

LEMKEN

**Seedbed combinations
System-Kompaktor and System-Korund**



LEMKEN System-Kompaktor and System-Korund:

The Concept

The difficult cost and labour situation on many farms demands machinery capable of combining high area productivity with excellent work quality.

Preparation of seedbeds according to exact requirements coupled to high area output and low wear costs are nowadays compelling arguments for using pulled seedbed combinations.

Non-driven seedbed combinations are being increasingly preferred over pto-driven implements such as rotary harrows for secondary cultivations prior to drilling cereals, oilseed rape and rowcrops.

With the seedbed combinations System-Kompaktor and System-Korund LEMKEN offers two implements, each with a wide choice of equipment, to meet all requirements for producing perfect seedbeds in arable farming.

The ideal seedbed

An ideal seedbed is the basis for optimum crop plant development. The prepared soil should be well-levelled and at the same time loosened over the total implement working width and working depth.

LEMKEN seedbed combinations guarantee an optimum distribution of the different soil particle sizes, giving a good crumb structure from seeding depth to surface.

The final rollers of these seedbed combinations then ensure a consistent reconsolidation down to sowing depth.

Reconsolidation of the seedbed also ensures the necessary water supply for the seedling.



the basis for optimal crops

System-Kompaktor

The LEMKEN System-Kompaktor with 3 to 10 m working widths means seedbed production in a single pass is possible.

It's the ideal implement for preparing the fine-crumbed, well-reconsolidated seedbeds of consistent depth which are especially required for small seed crops such as sugar beet or oilseed rape.

The semi-mounted seedbed combination System-Kompaktor in working widths from 5 m and 6 m can be combined with the pneumatic seed drill Solitair.

System-Korund

The LEMKEN seedbed combination System-Korund with working widths from 3 to 9 m delivers especially good levelling, loosening and crumbling of soil along with high area performance.

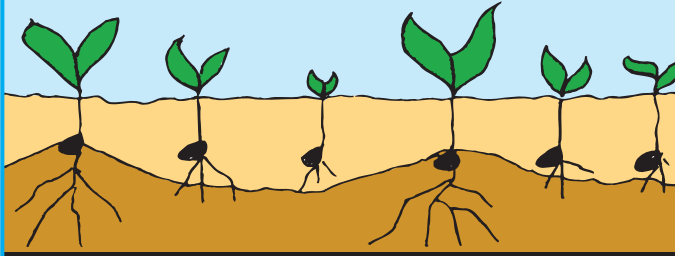
Especially due to different harrow sections, the System-Korund shows all its skills in the professional cultivation of potato or maize. The low weight of the implement enables large working widths with the tractor's three point linkage.



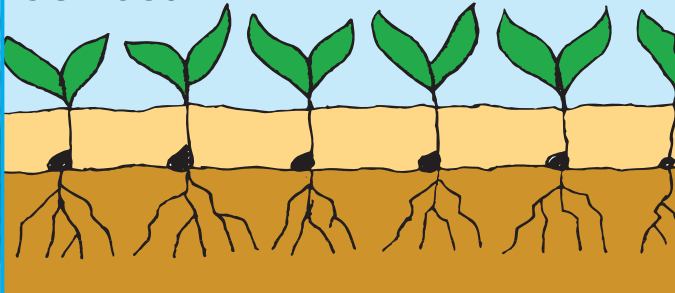
Superior seedbeds

Overall cultivation consistency – consistent loosening

Wrong:

