LEMKEN

Furrow presses VarioPack und FixPack

Why use a furrow press with the plough?

The concept

When ploughing, soil is loosened, crumbled and pore volume is simultaneously increased. This lets air and warmth into the soil but also interrupts continuity of the capillary system. The close rotations followed nowadays mean there's seldom time for a complete settling down of the soil and recommencement of microorganism life. Additionally, drying-out of ploughed soil has to be avoided whilst capillary action for the seed horizon in the soil must be restored as quickly as possible.

In this context, LEMKEN furrow presses offer outstanding work directly behind the plough. Just at the right time - when soil moisture content is at an optimum level – the seeding depth layer of soil is reconsolidated and rough clods be reduced in size, soil microorganism life is encouraged and drying out delayed.

Technology that works

VarioPack furrow press

Soil is reconsolidated to seeding depth, rough clods are reduced in size

- drying out is prevented
- soil microorganism life is encouraged
- capillary action is quickly restored

Implements following the press ensure additional reduction of cloddy soil and a good levelling action

- working passes are reduced to a minimum
- results in ready to sow fields on lighter and medium soils

The FixPack integrated furrow press

Additional reduction of rough cloddy soils, good levelling of the soil surface

- working passes are reduced to a minimum
- ready-to-sow fields on light and medium soils

High degree of efficacy on every soil

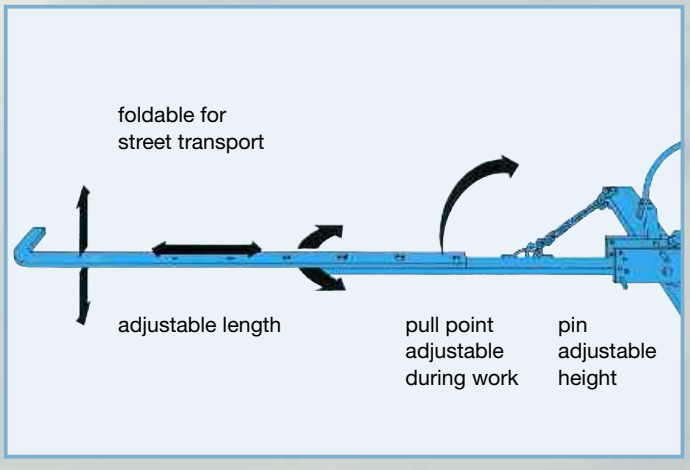
A variety of equipment packages

▲ = optimal ▲ = very good △ = good	Single-row press 700 mm		Single-row furrow press Ø 900 mm		Double-row furrow press Ø 700 mm		Double-row furrow press Ø 900 mm	
	Ring profile 30°	Ring profile 45°	Ring profile 30°	Ring profile 45°	Ring profile 30°	Ring profile 45°	Ring profile 30°	Ring profile 45°
Light soils		△		▲		▲		▲
Light up to medium soils		△		▲	▲	▲		▲
Medium soils	△		▲	△	▲	▲	△	▲
Medium up to heavy soils			△		▲		▲	▲
Heavy soils			△		△		▲	▲

The LEMKEN VarioPack furrow press can be delivered in a variety of versions:

- as single row or double row press
- with 700 mm or 900 mm ring diameter
- with 30° or 45° ring profile
- as alternating press for reversible ploughs or as front mounted press

