Great Plains Seed Drills
Innovative design built on proven principles

Producing thousands of drills every year to meet different crop establishment needs around the world, Great Plains is synonymous with advanced seeding system design and quality manufacture. Our three-metre transport range includes cultivator drills, air drills and compact seeders with working widths ranging from three to nine metres.

Great Plains innovation is founded on experience and driven by sound agronomic principles. This ethos is applied wherever it matters most - maximising yield and quality. That's why all Great Plains drills are designed to ensure first-class seedbed preparation, consistently accurate seed placement, both in terms of spacing and depth, and optimum seed-to-soil contact. Our technical know-how in these vital areas helps to create the ideal conditions for timely germination and consistent, even emergence.

Whether you operate a plough-based, reduced tillage or direct drilling system, whatever your crop rotation or soil types, whether you require minimum or maximum disturbance of the soil, there is a Great Plains drill that is fully equipped for the task.
**Proven reliability, attention-to-detail and outstanding build quality are standard**

All Great Plains units are designed and manufactured to take even the most demanding operating conditions in their stride, year after year. Rigorous FEA testing has resulted in the simplified design and increased strength of all our drill chassis.

**Materials and components are selected for their strength and durability.** For example, nut bars and depth wheel arms are in forged steel. Outsourced components are required to meet the same stringent quality standards. Areas subject to stress, such as pivot points, are reinforced with protective, hard-wearing bushes. Secondary bushes are manufactured in Nylatron, a material with high mechanical strength and excellent wear and fatigue resistance.

**Every Great Plains opener has been computer-designed, CNC machined, laser cut and robotically welded to ensure exact tolerances and excellent reliability.** Built using premium components and materials

**Soil movement and residue management to meet different needs**

Great Plains has developed a range of highly effective and well-proven cultivating discs designed to perform a variety of seedbed preparation, soil movement and residue management tasks.

**Turbo Coulter**

This blade is exclusive to Great Plains vertical tillage and seeding products. It enters the soil vertically which increases its ability to penetrate, therefore improving its cutting performance. The unique patented design of the flutes provides perfect cultivating into residue leaving an ideal environment for the seed. The 432mm diameter blade exits the soil horizontally discharging the cultivated soil behind leaving a mini seedbed for the opener to drill seed into. Ideal for use on reduced tillage and no-till systems and where minimal disturbance and seeding into cover crops or heavy residue is required.

- Saxon CDA Range
- Spartan® Range
- 3P1006NT Range

**Fluted Coulter**

This 432mm diameter coulter with its narrower design and smaller flutes penetrates harder soils easier. It is the preferred blade for pasture renovation.

- 3P1006NT Range
- Saxon CDA Range
- Spartan® Range

**Cultivating Disc**

This 460mm diameter disc with either a 25mm or 50mm notched profile is only available on the Centurion CDA drill series. The discs provide full width cultivation with maximum disturbance and, where required, residue mixing. Ideally suited for use on reduced tillage or plough-based establishment systems.

- Saxon CDA Range
- Centurion CDA Range
- 51MM X 330MM SINGLE

**Closing wheels**

A choice of seed placement finishing options

Great Plains offers a range of different closing wheel designs to suit different needs and soil conditions. Available on all drills featured in this brochure, each of the options below ensures the seed trench is closed efficiently giving each seed the right environment in which to germinate.

- 25MM X 305MM DOUBLE V
  - This design closes the seed trench with an aggressive ‘pinching’ action. It provides excellent depth control in moist soil conditions.

- WEDGE
  - Combining the ‘best of both worlds’ this 32mm x 330mm wheel closes seed trenches with an aggressive tapered edge while its large ‘footprint’ allows it to stay on top of loose soil.

- 51MM X 330MM SINGLE
  - This design presses soil directly over the seed, aggressively firming the soil surrounding the seed at the precise depth selected.

- 76MM X 330MM CENTRE RIB
  - This design firmly presses the soil directly over the seed with the centre rib of the wheel creating the soil. This crease allows the crust to crack open for even seed emergence.

**Openers**

Built using premium components and materials

Every Great Plains opener has been computer-designed, CNC machined, laser cut and robotically welded to ensure exact tolerances and excellent reliability. Materials and components are selected for their strength and durability. For example, nut bars and depth wheel arms are in forged steel. Outsourced components are required to meet the same stringent quality standards. Areas subject to stress, such as pivot points, are reinforced with protective, hard-wearing bushes. Secondary bushes are manufactured in Nylatron, a material with high mechanical strength and excellent wear and fatigue resistance.

