KRM

Quality Sowing at Low Cost

Soladrill Ares

4m ~ 6m Sowing Widths

KRM Sola

Accurate seed rate and precise depth . . .
for greater efficiency and cost savings

The KRM Sola Ares 2713 Seed Drill
in 4m00 to 6m00 widths

In today's intensive cereal growing systems, the quality of sowing in a range of conditions is critical if any crop is to have the best start and opportunity to achieve maximum potential.

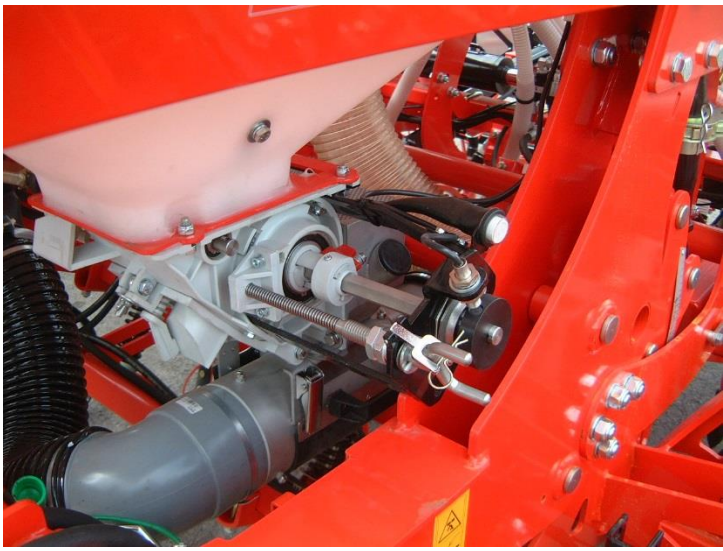
Whether it is a wet sowing season with sticky, difficult conditions or a dry one with hard, cloddy seedbeds, it is important to have a drill which will produce Quality Sowing in the widest range of conditions. The KRM Sola Ares 2713 seed drill with choice of Tine or Double Disc coulters allows better management of crop establishment in all conditions : fast drilling for high daily work rates in favourable "reduced tillage" or plough/press seedbeds, but still ensure Quality Sowing in uncertain or wet conditions. . . and all with one drill, when most other drills would be parked in the barn.

Extensive development by Sola on the coulter systems and seed metering has been included in the Ares Seed Drill. The result . . **KRM Sola Quality Sowing** combined with versatility means better germination and more even crop emergence for optimum use of inputs . . . using less horsepower, using less fuel and using less time for significant crop establishment cost savings.

Ares 2713 Seed Drill

Precise, Even Seed Metering

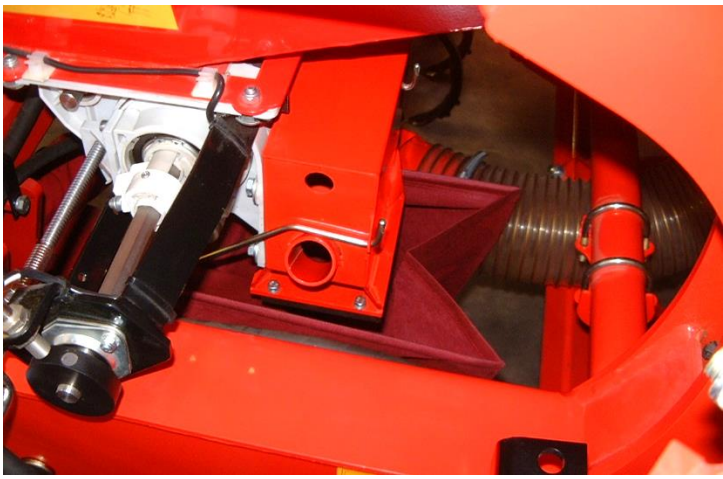
Precise control of sowing rate and even seed spacing in the row are vital in modern cereal growing management. New varieties and seed dressings have led to reduced sowing rates. The KRM Sola Ares 2713 drill uses the field proven central system for precise, gentle and versatile metering. The central fluted 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.

KRM Elite Tine Coulter

Positive depth control

Elite Tine coulters are mounted in 3 or 4 rows of equal length arms for each row. A heavy duty spring, positioned at a shallow angle below the tine, ensures that for each movement of the tine tip, there is only a small corresponding movement of the spring . . . resulting in more even pressure and therefore sowing depth as the coulter moves to follow the ground surface. The system achieves equally good results in shallow drilling (rape) or deep drilling (peas) or when soil conditions vary.