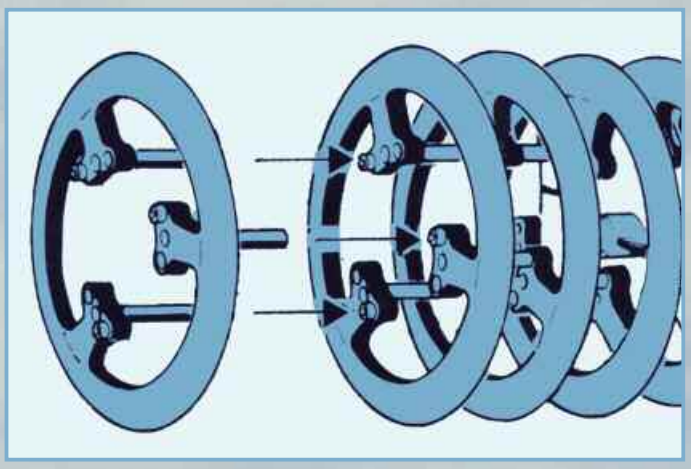
The hook linkage



The hook linkage for the furrow press is made of highly elastic tempered steel and can be adjusted for every working width of plough. This means that when the press has to be extended in width there is no need for a new hook linkage. It is able to stand-up to accidental running over by the tractor. The catching point lies optimally for every height of operation or all ploughing depths. The pull point can be adjusted during ploughing and gives accurate positioning of the press without overlapping, even on slopes. The solidly-built steering pole with contra-brake prevents accidental swinging-round of the catching hook during ploughing across the slope or when the press is being caught-up.

Technology that works

Variable working width



Because of the seamless ring construction, LEMKEN furrow presses can be extended or reduced in width at any time by simply screwing-on or detaching individual rings so that the implement can be adjusted to exactly fit any plough. Ample wearing material on the main usage zones ensure a long working life.

Blockage-free work

The form of each ring and its profile plus the special way it is attached to the implement guarantees highest strength, resistance to breakage, the lowest possible level of wear and with this, reduced servicing requirement, even when working on stony ground. Because the press doesn't feature a central hub this prevents blockages within the rings. Additionally, strong and very wear-resistant cleaning bands made of rubber with textile lining can be ordered for blockage free work.

VarioPack front furrow press – simple and safe

The rigid front furrow press FEP

The VarioPack attached to the front hydraulic system prevents due to its reconsolidation the tractor wheels from sinking and avoids ridges between the wheels. Thus it creates the best conditions for an exact and regular seedbed. Additionally it enables a shallower work for the following cultivation implement because it doesn't have to eliminate tractor tracks. The VarioPack front furrow press is characterised by its compact design and its extremely positive centre of gravity.

Transport with the foldable FEP

The VarioPack with hydraulic folding enables working widths up to 6 metres with a transport width of less than 3 metres. Neither an implement frame nor spokes obstruct the view ahead. The pendulum device guarantees a regular work quality on all soils due to the ideal soil adaptation and the independent swerving of the lateral parts when hitting a stone or an obstacle. It can be parked in folded position and provides safe transport with its complete lighting.

The mechanical steering

The integrated mechanical steering device works via an intersection in front of the furrow press so that it can be reliably drawn and steered along the contour of the field. The FEP K is available with ring diameters of 700 or 900 mm.

Multiple possibilities as desired

The all-round furrow press WEP

The single row furrow press (WEP) can be easily changed from a plough furrow press to a front furrow press by means of a push device. Thus the furrow press can be used for ploughing and drilling.

The push linkage

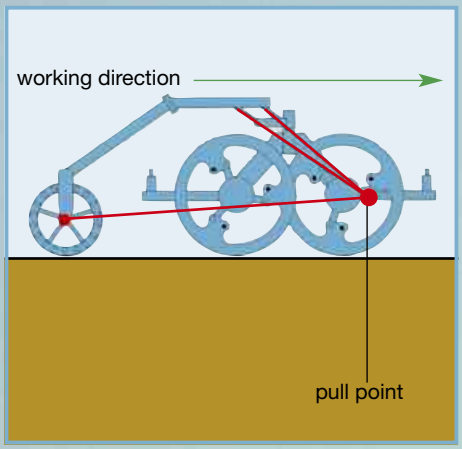
The push linkage in the front hydraulic system for drawn plough furrow presses enlarges the degree of utilisation of the furrow press. It is suitable for all furrow presses with 3 point linkages Cat. II, even for the products of other manufacturers. A simple control device provides a good steering behaviour with advantageous weight distribution and enables a precise tractor operation.

The adaptable reconsolidation

Only the double row furrow press (WDP) from LEMKEN offers the possibility of different working widths. The double row furrow press works between the wheels while in front of the wheels the single row furrow press combined with the tractor wheels also obtain a good reconsolidation. This is the precondition for a regular seedbed.

