

SEMI-MOUNTED REVERSIBLE PLOUGHS **DIAMANT**





Diamant 11 and Diamant 12



- The especially high stability of the ploughs meets the increasing horsepower of tractors at wide working widths.
- It is possible to plough near fences, ditches and boundaries despite wide working widths.
- The skimmers can be adjusted quickly, easily and without tools.
- The new generation of DuraMaxx plough bodies provides longer service life, less clogging and lower traction requirements, resulting in cost savings when using the plough.
- The Hydromatic-T overload protection allows plough bodies to be deflected in three dimensions.
- The traction enhancer reduces slip and increases the load applying to the rear tractor axle.
- The transport on public roads is safe with weight being distributed between tractor and plough

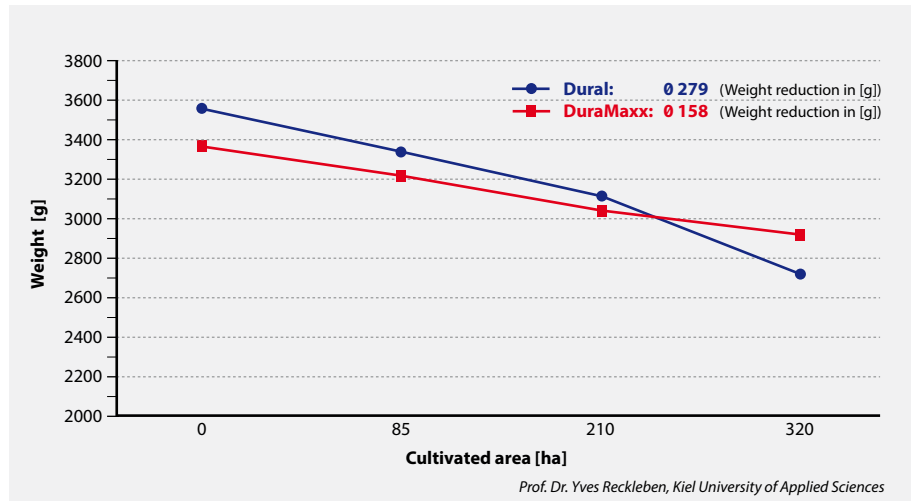
The demands on modern ploughs increase more and more due to continuously growing farms. LEMKEN offer Diamant 11 and Diamant 12 to meet these demands, especially with regard to handling, working quality and increase of productivity.

- The plough is easy to manoeuvre, in order to turn on narrow headlands

quickly providing optimum hectare performance.

- The easy to use working width adjustment is suitable for different soil and weather conditions, an important contribution to ecological and economic farming.

75 % longer service life



DuraMaxx – the better plough body

Duramaxx bodies represent a completely new plough body concept, enabling a 75 % increase in service life and a setup time reduction of up to 80 %.

- Duramaxx parts are made of much harder steel than conventional parts. This was made possible by eliminating drill and punch holes, which weaken the material.

- The mouldboards and slats are completely carried by the frog and are no longer the supporting part of the plough body. Their sole function is to turn the soil.

- They can be almost completely worn without affecting the stability of the plough body.

- Other advantages: Duramaxx plough bodies have a longer service life, are less likely to stick, and have a lower traction requirement.





Quick changing without tools

Duramaxx plough bodies are designed such that the mouldboards, slats and shins can be quickly replaced without tools

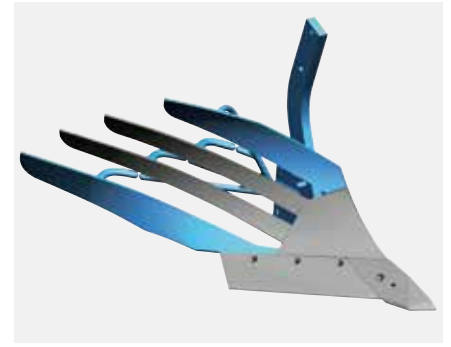
- Only one lynch pin must be pulled to remove the shin, which also serves as a locking element for the other structural elements. Afterwards, the mouldboard or the slats can be pulled out of their coupling device.
- Changing the share points is also a lot quicker compared with conventional systems because they are attached with only one bolt.



The body structure

Duramaxx plough bodies are available with mouldboard or slatted body.

- The mouldboard and the slats are attached with only two hooks.
- The clearance between the slats and the support is significantly increased on the slatted bodies. The support is set in line with the slats. This makes it possible to plough without clogging, even under difficult conditions.



DuraMaxx Hybrid for sticky soils

Plastic slats are also available for the DuraMaxx plough body for use in extremely sticky soils and in soil conditions where there is little pressure build-up on the mouldboard

- Optimal sliding properties are achieved when plastic slats are used at the top and bottom for the areas of the plough body that tend to stick.
- This means the DuraMaxx body can work without soil sticking - even under extreme conditions.