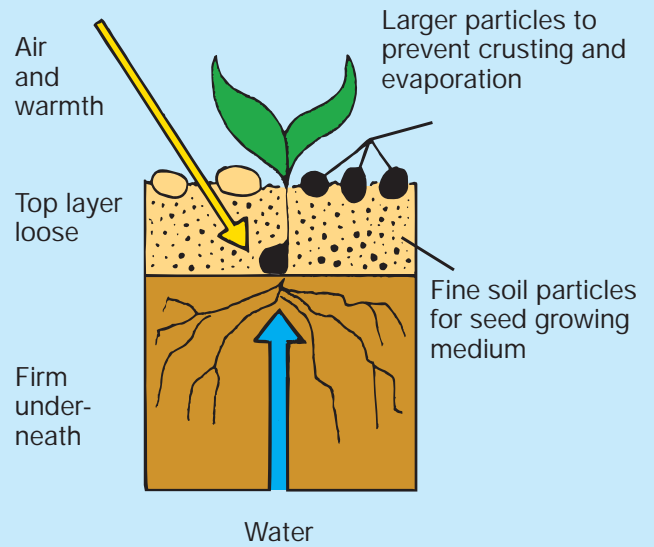


Correct:



Two rows of tines with duckfoot shares guarantee overall cultivation consistency. The parallel linkage of implement subframes guarantees precise application to the field surface and thus consistent working depth. The surface is evened-out by the front-mounted cutting or multi-blade leveller. The additional crumbler rollers on the System-Kompaktor support the surface levelling effect.

The ideal crumb structure

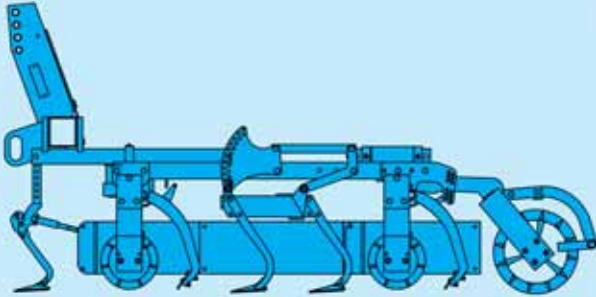


For optimum seed placement and best germination conditions the ideal seedbed features larger soil particles on the top layer and fine earth underneath with good reconsolidation. Big soil clumps and sods still remaining after the tine harrow subframes have passed are reduced in size by the rear bearing-mounted rollers or crumbler rollers. The shallow positioning of the shares produces an increased penetration force which leads to greater downward pressure on the crumbler rollers. This enables optimisation of both levelling action and soil crumbling.

Modern seedbed preparation systems

The multi benefit technique

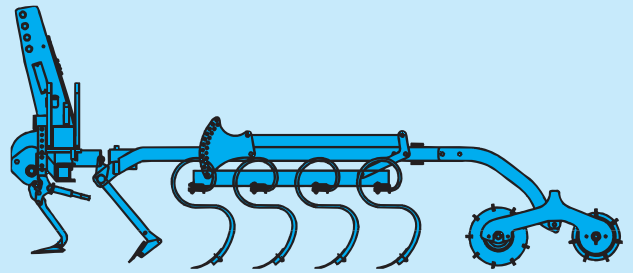
System-Kompaktor



The System-Kompaktor achieves the desired quality of seedbed often with only one working bout. Compared with pto-driven implements, its area performance is substantially higher. The System-Kompaktor creates the basis for even seed germination and consistent crop emergence in the field. The set working depth is maintained exactly, even when preparing shallow seedbeds. Multiple roller and tool combinations enable perfect crumbling and optimal reconsolidation of seedbeds.

The multi option implement

System-Korund



Through the variety of different cultivation equipment that can be fitted and with suitable working widths, the System-Korund seedbed combination offers an alternative for seedbed preparation with high area performance. The parallel linkage of the implement frames guarantees a precise and consistent working depth. Easily adjustable cultivation components, as well as the controlled hydraulic folding of the implement where working width is over 3 m, mean downtime can be substantially reduced and area performance boosted.



The System-Kompaktor for every job

Strong three-point headstock



The heat treated plates of the headstock provide high stability. Implement forces are absorbed by the full-length, height-adjustable toolbar. The top link attachment point is variable and thus always enables optimum top link positioning. The attachment pin is secured to prevent revolving and loss.

