 combination”, the tiller is equipped with a heavy-duty three-point linkage, incl. steel grip to attach the planter behind the tiller. Main benefits of this combination are:

- Use of the machine as a solo-machine for hilling and full-width tilling, independently from the use of the planter.

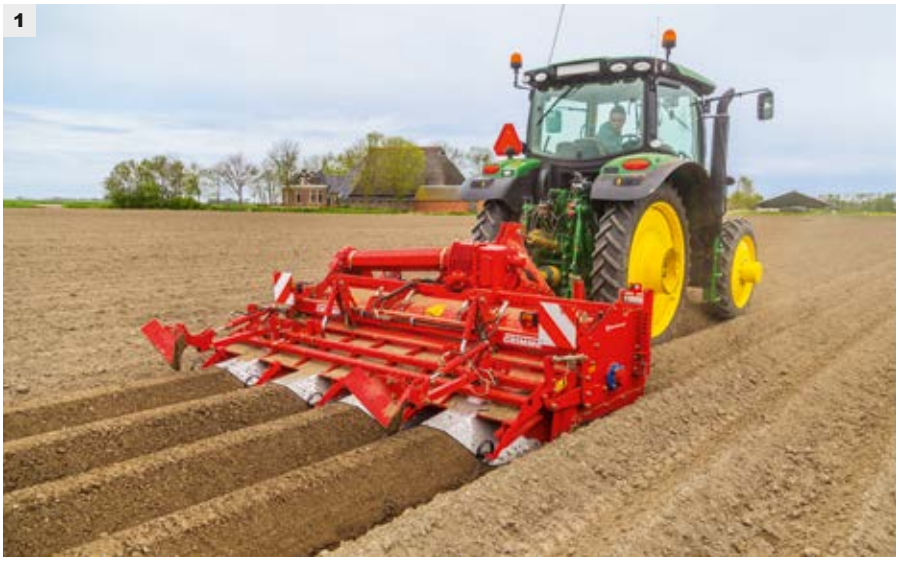
- Separate use of the planter without any soil cultivation.

- Permission for road transport in Germany.

- A single pass for several working steps – that leads to a reduction of working time and fuel.

- A single pass reduces soil compaction

1



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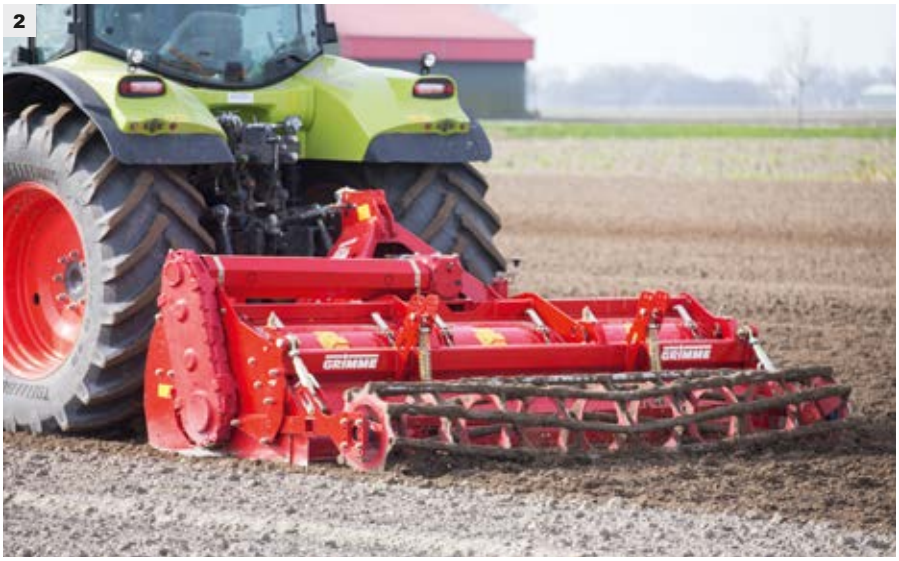

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Up to 500 HP tractor power

Drive

Drive line and rotor shaft are available in different versions for a tractor power of up to 500 HP (365 kW). Beside the “standard” rotor shaft, which is suitable for both full width tilling and rotary hilling, a second rotor shaft is optionally available with welded tine brackets over the whole width, for very hard soil conditions.

High stability on slopes and perfect hilling

Stabiliser discs

Stabiliser discs, which are mounted at the rear side of the rotary tiller ensure an exactly centered guidance, even on slopes. This reduces the risk of having green potatoes or a damaged tuber-nest.

