KRM

Elektra

Soladrill SM-P

- Easy clean hopper ~ no internal pipework
- Elektra ISObus control of metering and functions
- Quick and easy calibration

KRM Sola

One drill for plough/press, min-till or direct sowing . . . for greater efficiency and cost savings.

The KRM Soladrill SM-P is a new concept drill offering cereal growers the opportunity to use only one drill for sowing into a ploughed seedbed, into min-till prepared seedbeds or no-till directly into a stubble.

Many farmers are saving costs using min-till techniques, but the use of direct drilling in cereal growing has increased over recent years. One of the main reasons for this is thought to be that existing equipment has to be very heavy to ensure penetration in hard conditions and that discs tend to smear and not always cover the seed in wetter soil conditions. The capital cost involved in an additional, purpose built direct drill is high and maintenance costs can be prohibitive.

KRM has overcome these problems with the new SM-P seed drill. The SM-P incorporates a heavy duty tine coulter, which will work equally well directly into unmoved soil, into min-till seedbeds and into ploughed land.

4m ~ 7m Sowing Widths

SM-P Seed Drill

New Pressurised Hopper

The SM-P 2000lt. capacity pressurised hopper with sealed weatherproof lid ensures there is no air loss from the distribution system into the hopper, as occurs in traditional systems. This means that the high speed airstream from the hydraulic drive fan is more effectively and efficiently used to give precise distribution of seed to each coulter and ensures that the seed flow from the hopper to the metering unit is consistent from hopper full to empty, even when working on slopes.

A further benefit is that the seed distribution heads and all pipework are outside the hopper, giving easier access for filling and fast, easy and complete cleaning when changing seed type or variety.

New Precise, Even Metering

Precise control of sowing rate and even seed spacing in the row are vital in modern cereal growing management. New varieties and seed dressings have also led to reduced sowing rates. The KRM Sola SM-P drill uses a new stainless steel central system for precise, gentle and versatile metering. The central fluted roller accurately meters all seed types from small seeds such as oilseed rape, linseed, grass seed etc. to cereals, peas and beans. The pressurised hopper encourages gentle, even flow of difficult seeds and dressings into the metering unit without agitation. The metering unit can be fully taken apart without tools for quick and thorough cleaning.

Easy and Accurate Calibration

A new calibration system for the SM-P, conveniently placed at the front left of the drill, enables the operator, from one initial calibration, to quickly and accurately set the desired sowing rate. By simply pressing a button to collect an amount of seed and entering this into the ISOBUS console means the metering unit is then automatically set to precisely the rate required. Any residual seed can quickly be emptied for fast change between seed types. The high speed airflow is provided by a hydraulic drive fan.

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Accurate Seed Placement in all soils

Independent trials have long proven that precise depth control is the most important factor if a crop is to achieve full potential. Accurate depth results in more even germination and emergence, so that each plant is at the same growth stage through to maturity. Crop maintenance, agro-chemicals and fertilisers therefore have the maximum effect for optimum use of inputs, without waste.

How does the SM-P coulter work ?

The SM-P has a very narrow tine tip, angled forward to ensure soil closure around the seed slot. The seed delivery tube is positioned behind. The tine is tungsten carbide tip for maximum tine working life in the hardest ground conditions. In operation, the forward angle of the KRM SM-P coulters pulls the tip into work. Seed falls into the flow of soil behind the narrow tine. This action ensures maximum soil/seed contact at the required depth for improved germination whilst disturbing as little soil as possible outside the seed row.

What benefits are offered by the SM-P coulter ?

The coulter will operate in hard, or worse, hard and stony conditions when discs will not penetrate. And when conditions are wet, the drill can be operated without the risk of smearing. This means that crops can be sown at the right time in a wide range of conditions for better timeliness and improved yields ... and all by using one drill.

In harder min-till or no-till seedbeds, the soil below the seed is loosened and aerated by the tine action. Roots can therefore freely grow down nearer moisture to give a well established system to support plant growth. Undisturbed soil between the rows leaves a firm surface for following spraying or spreading operations. Vital crop maintenance can therefore be carried out at the correct plant growth stage with less risk of compaction or rutting. Less soil movement also helps minimise blackgrass seed germination and in turn helps to reduce infestation.

Discs lack penetration in hard soils, and in less than perfect conditions smearing can occur which seals the slot and results in it filling with water - leading to rotting seed and attracting slugs.

SM-P Seed Drill

KRM SM-P Coulter

Positive depth control

SM-P coulters are equal length for each row ensuring the pressure at the coulter tip is the same across the full drill width. Heavy duty double springs provide positive pressure to the coulter, resulting in more pressure and therefore sowing depth. The system achieves equally good results in shallow drilling (rape & cover crops) or deep drilling (peas & beans) or when soil conditions vary.

High clearance coulters

The high clearance and large stagger *SM-P* coulters allow material to flow through in the most difficult cloddy, stony or incorporated min-till or no-till direct drilled seedbeds or cover crops without blockage. The long, stiff coulter arms maximise clearance beneath the coulter frame and allow high forward speeds without coulter "bounce" for increased daily work rates. Central depth setting, working through a parallelogram linkage, ensures pressure on all coulters is identical for constant depth setting. The coulters following the tractor wheels can be independently adjusted if required.

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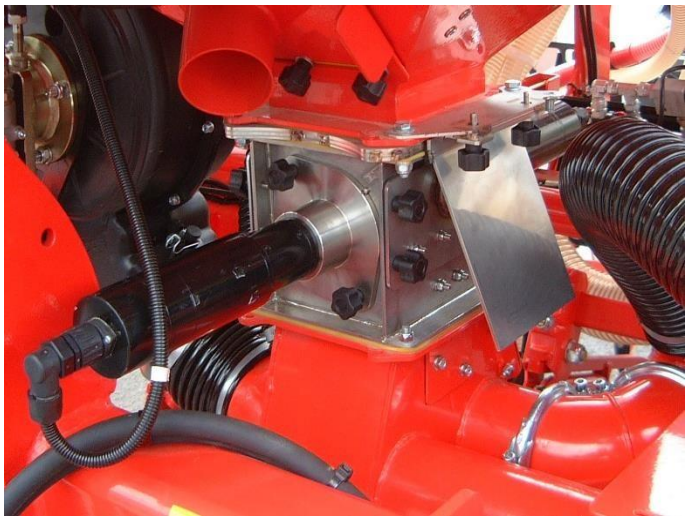
Elektra . . precise control at your fingertips !



ISOBUS Controlled Metering

Precise control of sowing rate and even seed spacing in the row are vital in modern cereal growing management. The KRM Soladrill SM-P uses a newly developed central system for precise, gentle and versatile metering for all seed types from small seeds such as oilseed rape, linseed, grass seeds etc to cereals, peas and beans. Two motors independently meter seed to each half of the drill, providing ½ width shut off.

ISOBUS in-cab control of all functions includes 2+2 tramlines and full monitoring includes fan speed and hopper seed level.

ISOBUS comes as standard. The ISOBUS controller controls the electric drive to the metering unit and gives the operator fingertip control in the tractor cab of:

Seed Calibration : simply input the seed weight collected during the calibration procedure and the required sowing rate, then the controller will automatically adjust the metering to the precise setting for the target sowing rate.

On-the-move rate adjustment : at the touch of a button, the operator can increase or decrease the sowing rate to suit the needs of individual parts of the field . . . for more efficient and optimum use of expensive seed.

Section Control : automatic control of seeding at headlands. This accurate start/stop prevents over-sowing or misses, and allows the centre of the field to be drilled leaving an accurate headland border. Half width via two sections is available as an option.

Variable Rate : the SM-P is ready prepared to follow GPS variable rate sowing maps.

No ISOBUS Terminal? KRM supply a range of ISObus terminals from the cost effective Smart 570 controller to the more advanced Touch 800 and Touch 1200 terminals which can be upgraded for Section Control & Variable Rate application as required.

SM-P Seed Drill

Built for high performance

Compact, close coupling

Offered in 4m to 7m working widths, the tractor mounted SM-P features a compact design giving great strength with the minimum weight. The close centre of gravity allows the use of a smaller and lighter tractor, so reducing seedbed compaction.

A hydraulically driven fan provides a high speed airstream and saves fuel by not having to run the tractor at full PTO speed.

The SM-P drill folds hydraulically to 3m for fast and safe transport. Hydraulic locks secure the wings in the folded position.

Sowing depth can quickly be set by ratchet adjusters against a conveniently positioned scale for reference.

Two rows of staggered following harrow tines leave a level seed bed finish. The harrow tine pressure can quickly be adjusted to suit seedbed conditions and seed types.

The SM-P has a loading platform with handrail and access steps for easy and safe access and for checking hopper contents and filling. Full road LED lighting and working lights are standard fitment.

The full opening sealed hopper lid accomodates all filling methods from big bags to bulk. The cover opens fully and protects the contents from rain and dust.

KRM Soladrill SM-P : TECHNICAL SPECIFICATION

Heavy Duty Bout Markers as standard

Rear folding heavy duty markers are compact for easier drilling on headlands or around obstructions. The markers can be adjusted for wheel mark, or for centreline mark for easy and accurate driving at high forward speeds. The large diameter cutaway discs are designed to leave a clearly visible mark in the most difficult seedbeds.

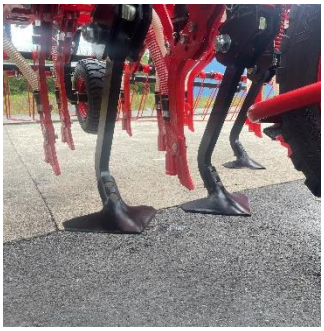
The heavy duty markers incorporate shear bolt protection in the event of accidental contact or collision.

Standard Equipment includes :

2000 lt. capacity pressurised hopper
Sealed, wide opening hopper lid
Hopper screen
Hopper access steps and platform
Central metering unit
Elektra ISOBUS electric metering
Stepless seed rate adjustment 2-400 kg/ha
Integral calibration kit for quick setting
Flotation Wheels 340/55 x 16
Hydraulic rear fold markers
SM-P Tine coulters in 4 rows
Central depth setting adjustment
Hydraulic fan drive : requires up to 45lt/min
Parallelogram mounted coulter frame
Heavy duty 2 row following harrow
Full road and working LED lights
2+2 shut off tramline control
Sensors for hopper level
Sensor for fan speed
Working & hopper lights

Optional Equipment includes :

3+3 track eradicators - 2 eradicators to remove each tractor wheel and 1 eradicator to remove each drill wheel.



Hydraulic depth adjustment. - for quick easy adjustment a pair of hydraulic cylinders along with stop collars set the drilling depth.

Pre-emergence markers - operated from the marker circuit or the hydraulic fan circuit where markers are not used eg for RTK.

Model	4m00	4m80	5m00	6m00	6m00	7m00
Number of rows	25	29	31	24	37	43
Row Spacing (cm)	16	16.5	16	25	16	16
Weight (kg)	1950	2240	2250	2300	2540	2830

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