Adjustable wheelmark eradicators



The duckfoot tine wheelmark eradicators can be easily and steplessly adjusted to suit every tractor track and tyre width. Each wheelmark eradicator has an overload safety device as standard for damage protection. Depth adjustment is in centimetre stages and is quickly carried out without tools via snap pin.

Consistent levelling



The robust front-fitted flat bar or tube bar roller is mounted in bearings and, together with an adjustable levelling bar, evens-out the field surface. Soil flow in the crumbler rollers is regulated by spindle adjustment. Where ground conditions are changeable this adjustment can be hydraulically corrected at any time. The levelling bar is sprung for protection against overload damage. The full-length, height-adjustable side plates enable level continuation of the seedbed without ridges being left at each side of the implement.



Setting-up for sowing

Protection against overload



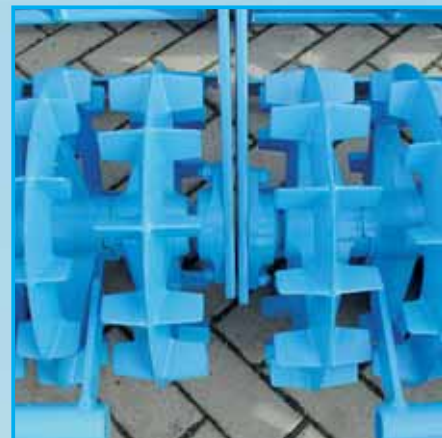
For uninterrupted work, even in stony conditions, the duckfoot share tines can be equipped with a Non-Stop overload safety device.

The Gamma tine harrows



In heavy soils or in boggy conditions gamma tines are recommended instead of duckfoot share tines. Tine line distances are 11 cm with a maximum working depth of 12 cm. The vertical positioning of the tines ensure that there's only minimum wet soil adhesion to the tine surfaces compared with that on curved tines.

Optimum reconsolidation

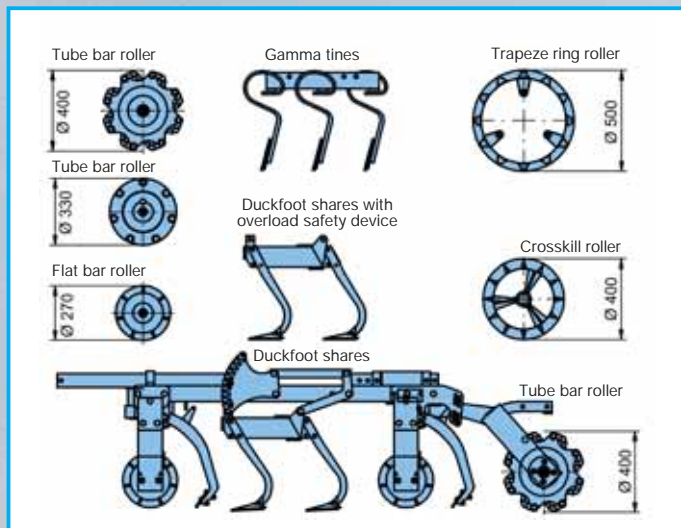


The heavy crosskill rollers ensure good reconsolidation. The staggered crosskill ring teeth are meshed in a way that prevents the rings twisting against one another. Possible blockages are therefore avoided. For wet conditions in autumn a 400 mm tube bar roller or a trapeze ring roller can be fitted as alternative.