Combination with seeders

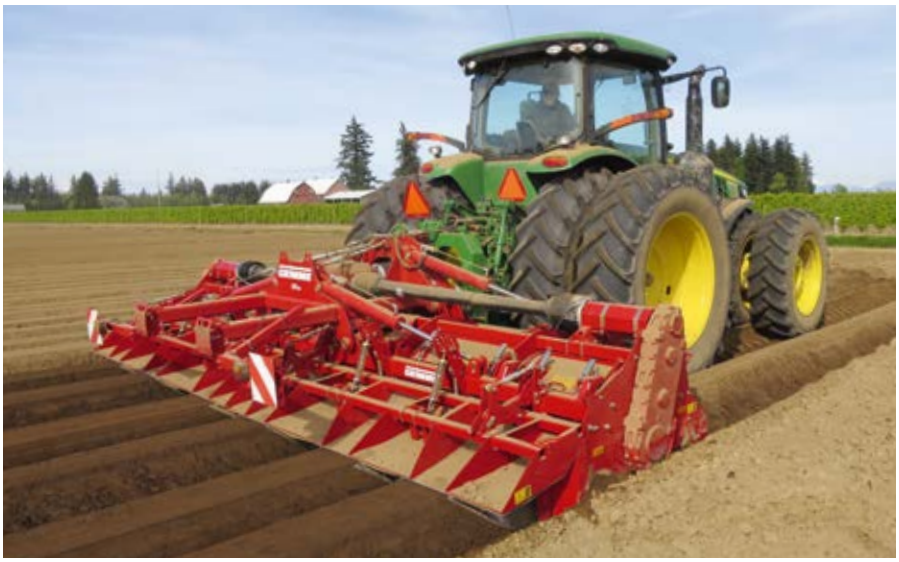
Lift frame

Seeders with a total weight of up to 1 t can be attached. Especially for growers of carrots there are additional, hydraulically driven ridge pressure rollers available, which can be mounted behind the machine. Row widths of 50, 60 and 75 cm are available.

Operation under any conditions

Rotary Hiller GF 600

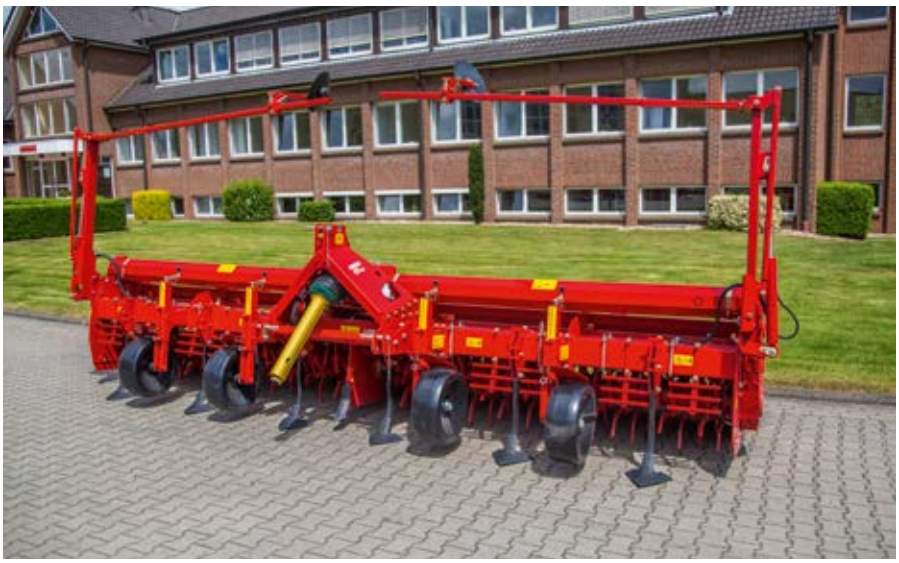
The GF 600 is a 6-row rotary hiller for potato ridges. Optionally it can be used as a full width tiller for conventional soil cultivation or as a machine for pre-hilling of potato ridges. Pre-hilled ridges contribute to warm up the soil faster. An optimised soil structure for planting and growing potatoes is prepared. Ridge shaping can be realised in several sizes. Due to the fact, that the machine is hydraulically foldable for road transport (option), an easy and fast transfer from field to field is possible.