Diamant 11 – Committed to Tradition



The reliable turnover device

Two telescopic cylinders rotate the plough powerfully and smoothly through 180 degrees.

- The precise inclination is adjusted separately for each side with adjustment bolts.



The big wheel

The large dimensioned wheel minimises soil pressure when ploughing and guarantees the required safety during road transport.

- The working depth of the plough is adjusted at the front with the three-point linkage, and with the hydraulically adjustable wheel at the rear. A pin serves as a depth limiter.
- A stop on the wheel prevents the plough from sinking too deep. This ensures that there is always sufficient clearance between the stabiliser and the soil.



Traction assistance, unregulated, optional

Diamant 11 ploughs can be equipped with unregulated traction assistance as an option.

- An additional hydraulic cylinder transfers the weight to the tractor's rear axle. This assists the traction of the tractor.
- This „intelligent distribution of force“ reduces slip and saves fuel.



Diamant 12 – provides values



Traction assistance, regulated, standard

Optimal hydraulic pre-tensioning can be set and stored according to the soil, tractor and distribution of force

- A significant increase in the rear axle load reduces slip and saves fuel.
- A degree of weight transfer, during road transport, means front ballast weight does not overload front axle on the road. Steering can be easier as a result.



Headlands management with TurnControl

With TurnControl, the pressure of the traction assistance is automatically reduced when turning, thus increasing the tractor's stability.

- Pressure is automatically adjusted, when turning, to ensure almost equal weight distribution is maintained on right and left tractor wheel.
- A sensor on the plough headstock measures the steering angle between the tractor and plough. When a steering angle of more than 60° is reached, the cylinder is automatically completely relieved. This also provides the required stability on slopes.



Relief for the tractor driver

With TurnControl electronic regulation, of all important plough functions, such as the plough inclination, plough rotation or the traction assistance pressure can be adjusted from the tractor seat

- The plough inclination is set and stored without mechanical stops by pressing a button on the operating terminal. The two double-acting turnover device cylinders hold the plough exactly in the pre-set position, mechanical turning angle stops are no longer required.
- The set inclination can also be "overridden" when ploughing the first or last more shallow furrows.



Always Well-Equipped



Boundary ploughing with an extension furrow

The lateral position of the wheel not only reduces the load on the plough frame, but also the distance between the tractor wheels and the mounted plough wheel. This has a positive effect on the manoeuvrability of the implement on the headlands

- With ploughs that are equipped with an extension furrow, the wheel position enables boundary ploughing right up to the neighbouring field.
- In the five-furrow model, only the tyre width runs directly beside the furrow. If the plough is expanded by one set of bodies, the wheel runs within the plough line.



Skimmer adjustment without tools

Working depth and inclination are independently adjusted without tools.

- As standard, the spreading angle can be adjusted by repositioning a wedge locked with a pin, without changing the working depth of the skimmer.
- The working depth is adjusted in stages with a pin on the flat leg. So, all of the skimmers on the plough are adjusted uniformly without requiring any other alignment and remeasuring. The angle is not changed in doing so.



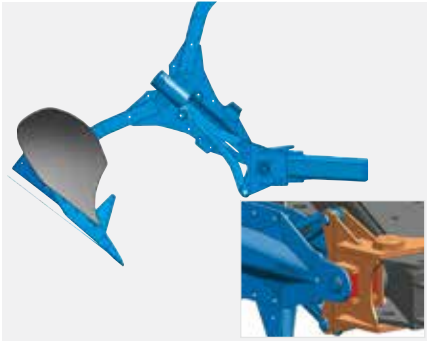
No skimmer distortion

In the model with skimmers, the Diamant is equipped with sturdy flat legs that are attached to the frame with two bolts.

- The flat leg prevents unwanted skimmer movement.
- It can be easily removed for ploughing without skimmers.



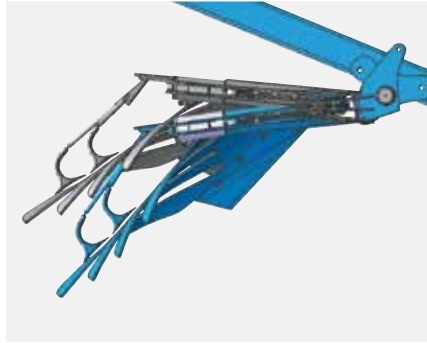
Ploughing under all Conditions without Interruptions



Hydromatic overload protection

The innovative LEMKEN Hydromatic overload protection consists of a steering system that ensures a solid connection of the plough body to the bearing point in every position.

- With high tripping and re-entry forces, the Hydromatic ensures soft, smooth tripping when meeting an obstacle.
- In doing so, the bodies are always firmly held and cannot be unhooked or torn off.



Simultaneous upwards and lateral deflection

The Hydromatic hydraulic overload element can easily deflect at any time, even when meeting lateral obstacles, up to 38 cm upwards and simultaneously, by up to 20 cm to the side.