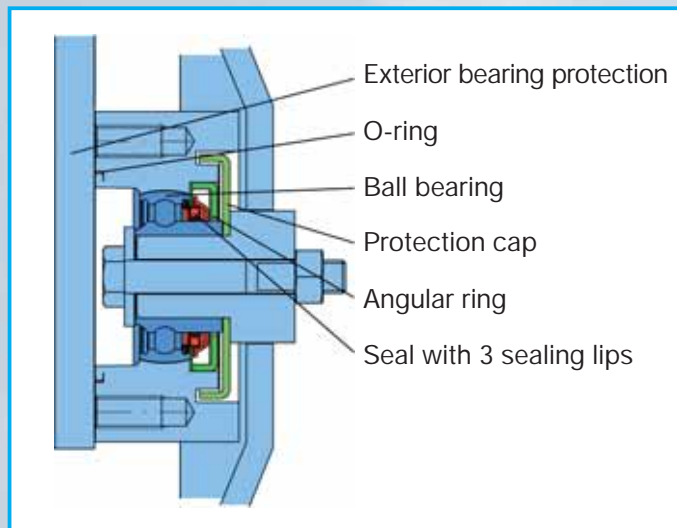
Versatile options

Combination possibilities



There are a lot of combination possibilities with the new generation of System-Kompaktor. Apart from different tine sections, tube bar or flat bar crumblers can be combined with different following rollers. This makes the System-Kompaktor an implement for almost all soil conditions.

Maintenance-free bearing



The new generation of maintenance-free bearings is completely sealed and thus effectively protected against dirt. This guarantees a long lifetime. The round design of the bearing case prevents it against catching stones. If nevertheless a bearing has to be changed it is significantly simplified by an additional interface at the frame.



Efficient preparation of fields

Safe transport



All LEMKEN 'K' Kompaktors with working widths from 4 m are hydraulically folded for a transport width of 3 m. Semi-mounting from 5 m working width enables an efficient weight distribution at the tractor thus permitting rapid and safe road transport. Additionally the air pressure in the tractor wheels can be reduced significantly.

The system carrier Gigant



LEMKEN offers the system carriers Gigant 800 and Gigant 1000 for exceptionally high work rate. Two seedbed Kompaktor combinations with 2 x 4 m or 2 x 5 m working width are fitted to the three-point linkages. Through the balancing system of the lower links the individual implement sections can follow field contour surfaces extremely well and independently of one another. The new lower links are designed so that the implement sections lie firmly on the main frame of the carrier thus avoiding movement during transport.



LEMKEN System-Kompaktor with Solitair:

Sowing System



Used after primary cultivations, the LEMKEN combination of semi-mounted System-Kompaktor with Solitair is ideal for accurate and rapid drilling.

The seedbed combination System-Kompaktor can be lifted out of working position independently of the Solitair drill and this guarantees clean entry and exit procedures at the headlands. Altering the working depth of the seedbed combination does not affect drilling depth.

The adjustable weight transfer on the chassis means weight is optimally transferred onto the following rollers of the semi-mounted implement. This ensures perfect work quality quite independently of the seed level in the Solitair hopper.

Versatile attachment



Because the drill attachment points with the semi-mounted implements System-Kompaktor, Zirkon, Rubin, Heliodor and Smaragd are the same, the Solitair pneumatic drill can be very simply combined with all these implements.

Additional equipment for the semi-mounted System-Kompaktor includes delivery with a hydraulic lifting shaft so that the System-Kompaktor can be combined with other drills or additional following rollers.



A combination with a secure future

The trailer



A high degree of safety in working and driving is offered by the air-braked running gear axle and large wheels with maximum track width (registered for up to 8 t gross weight and 50 km/h). This means soil damage is avoided during work, even with the Solitaire pneumatic drill fitted. It also allows rapid farm-field and field-field journeys, as well as road travel according to highway regulations.

The hydraulic equipment



Multiple options for the hydraulic system mean it can be operated with all types of tractors. The LEMKEN drilling combination System-Kompaktor/Solitaire with bout marker is operated through four double-acting valves and one single-acting valve. Using a 6/2-way valve spares one double-acting valve. By use of an electronic control block, all functions of the System-Kompaktor and Solitaire can be served with only two double-acting valves.