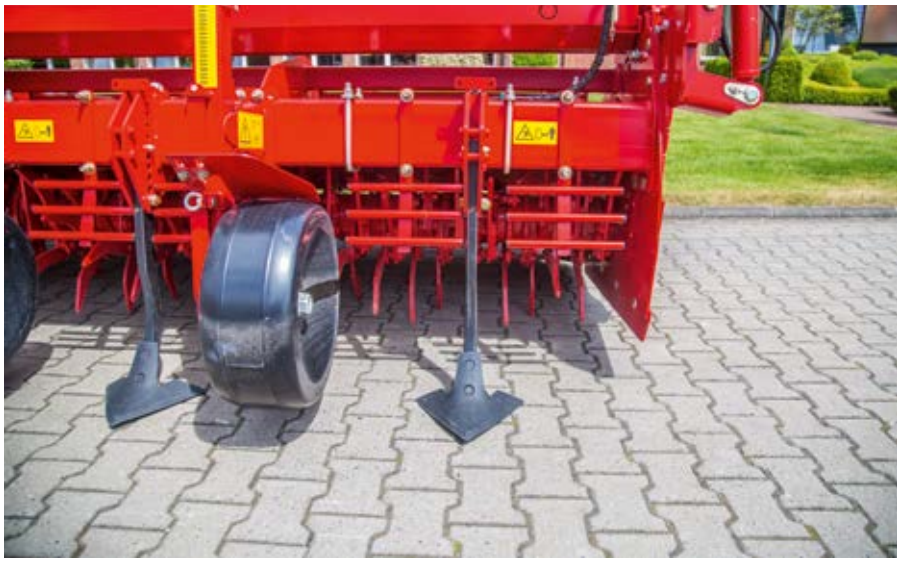


Low empty weight

Fixed frame

Using a fixed, non-foldable frame the empty weight of the GF 600 can be reduced by around 500 kg. For a secure road transport an end tow kit is available (option).

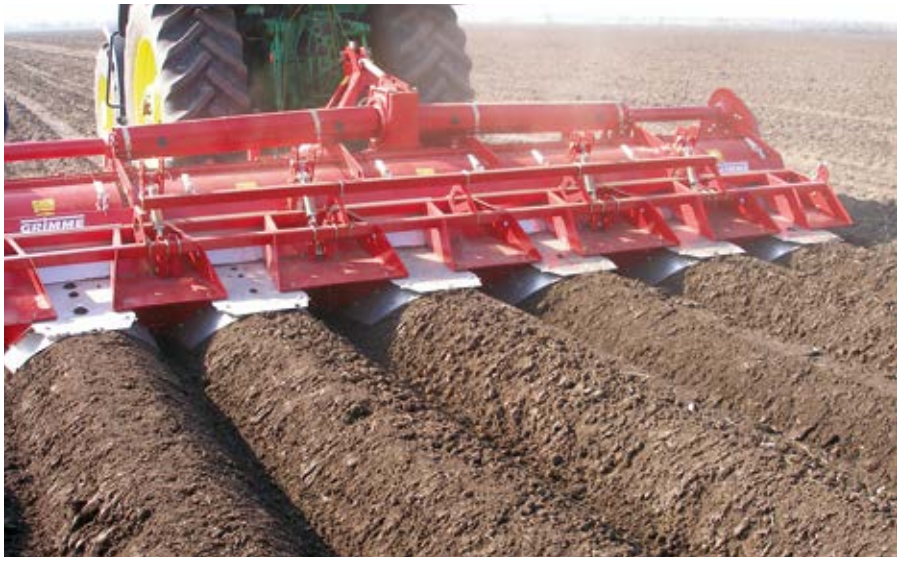




Improved root growth

Loosening tines, in front of the machine

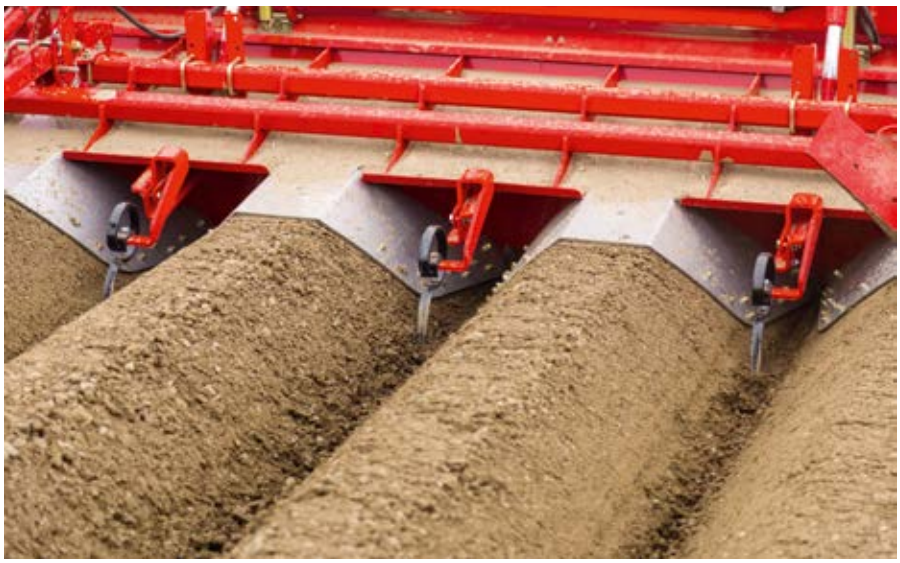
For an improved and deep root growth, there are strip-tilling loosening tines available (option), to work below ridges, when the machine is used as a full-width tiller.