**00 Series Opener**

00 Series Openers are designed for reduced tillage, fluted feed drills. The 00 opener features 330mm x 4mm offset double disc blades mounted on 205 triple lip sealed bearings. Coulter spacing is set at 167mm for optimum performance when seeding in all conditions ensuring the perfect environment in which to germinate. A rear depth controlling gauge wheel uses a T-handle adjuster with 18 depth settings.

- Saxon CDA Range
- Centurion CDA Range

**06/07 Series Openers**

Designed to take the toughest no-till conditions in their stride, 06 and 07 Series Openers feature an integrally mounted 432mm coulter and new unit combination with the opener moving independently of the coulter. The trailing double disc opener features 330mm x 4mm blades, 205 triple sealed bearings, and has a 6.5mm leading opener blade.

- 3P1006NT Range (06 Opener)
- Spartan® Range (07 Opener)

**Keeton Seed Firmer (Optional)**

For maximum seed-to-soil contact

The optional Keeton Seed Firmer runs in the bottom of the seed trench ensuring that the seed is firmed into the bottom of the slot. This not only results in consistently even seed depth, it maximises seed-to-soil contact enabling the seed to absorb moisture and nutrients more readily, reducing the time it takes for the seed to sprout and emerge from the soil. The Keeton Seed Firmer is another useful tool in the drive for consistent and even germination.
Introducing the Centurion and Saxon CDA Drills.

A cultivation, consolidation and seeding package of unsurpassed versatility

The Great Plains CDA family of drills includes both the Centurion and Saxon model ranges. Both the Centurion and Saxon share the same impressive standard features around seed metering, seed placement and consolidation and are available in 3, 4 and 6 metre working widths, in both grain only and grain plus fertiliser variants.

Where the two drills differ quite radically is in the cultivation element that forms part of their respective standard specification. The Centurion is equipped with traditional angled notched discs for full width cultivations in a reduced tillage or plough-based system, whereas the Saxon features Great Plains’ Turbo Coulter sub frame and patented disc units. This system transforms the unit into a semi direct drill able to seed with minimal soil disturbance and into high trash situations including cover crop. The Saxon can also be used for no till operations where soil structure allows.

Quality construction

Our CDA drills have endured extensive and punishing trials in a local quarry and on demanding farm and country roads. For our customers this translates into a robust, solidly constructed drill that not only offers longer working life in the field and attracts higher resale values, but will also eat up the miles on the road.

Highly efficient seed metering

Various roller segments are supplied with each CDA drill. Each segment has a different capacity, allowing all seed types from oil-seed rape to peas and beans to be metered accurately. The helical fluted profile of the roller ensures seed metering remains constant irrespective of rates. The seed is presented uniformly into the Venturi and bunching is eliminated at the opener end ensuring even distribution. With the increased use of cover crops utilising different mixes of seed the CDA can be calibrated to cope with any type of seed combination.

Attention to detail in the design of the roller segments extends to the seed pockets which have a rounded base preventing seed from getting wedged in the pocket. A shallow angle on the pockets’ leading edge ensures even feed of the seed from the roller into the air stream.

A high torque motor rated at 80Nm, the highest in its class, delivers seed efficiently and reliably even at high seed rates and low forward speed. Seeding rates range from 1.5 to 400kg/ha.

Excellent seed distribution creates optimum growing environment

Good seed distribution is dependent on seed from the meter reaching the openers evenly. Optimised design of the Venturi, tower and funnel including a new conical structure in the top of the distribution head has dramatically improved the seed flow and distribution to the openers. This has resulted in greatly enhanced seed distribution in the linear row, providing the optimum growing space that is so important to each seedling.

Adjustable coulter down pressure and depth control

An active coulter down pressure system can apply between 40kg and 160kg of coulter down pressure to suit conventional till and reduced tillage.

The down pressure is applied directly over the centre of the disc so that the opener arm always remains parallel to the soil, maintaining complete ground contact at all times. Down pressure is controlled by a hydraulic ram that rotates the coulter bar compressing the coulter to the soil. This is adjusted by means of the pressure control valve located at the front of the drill.