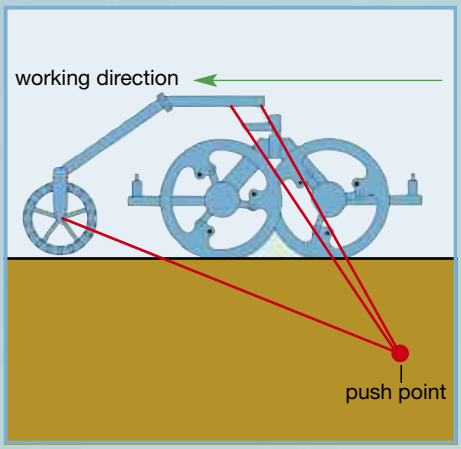
Trailed implements

Forward drive



Ground pressure exerted by the press trailed implements is added to through the low position of the pull point caused by the forward drive motion which fixes this point in the middle of the three-point axis. This helps avoid capsizing of the single row press or rearing-up of the double press.

Turning procedure



During turning the push point lies approx. one metre under the soil surface which takes the weight off the following implement and avoids any sliding or digging-in.

Nockenring roller

With its large area of ground contact, the nockenring roller is especially suitable for light soils and offers very good reconsolidation action with low draught requirement.

High stability under all conditions

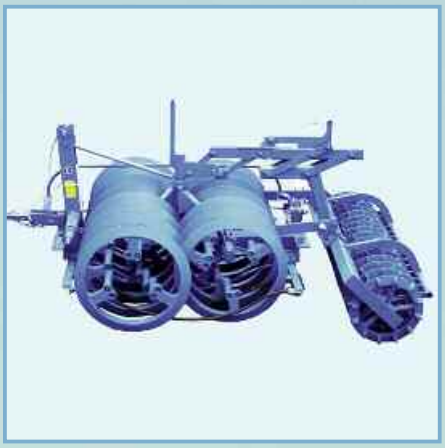
Crosskill roller

The limited distance between each of the press rings and the special ring profile of the crosskill roller means it is especially suitable for medium and heavy soils, guaranteeing good reconsolidation with low blockage risk and outstanding crumb formation.

Central frame

Because a framework around the press has been avoided, following implements can be closely attached which allows very tight turns. The easy to attach and detach following implements are positioned so that they work always on already reconsolidated soil.

Road transport



The folding element ensures reliable road transport. Through drawing the following implement closer to the press an optimum centre of gravity is achieved so that safe transport is possible even with smaller tractors. Dismantling the hook linkage is not necessary.

Integrated furrow press FixPack

The permanent link

The integrated furrow press FixPack remains linked to the plough while transport or on headlands. Thus it doesn't have to be transported separately. The FixPack, which can be used with ploughs with or without overload safety device, can work without any problem on fields with wedges or obstacles.

Road transport and the first furrow

For road transport the furrow press roller and the plough are lifted and turned in an angle of 90° and mechanically blocked. Then the furrow press arm is swivelled in hydraulically towards the plough.

For the first furrow the FixPack doesn't have to be detached. It remains swivelled and blocked in transport position.

Ground pressure

The ground pressure of the press roller is easily and rapidly adjusted between 400 and 800 kg via hole plate so that the equipment can optimally suit all working conditions.

Rollers for all working conditions

Plastic roller or star roller harrow

Depending on soil type and work effect desired (crumbling, reconsolidation) the FixPack can be equipped with a plastic roller or a star roller harrow.