Extended service life

Open-top shaping board

In order to be able to hill up ridges in emerged crop, there are open-top shaping boards available (option). Using insertable plates, these open-top shaping boards can also be closed (see picture).



Improved water absorption

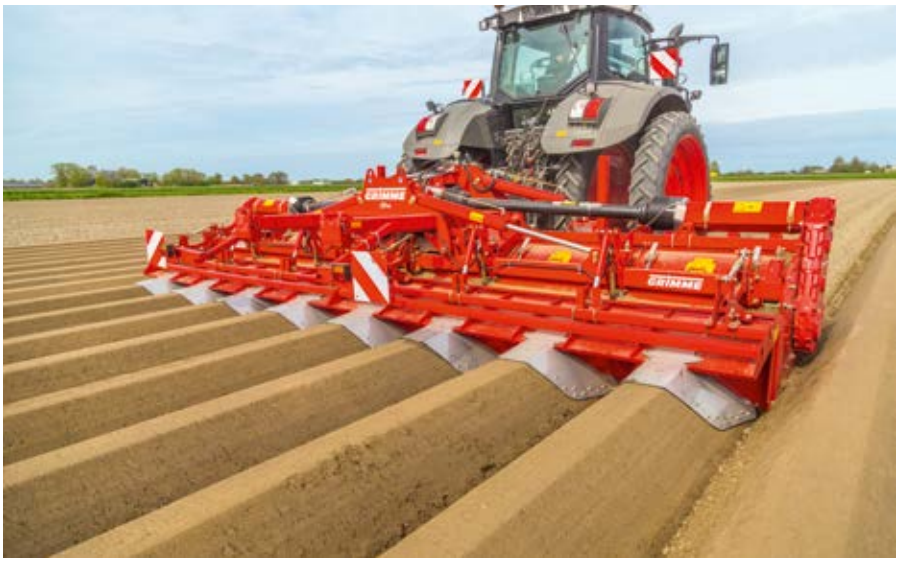
Loosening tines, rear of the machine

Fixed or spring loaded loosening tines behind the shaping board (see picture) are used to loosen the soil between the ridges, thus an improved drainage and absorption of water is realised.

Highest acreage performance

Rotary Hiller GF 800

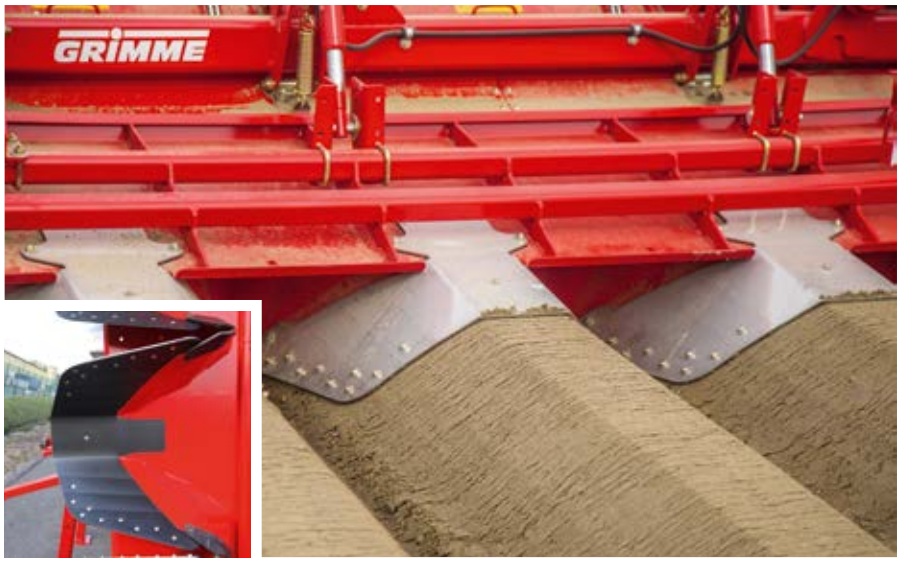
The GF 800 is an 8-row, hydraulically foldable rotary hiller, which is designed as a solo-machine to fulfil the highest requirements in area performance. It can be used for conventional hilling in a second step after planting, as well as a full width tiller (option). Additionally it can be used with integrated shapers for the pre-shaping of potato ridges. The option to increase the amount of tines, is a special feature for the GF 800 in heavy and very sticky conditions. Several shaping boards can be used to form different sizes and contours of ridges.