Individual opener depth adjustment allows each coulter to be set to suit soil conditions. Quick and easy adjustment guarantees superb seed depth control.

How we maximise seed placement accuracy

Great Plains CDA drills are bristling with clever ideas and proven technologies all brought together in a highly efficient and fully integrated system with the primary focus on delivering consistently outstanding seed placement accuracy.

Tramline shut offs and seed blockage sensors

Thoughtfully designed distribution heads with built-in tramline shut-offs and optional seed flow sensors accurately deliver seed to each coulter. Each row unit can be isolated and switched off manually.

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Adjustable coulter down pressure and depth control

An active coulter down pressure system can apply between 40kg and 160kg of coulter down pressure to suit conventional till and reduced tillage.

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Individual opener depth adjustment allows each coulter to be set to suit soil conditions. Quick and easy adjustment guarantees superb seed depth control.
Automatic control of weight distribution across the full width

Under the hopper there are highly accurate weigh cells (optional) automatically adjust the hydraulic down pressure on the wings to maintain consistent working depth across the full width of the machine. As the drill empties, the pressure is automatically reduced. Without weigh cells, wing down pressure is controlled via the terminal.

Total flexibility from smart technology

Data capture and display options for the ISOBUS ready CDA family of drills include the Müller Basic Terminal and the larger 10-inch Müller Elektronik Comfort Terminal.

Two touch-screen options are also available. The Müller Elektronik Touch 800 monitor and the Touch 1200 monitor, which can be used in portrait or landscape format, incorporate the very latest touch technology.

Featuring APP&GO all monitor options are individually expandable, enabling a range of functions to be added as and when required. All monitors also offer unrestricted visibility in the cab.

Seed tube design promotes even germination

The unique seed tube is designed to carry seed all the way to the bottom of the trench formed by the double disc opener. This design virtually eliminates seed bounce, ensuring that every seed is placed precisely and consistently, into an ideal growing environment, at the same depth in the bottom of the seed trench.

The close coupled press wheel provides depth control and firms the soil around the seed trench. This facilitates perfect soil to seed contact ensuring consistent seed germination and subsequently, even emergence.

More control around the headlands

Headland management control enables the operator to turn around on the headland using one function of the tractor hydraulic system. Wheel track eradicators, cultivator discs and openers are lifted sequentially and returned to work in sequence keeping the headlands as small as possible and maximising productivity.
Maximum disturbance. Maximum performance. The Centurion – a true cultivator drill

Change the notched cultivating discs on farm for Turbo Coulter sub-frame and discs to convert your Centurion cultivator drill into a Saxon minimal disturbance drill.

Features and Benefits

Cultivation
- Scalloped discs with a choice of 25mm or 50mm notched profiles
- Disc-to-disc spacing is 250mm – net disc spacing is 125mm (pic 1)
- Optional full width leveling board (pic 2)
- Track width adjustable pre-emergence markers
- Soil deflectors contain soil within machine width

Consolidation
- Large 910mm diameter, 430mm wide tyres reduce bow waving and draught
- Full width tyre packer placed ahead of the drilling coulters
- Shallow cleated tread pattern gives consistent consolidation and improved self-cleaning - scrapers are optional if required
- Staggered wheel formation and ability to reduce tyre pressures enables the drill to run in wet and difficult conditions (pic 3)

Seed Placement
- Compact following harrow mounted on press wheel complete with scraper
- Hopper feeds a 125mm diameter metering roller with unique flute design to eliminate seed pulsing
- Press-injection moulded seed distribution bowl with built-in transfer shot-off and seed flow sensors (optional); accurately delivered to each coulters (pic 5)
- Heavy duty coulter arms with down pressure adjustable up to 160kg and easy depth adjustment (pic 4)
- 76mm coulter spacing
- Each coulters incorporates a seed flap to eliminate seed bounce and a rubber cushion which acts as a depth stop

Memory rams for consistent depth control

The depth of the cultivation discs are controlled by memory rams so any alterations made during the drilling cycle are remembered after turning on the headland.

A drill that cultivates across the entire soil profile and consolidates the soil ahead of seeding with consistently high accuracy, the Centurion is ideally suited to working in reduced tillage and plough-based establishment systems across a wide range of soil types and conditions.