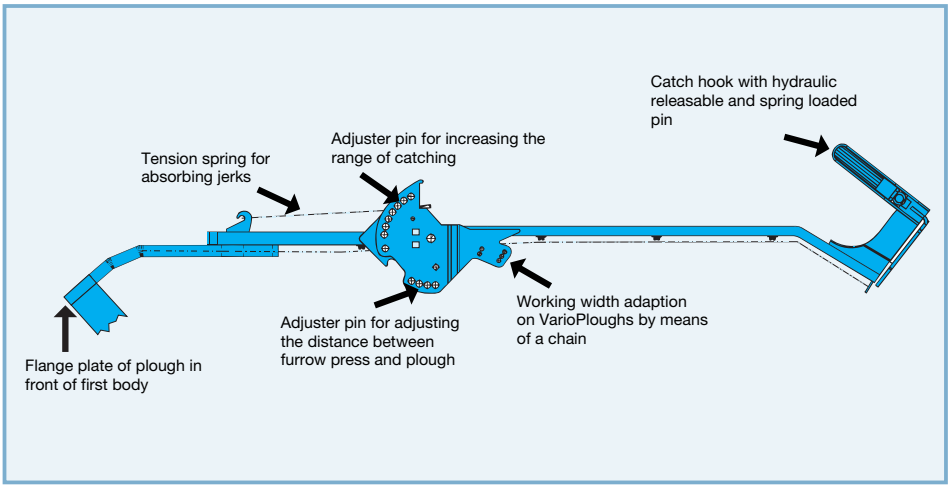
The plastic roller

The plastic rings which are mounted with 12.5 cm spacing on the trapeze disc roller have a diameter of 500 mm. 16 rings with a working width of 2.0 m and 20 rings with one of 2.5 m offer good reconsolidation on light to medium soils. The plastic rings and the scraper discourage soil sticking and so reduce the weight of the following implement. This allows the FixPack to be mounted on tractors with limited lifting power. The especially high-quality plastic means that down time low.

The star roller harrow

The star roller harrow used together with an adjustable cutting bar enables optimum levelling and soil crumbling efficiency, especially on medium and heavy soils. The cutting bar is particularly recommended when ploughing especially heavy soils. This helps break down the big lumps and simplifies the following seedbed preparation. Cutting bar working depth is finely adjustable.

Furrow press arm for VarioPack alternating press



The press arm swings in and out automatically. This enables reliable catching of the press and an optimum pull point position during ploughing.

The simple snap-pin no-tool adjustment of the press arm allows easy changes between field operation, transport and "ploughing without furrow press" positions.

The universal press arm with hydraulic detachment is available for all reversible ploughs, including other makes.

Technical data

Description	Central frame (Ø mm)	Number of rows	Number of rings	Ring (Ø mm)	Working width (cm)	Line distance (cm)	Weight (approx. kg)
Alternating furrow press							
VarioPack 110 WDP 70*	110 x 110	2	10 – 30	700	100 – 300	10	590 – 1.452
VarioPack S 110 WDP 70*	110 x 110	2	25 – 44	700	250 – 440	10	1,242 – 2,040
VarioPack 110 WDP 90*	110 x 110	2	13 – 32	900	162 – 400	12,5	1,390 – 3,005
VarioPack 110 WEP 90*	110 x 110	1	5 – 20	900	140 – 400	20	572 – 1.847
Trailed implements for VarioPack							
Crosskill roller CRP/T	–	1	12 – 44	450	130 – 460	10,5	274 – 992
Nockenring roller NRP/T	–	1	8 – 28	450	130 – 460	16,5	254 – 918
Front press							
VarioPack 110 FEP 90	110 x 110	1	12 – 20	900	250 – 400	20	1,145 – 1,825
Front press – hydraulically foldable –							
VarioPack 110 FEP K 70	110 x 110	1	20 – 30	700	400 – 600	20	1,250 – 1,750
VarioPack 110 FEP K 90	110 x 110	1	20 – 30	900	400 – 600	20	2,500 – 3,500
Integrated furrow press for 3-, 4- and 5-furrow ploughs							
FixPack KU 200 with plastic roller and scrapers		1	16	500	200	12,5	376
FixPack KU 250 with plastic roller and scrapers		1	20	500	250	12,5	417
FixPack S 200 with star roller		1	–	330	200	–	327
FixPack S 250 with star roller		1	–	330	250	–	349

* Also available as press for one-way ploughs

All statements, measurements and weights given represent standards subject to continuous further development and are therefore not binding. The weights given always refer to standard equipped implements. We reserve the right to change specifications.

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