Reduced wear

Spring loaded housing

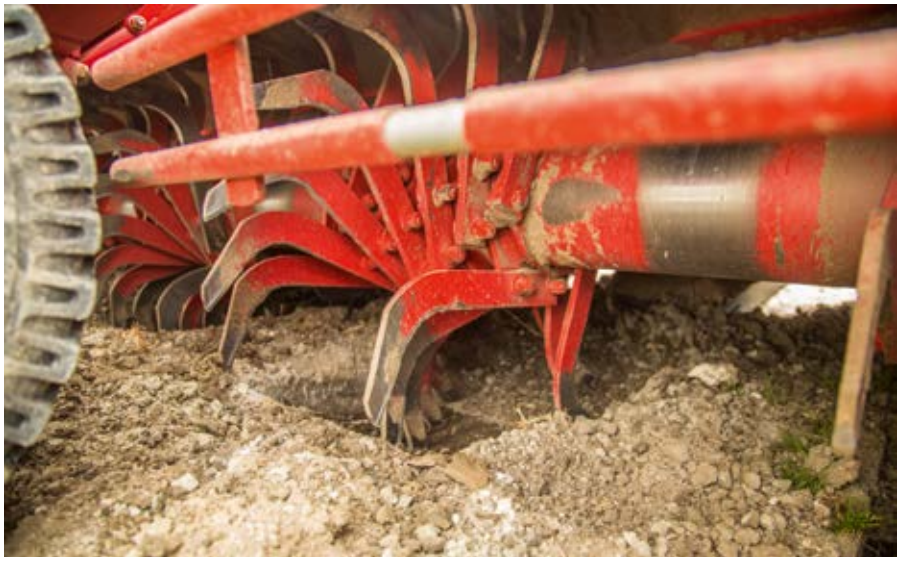
The spring loaded housing of the rotor shaft enables an improved self-cleaning effect. The consequence is less wear of the tines due to a reduced amount of sticking soil, further more this leads to a reduced fuel consumption. Impacts from small stones or other foreign bodies, are mitigated by the spring loaded suspension.



Higher yields

Ridge shaping board XL

The ridge shaping board XL enables the build up of a ridge with a scope of up to 1.05 m. Due to the very large volume of the ridge, there is enough space for a large tuber-nest.
To counter the risk of waterlogging, the seed-potato can be planted above “ground level” (above the original soil horizon).



More intensive soil cultivation

Rotor shaft with more tines

As an option the rotor shaft can be equipped with a higher number of tines. Under practical conditions this is used to obtain fine crumbled structures, therefore it is recommended especially for heavy and sticky soils.

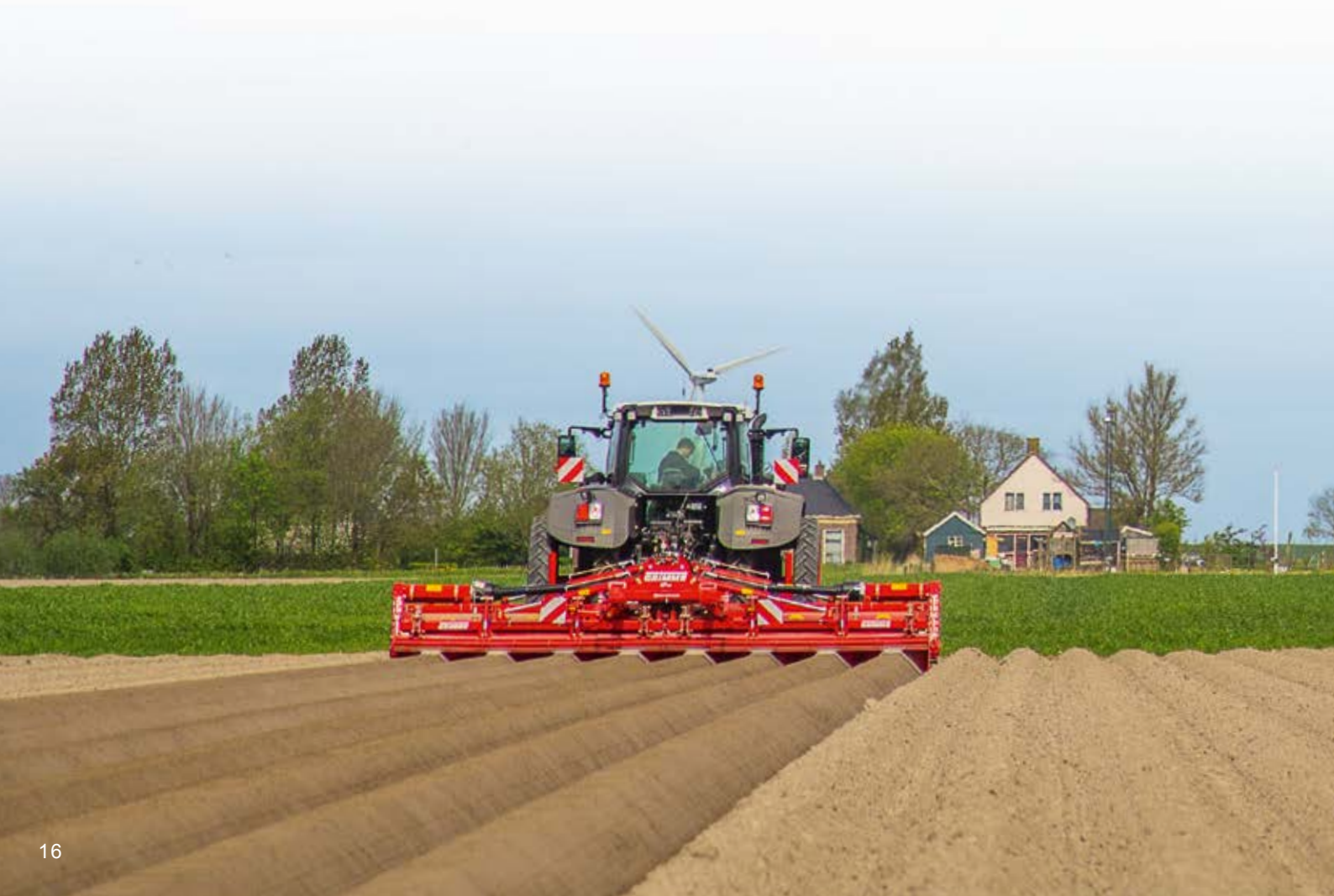
Better driving

Spraying track lever

The operation of spraying track levers can be done mechanically or hydraulically, there use is to remove and to plane the empty ridges of tramlines. Due to the plane soil a stable and comfortable driving is ensured, when large tyres are mounted on machines for chemical plant protection or fertilisation.