Centurion CDA300

Centurion CDA400

Centurion CDA600

- Reduced tillage
- Plough-based
- Maximum soil disturbance

Centurion CDA drills combine innovative features alongside proven technologies. From the highly effective cultivation discs and consolidating tyre packer to the accuracy and consistency provided by the drills’ seed distribution and placement system, the Centurion is designed and built to deliver outstanding performance and reliability.

The Centurion is equipped as standard with two gangs of 460mm diameter notched cultivation discs mounted in pairs on hub units with ‘sealed for life’ bearings to keep maintenance to an absolute minimum.

A true cultivator drill in every sense, the Centurion provides maximum disturbance across the full width of the machine. The discs are placed at an optimum angle so they can cultivate and level at the same time. This reduces the pre-cultivation required, particularly when the optional levelling board option is used, reducing cultivation time in the field and associated costs.

Reduced tillage
Plough-based
Maximum soil disturbance

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- Soil deflectors contain soil within machine width

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Change the notched cultivating discs on farm for Turbo Coulter sub-frame and discs to convert your Centurion cultivator drill into a Saxon minimal disturbance drill.
Drill with minimal disturbance, into heavy residue and cover crop - the Saxon does it all

The latest addition to the Great Plains CDA family of drills, the Saxon is a unique, low disturbance cultivator drill developed for the latest establishment techniques. The Saxon mirrors the looks of Great Plains’ Centurion cultivator drill and shares all of its key features around seed delivery, seed placement and consolidation. However, the Saxon differs from its sister drill in one key area. Instead of incorporating angled notched cultivation discs within their base specification all Saxon drills incorporate Great Plains’ innovative zonal cultivation and seeding technology (see pages 18 and 19 for full details). This technology equips the Saxon with the patented Great Plains Turbo Coulter, which is designed to meet the need for minimal disturbance and, if required, for cutting through and drilling into high volumes of residue. The full width tyre packer not only offers consolidation but also ensures even weight distribution across the full width of the drill.

Performs in conventional tillage too

For those who operate traditional tillage systems and require a low disturbance, reduced horsepower solution, the Saxon, with its tyre packer and levelling board, performs as well as a conventional cultivator drill. Effective across a wide range of soil types and conditions, the supremely versatile Saxon can also operate very efficiently in no till conditions where the soil structure allows.

CASE STUDY: SAXON

Project Lamport is a 5-year project led by Agrovista and supported by Bayer CropScience to develop new ways of controlling black-grass on heavy land. The trials were conceived against the background of the increasing damage being done to crops and yields by highly resistant black-grass and the rapid spread of the weed across the UK. With herbicides achieving only 90% control when 98% is essential just to stand still by maintaining the seed bank in the soil, new thinking was required that placed more emphasis on cultural methods of control. Project leaders believe the best way to control black-grass on heavy land is to plant cover crops in the autumn and then direct drill spring crops into the killed off vegetation. Throughout the project, various drills from different manufacturers have been trialled on different plots at the Lamport site. Extremely positive results were found utilising Great Plains’ zonal cultivation technique, initially with the Spartan Air Drill (see pages 20 - 23) and more recently with the ideally suited Saxon.

Experience over the last 4 years of trials is showing that a comprehensive approach to this issue appears to provide a workable solution. Not only was spring wheat germination good, but because only 10-50mm strip of soil was disturbed, black-grass germination was low. With an impressive 98.9% control of black-grass achieved without reliance on a matrix of chemical inputs, it’s an approach that offers real potential for consistently good yields and profit. The Saxon utilises Great Plains’ zonal cultivation technique ahead of a full-width tyre packer (see pages 18 and 19) to spread the drill’s weight. This arrangement enables the Saxon to establish a crop in adverse, wet and heavy conditions that would prove prohibitive for some other drills.

Great Plains system impresses at ‘Project Lamport’ resistant weed control trials

Winter wheat after full herbicide programme June 2016

Spring wheat direct drilled after autumn stale seedbeds (no cover crop) July 2016

Spring Wheat direct drilled after autumn cover crop of black oat and vetch (July 2016)
Grain and fertiliser delivery further extends the impressive capability of the Saxon and Centurion CDA range

The development of our CDA grain and fertiliser drills has been driven to a significant degree by extensive trials over a number of years of seeding into cover crop as part of resistance black grass research. This has resulted in a fertiliser application system designed to promote the best possible start for young seedlings particularly in the spring, which is crucial to optimising output for spring crops.