- Even when ploughing deeply, there is enough deflection clearance to ensure continuous smooth operation.
- The high tripping forces can be easily adjusted from the tractor seat.



Individual Adjustment

A minimum and maximum value for the tripping force can be individually adjusted between 50 and 140 bar using a handwheel on the control valve (optional), e.g. for shallow or heavy soil areas

- These limit values can then be reached using the tractor control unit.
- It is not necessary to readjust by observing the manometer.
- The solid connection between the plough beam and the frame allows low system pressures.



Technical Data

Model	Working width per furrow [approx. cm]		Interbody clearance [cm]	Number of furrows	Weight [approx. kg]	
	Diamant	Diamant V			Diamant	Diamant V
With double cutting shearbolt overload safety device						
Diamant (V) 11 5 L 100	33,38,44,50	30 - 55	100	5	2,580	3,755
Diamant (V) 11 5+1 L 100	33,38,44,50	30 - 55	100	5+1	2,830	3,065
Diamant (V) 11 6 L 100	33,38,44,50	30 - 55	100	6	2,826	2,036
Diamant (V) 11 6+1 L 100	33,38,44,50	30 - 55	100	6+1	3,076	3,346
Diamant (V) 11 7 L 100	33,38,44,50	30 - 55	100	7	3,072	3,317
Diamant (V) 11 7+1 L 100	33,38,44,50	30 - 55	100	7+1	3,322	3,627
Diamant (V) 11 8 L 100	33,38,44,50	30 - 55	100	8	3,318	2,598
Diamant (V) 11 8+1 L 100	33,38,44,50	30 - 55	100	8+1	3,568	3,908
Diamant (V) 11 5 L 120	33,38,44,50	30 - 55	120	5	2,630	3,825
Diamant (V) 11 5+1 L 120	33,38,44,50	30 - 55	120	5+1	2,892	3,149
Diamant (V) 11 6 L 120	33,38,44,50	30 - 55	120	6	2,888	3,120
Diamant (V) 11 6+1 L 120	33,38,44,50	30 - 55	120	6+1	3,150	3,444
Diamant 11 7 L 120	33,38,44,50		120	7	3,146	
Diamant 11 7+1 L 120	33,38,44,50		120	7+1	3,408	
With additional hydraulic overload safety device						
Diamant 11 (V) T 5 L 100	33,38,44,50	30 - 55	100	5	2,800	2,975
Diamant 11 (V) T 5+1 L 100	33,38,44,50	30 - 55	100	5+1	3,099	3,334
Diamant 11 (V) T 6 L 100	33,38,44,50	30 - 55	100	6	3,090	3,300
Diamant 11 (V) T 6+1 L 100	33,38,44,50	30 - 55	100	6+1	3,389	3,659
Diamant 11 (V) T 7 L 100	33,38,44,50	30 - 55	100	7	3,380	3,625
Diamant 11 (V) T 7+1 L 100	33,38,44,50	30 - 55	100	7+1	3,679	4,984
Diamant 11 VT 5 L 120		30 - 55	120	5		3,045
Diamant 11 VT 5+1 L 120		30 - 55	120	5+1		3,418
Diamant 11 VT 6 L 120		30 - 55	120	6		3,384
Diamant 11 VT 6+1 L 120		30 - 55	120	6+1		3,757

Number of furrows	Diamant 11				Diamant 12			
	Four-staged working width	Vari Version	T-element	OF version	Four-staged working width	Vari Version	T-elements not with FlexPack	Integrated FlexPack packer
5+1	x	x	x	x				
6+1	x	x	x	x	x	x	x	x
7+1	x	x	x	x	x	x	x	x
8+1	x			x	x	x	x	
9+1					x			

All specifications, dimensions and weights are subject to continuous technical development and are therefore not binding. The weight specifications always refer to the basic equipment. Subject to change.

Service decides



When you have bought a machine from LEMKEN, the well known, almost proverbial LEMKEN service starts. 18 customer-oriented factory branches and outdoor storage areas in Germany as well as our own sales companies and importers in more than 40 countries, and a strong dealer network, ensure that machines and spare parts are supplied quickly. If a part is not in

stock, it can be delivered to the customer within 24 hours via the LEMKEN logistics centre which is manned round-the-clock 365 days a year.

Knowledge from the LEMKEN specialist

Well trained customer service technicians are available to

farmers, contractors and trade, who are using machinery for the first time, as well as for professional maintenance and repairs. Thanks to regular training courses, LEMKEN customer service is always up to date with the latest LEMKEN technology.

Original spare parts from LEMKEN

LEMKEN wearing parts are designed for a maximum service life. High-quality materials, the latest production methods, and an intensive quality control ensure a long service life. Therefore, all original spare parts bear a unique identification with the registered LEMKEN trademark. Original spare parts can be ordered at any time online on the Internet via the LEMKEN information and ordering system.



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