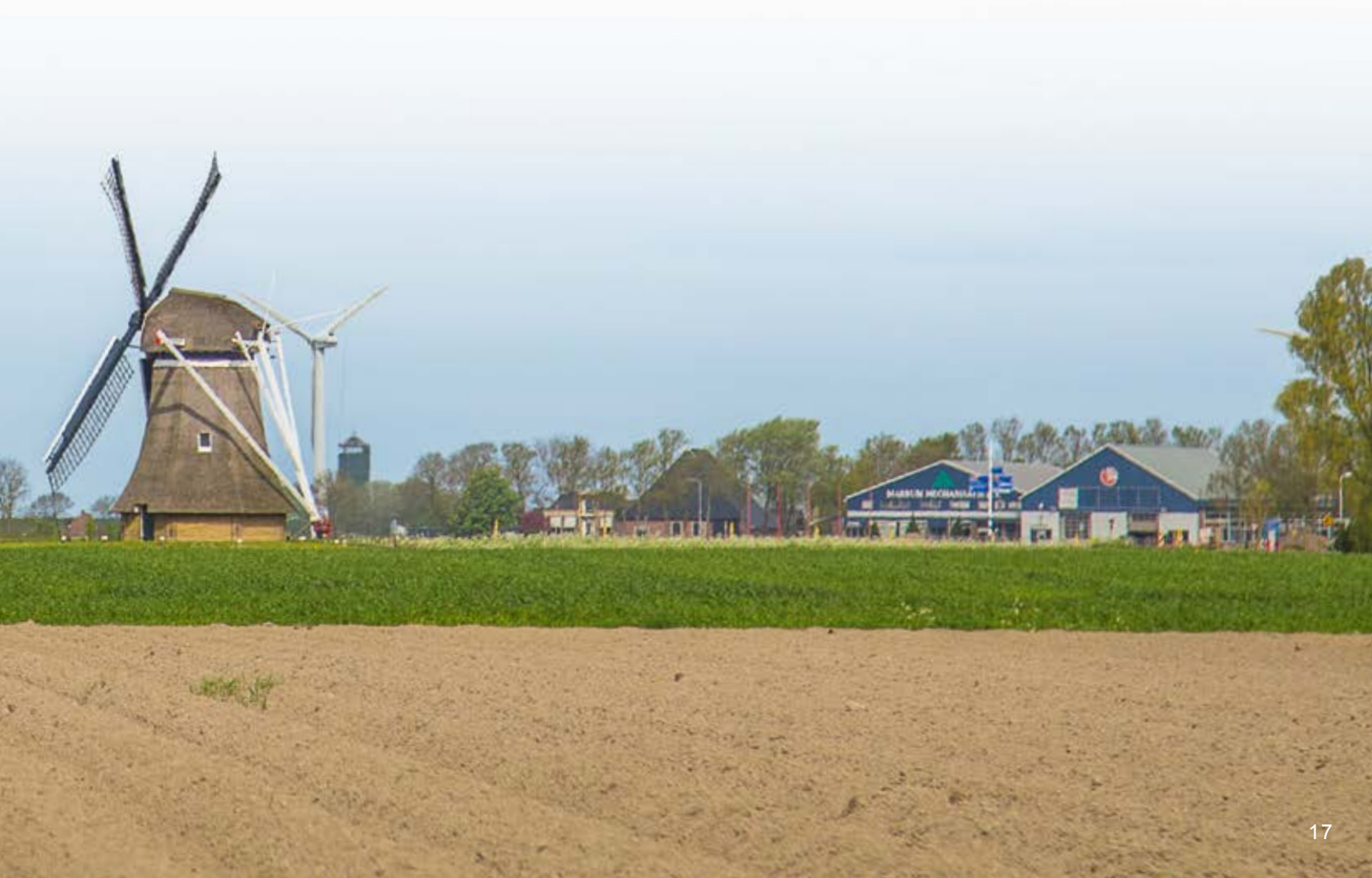
Technical data GR 300

Length	2320 mm
Width	3290 mm
Height	1540 mm
empty weight	1850 kg
Working width	3 m
Drawbar: Lower linkage category	Cat. 2 / 3
Input speed p.t.o.-shaft	1000 rpm
Rotor speed	350 rpm
Tine rotor diameter	620 mm
Amount of tines for full-width setup	112
Number of support wheels	2
Support wheels	155/80 R13
Carrying roller diameter	480 mm
Engine power (min.)	90 kW



Technical data GF-series

	GF 200	GF 400	GF 600	GF 800
Length fix / foldable	2350 / – mm	2350 / – mm	2350 / 2600 mm	– / 2600 mm
Width fix / foldable	1790 / – mm	3290 / – mm	4820 / 4820 mm	– / 6320 mm
Heigth fix / foldable	1450 / – mm	1450 / – mm	1450 / 1450 mm	– / 1450 mm
Empty weight fix / foldable	1400 / – kg	2000 / – kg	2950 / 3600 kg	– / 3900 kg
Working width	1.50 m	3 m	4.50 m	6 m
Number of rows	2	4	6	8
Row width	75 cm			
Two point bottom linkage (in case of unfoldable frame)	Cat. 2	Cat. 3		–
Two point bottom linkage (in case of foldable frame)	–	–	Cat. 3	
Input speed p.t.o.-shaft	1000 rpm			
Rotor speed	350 rpm			
Tine rotor diameter	740 mm			
Amount of tines for rotary hiller	32	64	92	124
Amount of tines for full-width setup	56	112	164	220
Engine power (min.)	50 kW	100 kW	160 kW	200 kW



Product range spring technolo

Separating technology

Bed former (BF/BFL- series)
2-, 4- and 6-rows



Clod Separator (CS-series)