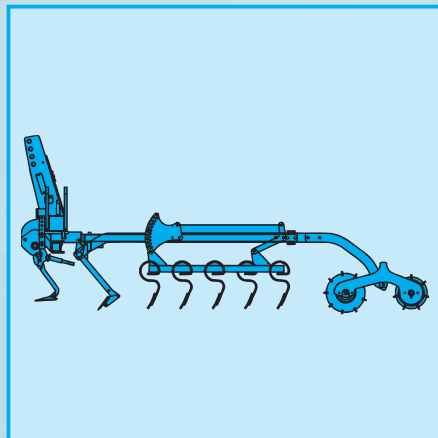
LEMKEN System-Korund L:

The durable support bars



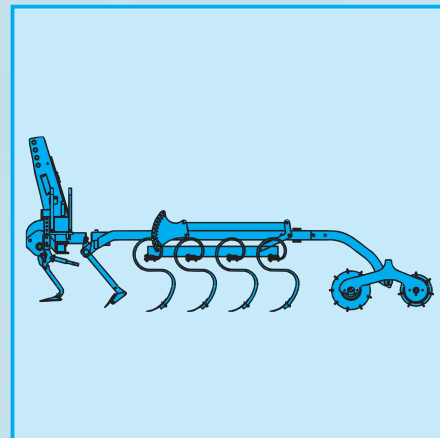
The use of high quality steel guarantees extreme durability and long working life for the implement frames. The elastic support bars of massive spring steel absorb large impact forces. Tractor and implement are thus protected, especially during road travel and whilst driving on headlands. LEMKEN gives an unlimited guarantee on the spring steel support bars.

The small spring tine harrow section



The small spring tine harrow section is equipped with 5 rows of straight or curved tines. 25 tines with a line distance of 60 mm provide an even loosening effect with shallow seedbed preparation.

The spring tine harrow section



The spring tine harrow section is equipped with 4 rows of tines. 16 tines with a line distance of 98 mm provide an even loosening effect with deep seedbed preparation. Instead of spring tines the harrow section can also be equipped with Marathon- or Gamma tines.



Perfect levelling of all soils

Multi-levelling bar



The multi-bar positioning pressure can be adjusted by screw to suit all applications. The planing effect of the sprung multi-bar means an optimum seedbed is produced, even under difficult conditions such as deep tractor ruts or uneven ploughed surfaces. This then allows tines to work at shallower settings, with all the associated fuel savings.

The multi-levelling bar set in grade position



On medium to heavy soils the multi-levelling bar is set in grade position. This allows reliable levelling with a single pass. The multi-levelling bar is spring loaded to protect it against overload.

The multi-levelling bar set in drag position



In light soil surfaces the multi-levelling bar is set in drag position. Thus, even on level surfaces less soil is built up in front of the blade, implement draught requirement is reduced. Settings can be individually adjusted for all operational conditions.



Profitable seedbed preparation

Precise working depth



The implement sections are suspended in parallelogram and so allow exact positioning of the cultivation tools and thus consistent working depth. The positioning of the shares gives an increased entry force and enables a higher pressure to be placed on the rollers. This optimises levelling and crumbling effect. The 3 to 15 cm working depth range of individual harrow sections are pin adjustable in small increments.

The double toothed bar crumblers



The toothed bar crumbler and tube toothed bar crumbler are double rollers with front row diameter of 330 mm and rear row diameter of 270 mm. Large and well-sealed bearings guarantee long-life. The automatic locking of the crumbler rollers stabilises the implement sections in working position and avoids snagging whilst folding.

Optimal soil adaptation



The roller geometry guarantees a consistent pressure distribution for an optimum crumbling and levelling effect. The pendulum fixed rollers can move over obstacles without having to lift the whole implement. The robust design of the roller with an 8 mm thick tooth bar profile guarantees long working periods in the field.



Versatile options

The positive centre of gravity



The short and compact design of the System-Korund creates a positive centre of gravity of the seedbed combination which enables the use with lower lifting capacity tractors

Controlled folding



The controlled folding of the implement sections for cultivators with working widths from 7.50 to 9 metres gives a rapid transformation from working to transport mode and vice versa. The control system folds the implement into transport position and at the same time folds out the stands.