High clearance coulters

The 3 rows of high clearance and large stagger *Elite* coulters allow material to flow through in the most difficult cloddy, stony or incorporated min-till seedbeds without blockage. Short coulter arms allow high forward speeds without “bounce” for increased daily work rates. The special *Elite* coulter tip is shaped to give positive penetration and trash clearance but not lift wet, cloddy soil. Central depth setting working through a parallelogram linkage ensures pressure on all coulters is identical for constant depth setting. Individual coulter pressure can be adjusted if required.

Low operating costs

The tip of each coulter is designed to maintain the same shape and therefore sowing performance as wear occurs. The tip is easy and low cost to replace. Narrow profile produces Quality Sowing using less horsepower, less fuel and in less time so significantly reduced operating costs.

Ares 2713 Seed Drill

KRM PT Tine Coulter

For “low disturbance” sowing the PT coulter has a very narrow tip, angled forward for positive penetration with the seed delivery tube positioned behind. The tine is tungsten carbide tipped to minimise wear giving the benefits of maximum working life in the hardest conditions and low operating costs.

The PT coulter will operate in hard dry or in very wet conditions providing positive depth control with minimal soil disturbance to minimise blackgrass seed germination, so helping reduce any blackgrass infestation.

High Clearance Coulters

PT Tine coulters are mounted in 4 rows of equal length arms for each row. Special shaped arm and a spring mounted above the coulter ensure maximum clearance to prevent risk of blockage in Min-Till or Direct seedbeds. The narrow tip reduces tractor horsepower requirement and central depth setting working through a parallelogram linkage ensures pressure on all coulters is identical for constant sowing depth. Individual coulter pressure can be adjusted if required

KRM Double Disc Coulter

For working in reduced tillage or conventional seedbeds, when precise control of sowing depth is required, KRM with Sola has developed a Double Disc coulter system for positive penetration and depth even at higher forward speeds, but with minimal disturbance of the seedbed to conserve moisture and prevent secondary weed germination, such as Blackgrass.

Double Disc versatility

To achieve this, each double disc coulter consists of two 350mm diameter boron steel flat discs. The discs are staggered to leave a narrow seed furrow. This minimises the movement of soil to create the ideal seed furrow, but also provides a self-cleaning effect to prevent blockage when working in high residue or difficult seedbeds. Discs are mounted on maintenance-free ball bearings and can be adjusted for wear to maintain the correct spacing between the discs. A rubber depth control wheel behind each double disc coulter ensures that seed is always placed at the same depth, even in varying soil conditions and even when operating at higher forward speeds. Pressing of the soil by the depth control wheel provides positive soil to seed contact, close to moisture for rapid germination and emergence

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.

Ares 2713 Seed Drill

Built for high performance

Compact, close coupling

The tractor mounted Ares 2713 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, the Ares is available as a solo drill or with integrated cultivator.

The optional cultivator has two rows of heavy duty, auto reset tines to provide the initial loosening and levelling of the seedbed and to prepare a fine tilth for the following three rows of coulters to sow a wide range of conditions, including heavy wet soils and min-till seedbeds. The cultivator frame can be raised or lowered, allowing the operator to adjust the amount of seedbed cultivation to match field requirements.

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 Ares 2713 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 Ares : 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 plastic 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
- Hydraulic rear fold markers
- Sensors for hopper level, fan, forward speed
- Elite Tine coulters in 3 or 4 rows
- PT Tine coulters in 4 rows
- Double Disc coulters in 2 rows
- Central depth setting adjustment
- Hydraulic drive fan
- Parallelogram mounted coulter frame
- Heavy duty 2row following harrow
- 2+2 Track Eradicators on solo drills
- Full road and working lights
- Solatronic 2+2 shut off tramline control

Optional Equipment includes :

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

Model	**4m00**	**4m00**	**4m50**	**4m50**	**4m80**	**4m80**	**5m00**	**5m00**	**6m00**	**6m00**
Coulter	Tine	D-Disc	Tine	D-Disc	Tine	D-Disc	Tine	D-Disc	Tine	D-Disc
No of Rows Elite / PT	32 / 25	28	36 / 28	33	38 / 30	35	40 / 31	35	48 / 37	43
Row Spacing cm	12.5	14	12.5	14	12.5	14	12.5	14	12.5	14

Keith Rennie Machinery Ltd. Roecliffe. Boroughbridge. N.Yorkshire YO51 9LS

Tel: 01423-324221 Fax: 01423-324355 E-mail: info@krm-ltd.co.uk www.krm-ltd.co.uk