Planting technology

Cup planter (GL-series)
2-, 4-, 6- and 8-rows



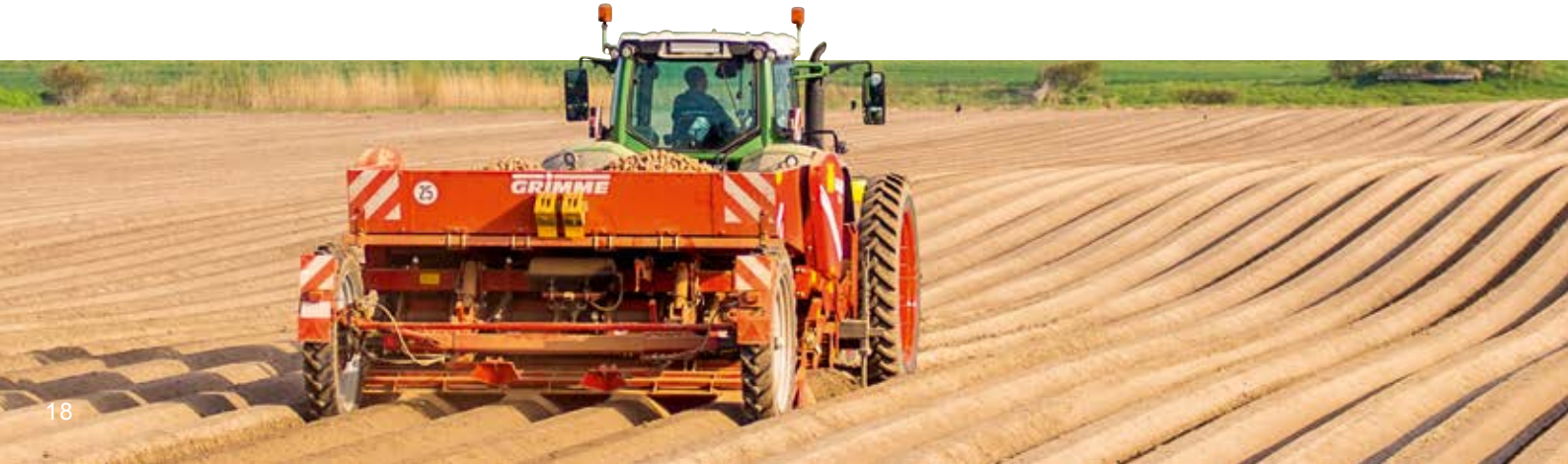







Belt planter (GB-series)
2-, 3- and 4-rows



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Soil cultivation

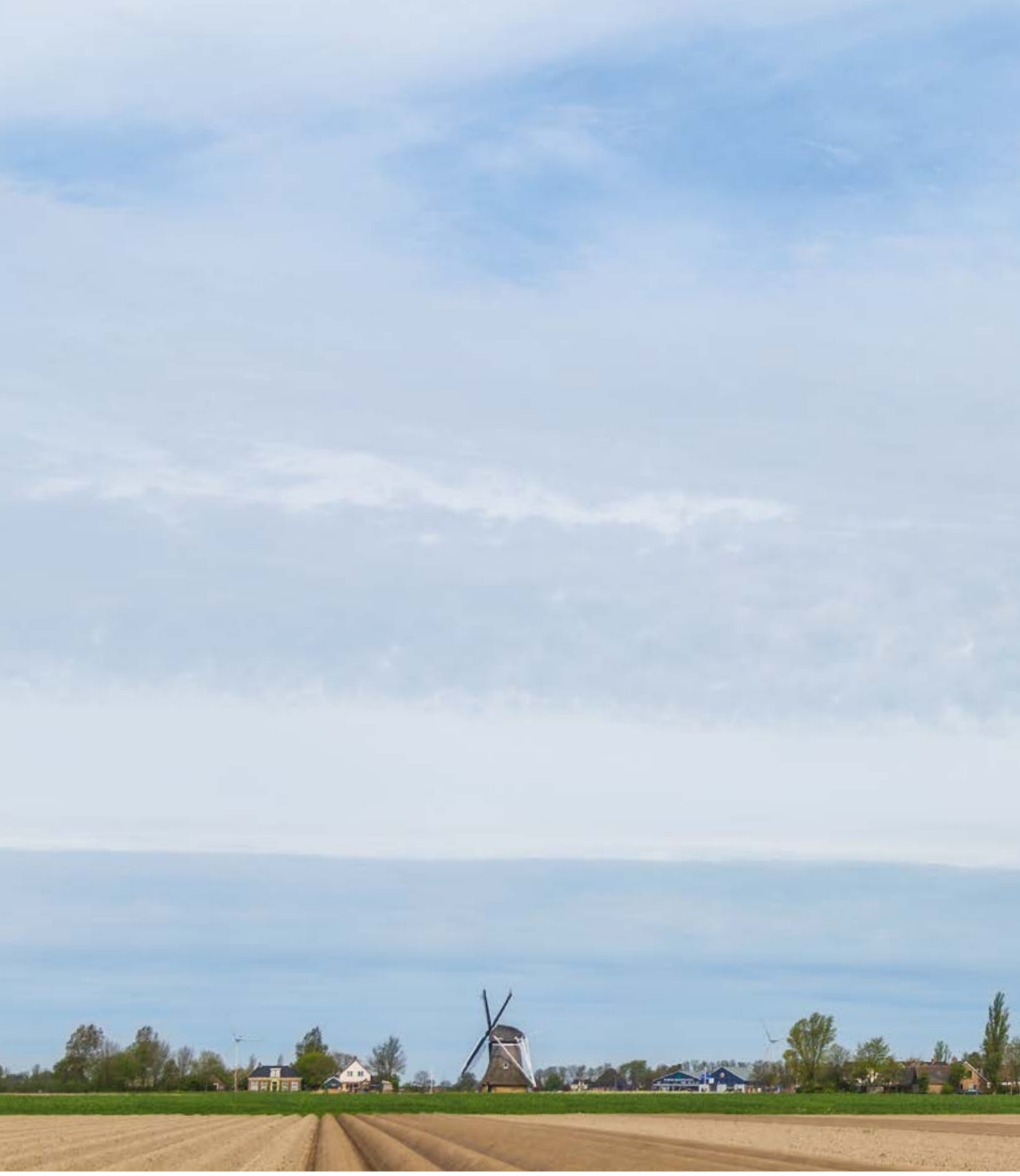
Rotary tiller (GF-series)
Full-width tilling, rotary hilling, 2-, 4-, 6- and 8-rows





Ridging Hiller (GH-series)
2-, 4-, 6- and 8-rows, conventional and ecological growing



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