Safe transport



Independent of working width, all System-Korunds have a transport width of 3 m and a transport height of less than 4 m. Hydraulic or mechanical locking secures the implement during transport.



Technical data

Seedbed combinations System-Kompaktor

Up to kW (HP)	Description	Working width (cm)	Number and width of sections	Weight (approx kg) mounted semi-mounted	
- Rigid, (semi-mounted) -					
88 (120)	System-Kompaktor S 300 with duckfoot shares*	300	2 x 1.5 m	1,430	-
88 (120)	System-Kompaktor S 300 with gamma tines with share	300	2 x 1.5 m	1,535	-
110 (150)	System-Kompaktor S 400 with duckfoot shares*	400**	2 x 2.0 m	1,650	-
110 (150)	System-Kompaktor S 400 with gamma tines with share	400**	2 x 2.0 m	1,805	-
184 (250)	System-Kompaktor S (A) 600 with duckfoot shares*	600**	4 x 1.5 m	2,650	4,225
184 (250)	System-Kompaktor S (A) 600 with gamma tines with share	600**	4 x 1.5 m	2,880	4,394
- hydraulic folding, (semi-mounted) -					
118 (160)	System-Kompaktor K 400 with duckfoot shares*	400	2 x 2.0 m	1,850	-
118 (160)	System-Kompaktor K 400 with gamma tines with share	400	2 x 2.0 m	2,005	-
162 (220)	System-Kompaktor K 500 (A) with duckfoot shares*	500	2 x 1.5 m, 1 x 2.0 m	2,103	3,670
162 (220)	System-Kompaktor K 500 (A) with gamma tines with share	500	2 x 1.5 m, 1 x 2.0 m	2,283	3,850
184 (250)	System-Kompaktor K 600 (A) with duckfoot shares*	600	4 x 1.5 m	2,703	4,270
184 (250)	System-Kompaktor K 600 (A) with gamma tines with share	600	4 x 1.5 m	2,872	4,439
System trac Gigant - hydraulic folding, semi-mounted -					
from 162 (220)	Systemträger Gigant 800	800			2,645
	System-Kompaktor-Felder with duckfoot shares*	800	4 x 2.0 m	-	3,300
	System-Kompaktor-Felder with gamma tines with share	800	4 x 2.0 m	-	3,610
from 206 (280)	Systemträger Gigant 1000	1,000			2,845
	System-Kompaktor-Felder with duckfoot shares*	1,000	4 x 1.5 m, 2 x 2.0 m	-	4,750
	System-Kompaktor-Felder with gamma tines with share	1,000	4 x 1.5 m, 2 x 2.0 m	-	5,138

* Also available with overload safety device

** Exceeds the permitted highway legislation transport width

Seedbed combination System-Korund

Up to kW (HP)	Description	Working width (cm)	Number and width of sections	Weight (approx kg)
88 (120)	System-Korund 300 L*	300	2 x 1.5 m	856
110 (150)	System-Korund 450 L*	450	3 x 1.5 m	1,386
132 (180)	System-Korund 600 L*	600	4 x 1.5 m	1,920
158 (215)	System-Korund 750 L*	750	5 x 1.5 m	2,820
184 (250)	System-Korund 900 L*	900	6 x 1.5 m	3,220

* System-Korund choice from spring tines or small spring tines

All information, sizes and weights are liable to continued technical development and are therefore not guaranteed. The information regarding weight always applies to basic models. The right to make alterations is reserved.



LEMKEN GmbH & Co. KG
Weseler Str. 5, D-46519 Alpen · P.O. Box 11 60, D-46515 Alpen
Phone: +49 28 02 81-0 · Fax +49 28 02 81-220
E-Mail: lemken@lemken.com · Internet: www.lemken.com

Your LEMKEN-specialized dealer: