KRM

Versatile Sowing at Low Cost

Soladrill SM1909

Positive penetration in the hardest dry or stony conditions

No smear in wet soils

Sow directly into stubble , min-till or plough/press seedbed

Deep tilth for good root growth

Low power requirement saves fuel

Ideal for deep sowing of Peas/Beans

KRM Sola

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

The KRM Soladrill SM1909 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 direct into a stubble. Many farmers are saving costs using min-till techniques, but the use of direct drilling in cereal growing has increased relatively slowly 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 restrictive.

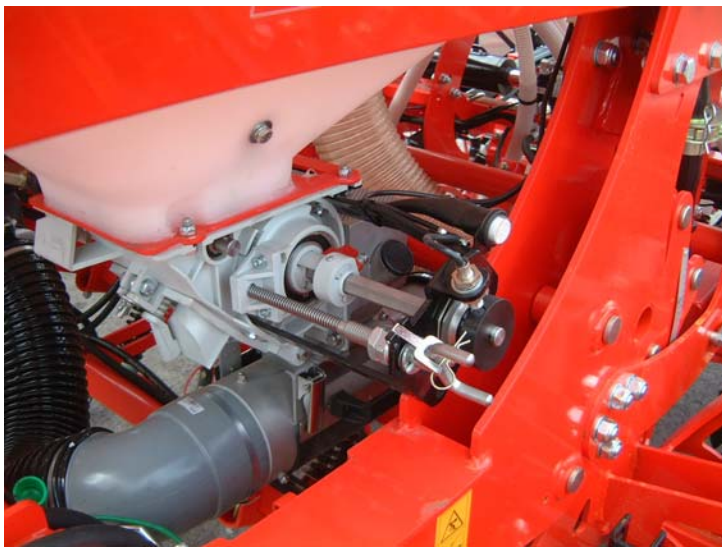
KRM has overcome these problems with the new SM1909 seed drill . The SM1909 incorporates a heavy duty tine coulter which will work equally directly into unmoved soil, into min-till seedbeds and into ploughed land.

The KRM SM1909 versatility means more timely sowing of crops in the right conditions leading to greater yields. The light but strong construction saves expensive horsepower, saves fuel, saves labour and saves time . . to improve margins

SM1909 Seed Drill

Precise, Even Seed Metering

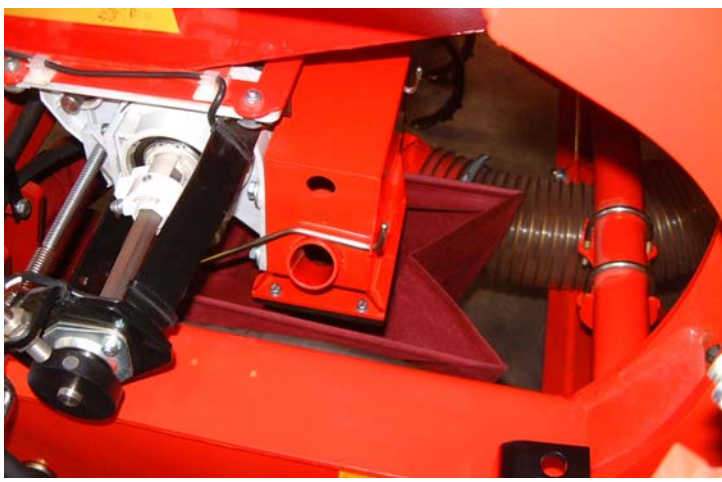
Precise control of sowing rate and even seed spacing in the row are vital in modern cereal growing management. New varieties and seed dressings have led to reduced sowing rates. The KRM Sola SM1909 drill uses the field proven central system for precise, gentle and versatile metering. The central fluted roller accurately meters all seed types from small seeds such as oilseed rape, linseed, grass seeds etc to cereals, peas and beans. Slow rotating agitator encourages gentle, even flow of difficult seeds and dressings into the metering unit.



Conveniently offset to give the operator easy access from the side of the drill to adjust the settings, the metering unit precisely meters all seed types from 2 to 400kg/ha. A high speed airstream carries the seed to a distribution unit and evenly delivers the seed to the individual coulters. A simple calibration procedure ensures fast and accurate setting of the required sowing rate. The central feed roll allows accurate metering with only small quantities of seed in the hopper. Any residual seed can quickly be emptied by opening a flap for fast change between seed types. The high speed airflow is provided by a hydraulic drive fan.

Simple and Accurate Calibration

For calibration, a bag is positioned under the metering unit to collect seed for quick and accurate checking of the sowing rate for individual varieties and seed types. On mechanical drive drills, the metering unit is rotated by crank handle. Then simply weigh the seed collected to confirm or adjust to the rate required. On Solatronic Lite electric drive drills, the metering is turned simply by pressing a button. The amount of seed collected is entered into the control box and after this single calibration, the metering unit is automatically set to the rate required.

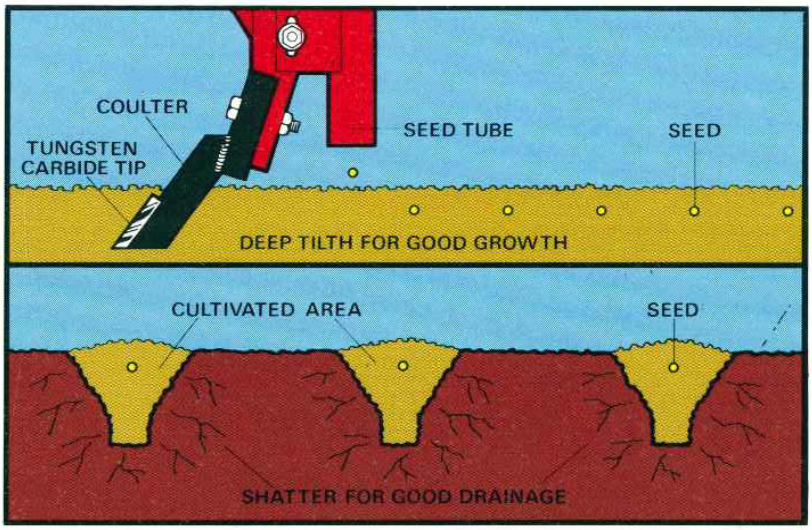


Angled surfaces in the hopper base and fully lowering the flap in the metering unit makes for fast and complete emptying when changing seed type.

KRM Sola

Accurate Seed Placement in all soils

Independent trials have long proved 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 SM1909 coulter work ?

The new coulter has a very narrow tine tip, angled forward for positive penetration with the seed delivery tube positioned behind. The tine is tungsten carbide tipped, a very hard-wearing material, for maximum tine working life in the hardest ground conditions. In operation, the forward angle of the KRM SM1909 coulters pulls the tip into work at a depth of approx 75mm. Each coulter acts as a “mini-subsoiler”, creating a tilth as it is drawn forward. Toxic straw waste is moved sideways by this action so that seed is dropped into clear moist soil. 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.

What benefits are offered by the SM1909 coulter ?

The 1909 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 risk of smearing. This means that crops can sown at the right time in a wide range of conditions for better timeliness and improved yields . . and all from using one drill.

In harder min-till or direct 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 moved also helps minimise blackgrass seed germination helps reduce blackgrass 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.

SM1909 Seed Drill

Direct Sowing

Min-Till Sowing

Sowing after Potatoes

Sowing Peas in Plough/Press

KRM Sola

Solatronic . . precise control at your fingertips !

Solatronic is simple to program and monitors forward speed, area sown, fan speed and hopper low seed level, but with mechanical drive to the metering mechanism. The tramline sequence is operated automatically as the markers are raised at the end of each bout. The 2+2 tramline shut-offs save seed to the hopper for a clear start to each tramline.

Solatronic Lite (Option) controls the tramline sequence with 2+2 tramline shut offs and monitors the forward speed, area sown, fan speed and hopper low seed level. In addition, Solatronic Lite will also provide electric drive to the metering unit. The forward speed is provided by a GPS sensor mounted on the drill. The single control box then gives the operator fingertip control of:

Automatic rate calibration : simply input the seed weight collected during the calibration procedure and the required sowing rate, then the Lite 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.

Variable Rate : (Option) A software unlock and connection cable allow the Solatronic Lite to be connected to a GPS unit to follow pre-prepared variable rate sowing maps.

KRM Auto-Switch (Option) can be linked to Solatronic Lite for automatic on/off seeding control 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. Auto-Switch can also follow a pre-prepared GPS variable sowing rate map to automatically adjust the sowing rate.

SM1909 Seed Drill

Built for high performance

Compact, close coupling

The tractor mounted SM1909 features a compact design, giving great strength with the minimum of weight. Close centre of gravity allows the use of a smaller and lighter tractor, so reducing seedbed compaction.

Offered in 4m to 6m working widths, a special linkage in the coulter frame pivots, allow the centre and wing sections to follow ground contours to maintain accurate sowing depth. The drill folds hydraulically to 3m for safe and fast transport between fields and incorporates an automatic lock when in the folded position.

Shaft and gear drive without chains ensures positive drive to the metering unit. A wheel brake stops sowing instantly when the drill is raised.

The SM1909 drill folds hydraulically to 3m for fast and safe transport. 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.

Loading platform with handrail and access steps for easy and safe access for checking hopper contents and filling. Full road lighting and working lights are standard fitment.

The wide hopper opening accomodates all filling methods from Big Bags to Bulk. The cover opens fully and protects the contents from rain and dust.

KRM Soladrill SM1909 : 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 more 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 hopper
- Folding weatherproof cover
- Hopper screen
- Hopper access steps and platform
- Central Metering unit with micro-metering
- Stepless seed rate adjustment 2-400 kg/ha
- Integral calibration kit for quick setting
- Flotation Wheels 340/55 x 16
- Tine coulters in 4 rows
- Tungsten carbide coulter tips
- Parallelogram mounted coulter frame
- Central depth setting adjustment
- Hydraulic drive fan
- Full road and working lights
- Heavy duty 2row following harrow
- Hydraulic rear fold markers
- Solatronic 2+2 shut off tramline control with sensors for hopper level, fan, forward speed

Optional Equipment includes :

- Solatronic Lite electronic drill control
- 3 + 3 Tractor Wheel Eradicators
- 3 + 3 Tramline shut off
- Individual row manual shut off valves
- Variable Rate sowing with GPS control
- Automatic 2 disc Pre-Emergence Marker
- Electric half width sowing shut-off
- Auto-Switch headland management

Model	**4m80**	**5m00**	**6m00**
Coulter	Tine	Tine	Tine
Number of Rows	29	31	37
Row Spacing cm	16	16	16

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