Grain and fertiliser variants are available on all 3-metre, 4-metre and 6-metre Centurion and Saxon CDA drill models.

The Great Plains fertiliser application system places the nutrients at the time of seeding and closer to the seed, either in line with the seed utilising the innovative Great Plains double shoot system, or as a side dressing. As well as speeding up emergence, the consistently accurate placement of fertiliser helps to reduce input costs.

Double shoot technology

- Fertiliser above seed
- Same depth as seed
- Side dressed between rows

Seed plus seed

All Saxon and Centurion grain and fertiliser models incorporate two seed meters instead of one seed meter and one fertiliser meter. This feature greatly improves the accuracy of product delivery. The Great Plains system allows companion crops to be placed either in the seed row or placed to the side maximising establishment of different crops by helping to control weeds, alleviating compaction and promoting good nutrient uptake.

Hopper options

An adjustable partition in the hopper enables percentage grain to fertiliser division of 60/40 or 50/50.

‘On the move’ variable rate control

Independent ‘on the move’ variable rate control provides maximum efficiency where nutrient requirements change within varying field conditions.

Higher application rates of up to 400kg/ha of grain and fertiliser are achievable at speeds of up to 10km/hr thanks to the new design of distribution head and Venturis, a design which also delivers a more even distribution of the seed across the full width of the drill profile and better seed spacing in the linear row.

Half width shut-off on 6m models

Half width calibration and half width shut-off (left or right) is controllable from the cab. Both are standard features on the 6-metre grain only and grain and fertiliser drills.

On all models the fertiliser is placed through a fertiliser tube which can be positioned to be either forward or rear facing. Fertiliser can also be placed to the side allowing side dressing of the seed. The delivery tube can be rotated to suit the requirements of the crop and the amount of fertiliser being used.

Timely emergence and reduced input costs

The Great Plains fertiliser application system places the nutrients at the time of seeding and closer to the seed, either in line with the seed utilising the innovative Great Plains double shoot system, or as a side dressing. As well as speeding up emergence, the consistently accurate placement of fertiliser helps to reduce input costs.
A pleasure to work with – in the field, on the road, or in the yard

Both Centurion and Saxon drill ranges have been designed not only for ease-of-use in the field, but also for improved stability on the road and quick, easy routine maintenance.

Innovative tri-mode packer system

The full-width tyre packer features a unique ‘tri-mode’ design to suit in-field operation, transport and servicing functions.

Field mode

This mode allows all tyres to stay in contact with the ground for headland turns.

Transport mode

Gives increased ground clearance (+250mm) for entry and exit of fields by lowering 2 axles. This also improves stability on cambered roads. Tyres wear more evenly and punctures are reduced.

Service mode

This mode provides easier access when maintaining and servicing the coulter assembly. An added benefit is that if a puncture occurs, the tyre can be changed in the field, without lifting equipment, significantly reducing downtime.

Operator-friendly seed calibration

Calibration is a quick and simple operation. Having entered the target seed rate into the control panel in the cab, the operator walks to the rear of the drill where a dedicated pipe delivers the metered amount. The operator presses the calibration button and fills the calibration bag. The bag is then weighed using the scales supplied and the value entered into the calibration screen. With one press of the ‘OK’ button, the drill is calibrated.

Quick, easy seed roller removal

The seed roller can be removed with a full hopper of seed simply by sliding closed the steel shutter located directly above the metering unit which isolates the hopper from the metering housing. Physically removing the seed roller and then changing individual roller segments are quick, easy manual operations that don’t require any tools.

Safe, easy hopper access and filling

Ergonomically designed steps and platforms provide easy access to the metering housing and distribution head. Strategically placed steps and grab handles enable the operator to safely open the hopper cover either from the front or the back of the drill. The wide hopper makes filling the drill safe, easy operation whether using big bags, wide buckets from tele-handlers or drill fillers.

More ways of tailoring your drill to suit your needs

Centurion and Saxon CDA drills are available with a wide range of optional extras enabling you to fine-tune the specification of your drill to meet particular operating requirements.

Hydraulic levelling board

A popular option on the Centurion, the hydraulically controlled levelling board, situated between the cultivation discs and the tyres, enhances the calibration effect. The sprung leaves level the soil and present a smoother surface to the consolidation tyres allowing the openers to place the seed in an ideal environment. The spacing between the sprung leaves is optimised to allow trash to flow through freely. A depth indicator informs the operator what position the board is working at.

Hydraulic bout markers

Hydraulic bout markers are controlled with the Müller control panel. Markers can be set to work sequentially by bout or set to work the same side if avoiding an obstruction. They can also be set so that both are out together. The marker arms are protected by shear bolts and spares are stowed on the marker arm frame.

Pre-emergence markers

Pre-emergence markers work in conjunction with the tramline system automatically. The sprung tines provide an ideal mark for the sprayer operator. The depth of the tines is adjustable by limiting or extending the stroke of the arm. In difficult conditions the double acting rams provide the required down pressure to ensure the mark made is clear and remains visible. The markers can be operated symmetrically or asymmetrically without compromising visibility of the marks.

Wheel track eradicators

Hydraulically controlled and linked to the headland management function, the optional track eradicators can be isolated and kept out of work. They can also be independently adjusted to work deeper or shallower as required.

Scaper and following harrow

Dependent on the press wheel chosen, a scraper and following harrow assembly is available with Centurion, Saxon and Spartan II ranges. Wheel arm mounted and easy to adjust, the scraper keeps the press wheel clean in difficult conditions so that the drill can carry on seeding.

Easy harrow operation

The following harrow can be engaged and disengaged quickly and easily as and when required. The working depth can also be adjusted to suit different conditions.
Unique zonal cultivation and seeding technology

A concept proven across Great Plains Saxon CDA, Spartan® and 3P1006NT drill ranges.

Ultimately the performance of any drill is measured by the accuracy with which it places the seed and the consistency of emergence that is achieved as a result. It’s a key area and it’s one in which Great Plains design and engineering teams excel.

Ongoing product development over many years has led to a number of important yield-improving advances which have become standard features in many Great Plains drills and are making a real difference for growers around the world. One such innovation is a unique zonal cultivation and seeding system, at the heart of which are Great Plains patented Turbo Coulter discs.

This technology ensures that every seed sown is placed at the optimum depth in an ideal environment to facilitate consistently even germination and it is an integral part of the specification of our widely acclaimed and highly successful Saxon, Spartan® and 3P1006NT drill ranges.

The drills work on pre-cultivated land, no till systems and cover crops.

On Saxon models a full-width tyre packer runs ahead of the Double Disc Openers to firm the soil ahead of seed placement.

Precise placement of the seed by the Double Disc Opener is assured due to the fluted design of the Turbo Coulter which clears crop residue away from the seeding zone.

The Turbo Coulter precisely cultivates zonally creating the ideal environment for the Double Disc Opener to place seed.

The ground is worked vertically with straight blades and only in a 10-50mm strip of soil.

The Press Wheel firms the soil around the seed optimising seed to soil contact, creating the ideal situation for germination leading to consistent emergence.

The cultivated area is darker and warms faster than the uncultivated area when seeding.

Rooting into coultured soil, this proven system creates the ideal conditions for healthy growth and high yields.

This picture shows seed placement and minimal disturbance of soil ahead of trench closure by the press wheel.
Already a well-proven direct drill - the new Spartan II is better than ever

The Spartan II range is the next generation of Spartans incorporating new and improved features further increasing the productivity and versatility of this well-proven direct drilling solution.

Initially available in working widths of 6-metres (Spartan II 607) and 9-metres (Spartan II 907), these models will be joined by 8-metre, 10-metre and 12-metre variants to complete an extensive and versatile range offering a choice of 150mm or 187mm row spacings.

The latest Spartans feature Great Plains’ innovative zonal cultivation and seeding technology (see pages 18 and 19). At its heart is the patented Great Plains Turbo Coulter, which meets the need for minimal disturbance and operation in heavy residue.

Each Turbo Coulter is in line with the trailing double disc 07 Series opener, creating a mini-seedbed in a 10-50mm strip of soil where the seeds will actually be planted, providing every row with equal conditions.

Precise Ground Contour Following

A. HYDRAULIC WEIGHT TRANSFER (SIDE-TO-SIDE)
The Spartan II openers can flex up 125mm and down 75mm. They are mounted to a unique frame. The wings of the frame can flex down as much as 10° and up over 15°. Coupled with constant hydraulic down-pressure applied to the wings, this feature allows the drill to precisely follow undulating ground conditions from side to side.

B. FRONT TO BACK HYDRAULIC WEIGHT TRANSFER
The 2-point parallel linkage connects the centre frame to the cart. The upper linkage is controlled by an adjustable hydraulic cylinder. This allows the machine to flex forward and back 15° hugging the contours of the ground, front to back, over hills and valleys.

Hopper options give you more flexibility

The Spartan II 607 comes with either a single seed-only 5280-litre hopper or two 2885-litre hoppers for seed/fertiliser applications.

The Spartan II 907 comes with two 3000-litre hoppers for seed and fertiliser.

The hoppers are pressurised and manufactured in a polypropylene material impervious to fertiliser.
Consistent, precise seed placement in all conditions

A: The unique planter-style seed tube carries seed all the way to the bottom of the slot formed by the double disc opener. This design virtually eliminates seed bounce, ensuring that every seed is placed precisely and consistently, into an ideal growing environment, at the same depth in the bottom of the seed trench.

B: The close coupled press wheel serves two purposes. Firstly it provides depth control and secondly it tamps the soil around the seed slot. This facilitates perfect seed to soil contact ensuring consistent seed germination and subsequently, even emergence - vitally important if pre-emergence spraying is necessary.

C: The position of the spring connecting directly to the forged nut bar provides between 80 and 110kg of constant down pressure, applied where it matters most, directly over the centre of the disc. This means that the opener arm remains parallel to the soil at all times, ensuring that the double disc opener is presented to the soil at the optimum angle, reducing smearing and soil movement. Down pressure exerted over the coulters is between 180 and 250kg.

D: The Spartan® range has individual opener depth control from 6mm to 102mm. Quick, easy adjustment is by means of a simple T-handle, which allows each coulter to be set to suit soil conditions. Up to 18 settings are available to guarantee superb seed depth control.

New tower system optimises seed distribution

Integrated Daisy Chain Blockage Sensors (DCBS)

The Spartan® has a new tower system designed to further enhance seed distribution across the full width of the drill. Small improvements have been made to give a better flow. For example, primary and secondary hose diameters have been increased by at least 20% for improved seed distribution and air flow. The risk of spillages around headland turns is greatly reduced thanks to significantly shortened hose lengths from meter to tower and a faster variable rate shut-off from the cab.

The tower system on the new Spartan®607 has been completely reconfigured. Now with towers placed to be directly above the seed box, all of which are mounted on the centre section of the drill, the new arrangement looks cleaner and tidier.

Features designed to improve your productivity include: trammles on towers with auto rate adjust, and individual row shut-off option; half-width shut-off and integrated Daisy Chain Blockage Sensors (DCBS), which require fewer wires and provide accurate isolation of a blocked or faulty sensor.

Improved seed metering system design

The meter box has been redesigned to eliminate any dead areas for the seed to gather. A standard agitator ensures that even the lightest seeds are fed evenly and constantly.

Well-proven variable rate hydraulic drive

All Spartan® models feature hydraulic drive which offers outstanding reliability in all operating conditions. It incorporates an internal rate sensor to monitor meter pressure and uses the same hydraulic system as the drill’s hydraulic down pressure function. Radar Speed Control allows for seed rate adjustment while the drill is in operation.

Quick, easy calibration from rear of machine

Seed calibration is a quick and convenient push-button operation from the rear of the machine. Seed is diverted manually by using the simple slider device. The calibration bag (included with the drill) is quickly and easily attached and the fan is then activated by the press of a button. The hoppers can be cleaned out utilising the same basic procedure.

High capacity auger for rapid filling and emptying

Larger Spartan® drills - from the 8-metre 807 to the 12-metre 1207 models - come with a high capacity 254mm diameter auger. Featuring wireless remote control, filling the hoppers and unloading from the rear hopper is quick and easy operation for a single person.

Easy-to-access weight packages

Spartan® 607 models incorporate weight packages, which provide the weight required to penetrate in no-till establishment systems. These easy-to-access weight blocks are quick and easy to remove for reduced tillage operations, where less weight is required to minimise compaction and mitigate the creation of tyre tracks in softer conditions.

Smart, touch-screen control technology

Data capture and display for the ISOBUS-ready Spartan® range and seed rate adjustment on the move is provided by the Müller Elektronik Touch800 monitor. Featuring the latest touch technology, all monitor options are individually expandable, enabling a range of functions to be added as and when required.

Safe and stable in and out of the field

All Spartan® drills fold to 3 metres transport width in compliance with EU and other countries.

New parking stands

All Spartan® drills have new parking stands. The stand for the 607 model is operated manually by means of a simple jack handle, whilst all other models in the range feature hydraulically adjusted parking stands.

New-style rear casters and increased track width

The rear axle on the new Spartan® has a significantly increased track width to improve stability on the road. New stylecaster wheels are fitted with BKT tyres, capable of running at the higher speeds that customers demand. The rear casters follow in the same footprint as the cart tyres so as not to create additional tracks.

Tyres include a scraper to keep them clean.

NEW SPARTAN® DIRECT DRILL RANGE
The Great Plains 3P1006NT is a 2-Point Mounted No-Till Drill with lift assist wheels to ensure safe operation and transport. The 3P1006NT utilises the 06 Series Openers to properly place seed. The coulters are pre-loaded to 204kg to ensure effective penetration, even in the toughest conditions.

The spring pre-load coulter design adds stability and improved tracking on slopes. Our double disc configuration and full length seed tube ensures that the seed is placed consistently at the chosen depth. Additional seed tubes are used to place both native grass and small seeds. This allows three different seeds to be planted at separate rates and different depths at the same time. Depth control is handled by the 18-position T-handle press wheel adjustment.

The main seed box is a fluted feed design. The seeding rate is set with the four-speed transmission and the adjustable gate opening. The optional native grass box uses our proven "picker wheel" to meter the seed. Rates are adjusted by varying the speed of the drive. Lastly, the optional small seeds attachment is a smaller version of our fluted feed system, and seeding rates are set by changing the opening of the fluted feed. The ground-drive system automatically disengages when lifted, simplifying the unit and enhancing its reliability.

**Features and Benefits**

- **Lift Assist**
  Smaller tractors can be used to operate the drill without compromising performance. Two standard lift assist wheels in the rear of the 3P1006NT provide greater lift capacity and assist the tractor’s 3-point. Straddle axle caster wheels provide manoeuvrability and strength.

- **Grease bank**
  Installed on no-till machines so all coulters can be serviced from a centralised location.

- **4-speed gearboxes**
  Provides increased accuracy and flexibility of the metering system by giving the operator more choices for drive speed.

- **2-point with Lift Assist**
  Allows for unmatched ground gauging in rough, rolling terrain while ensuring safe operation and transport.

- **Optional seed and fertiliser boxes**
  Smaller version of the main box fluted feed cup provides precise metering of small seeds like clover and alfalfa.

- **Fertiliser box**
  Features stainless steel components for long life. Six-Point Star Meter Wheels accurately meter just the amount of fertiliser you desire.

- **Native grass box**
  The Series II Native Grass Attachment features a very aggressive agitator and picker wheel to keep fluffy seeds moving through the meter. Large cups and hoses keep seed from bridging.

- **Second main seed box**
  This option gives you another wide fluted feed cup and box to deliver a second type of seed to the opener.

**Durability, flexibility and performance you can depend on**

The Great Plains 3P1006NT COMPACT NO-TILL DRILL

**MODELS**

- 3P1006NT
  - No till
  - Seeding into cover crop
  - Working in high residue
### CENTURION

<table>
<thead>
<tr>
<th>MODEL INFO</th>
<th>TRAILED CULTIVATOR DRILL</th>
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<tbody>
<tr>
<td>MODEL</td>
<td>CENTURION 3P1006NT</td>
</tr>
<tr>
<td>ROW SPACINGS</td>
<td>19.05 cm</td>
</tr>
<tr>
<td>NUMBER OF ROWS</td>
<td>18, 24, 36</td>
</tr>
<tr>
<td>WEIGHT (approx.)</td>
<td>4,420 kg, 5000 kg, 6,610 kg</td>
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<tr>
<td>POWER REQ (HP)</td>
<td>120 - 260, 150 - 260, 225 - 400</td>
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<tr>
<td>DISC DIAMETERS (x 2 rows)</td>
<td>40.0 cm</td>
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<tr>
<td>WORKING WIDTH</td>
<td>3.0 m, 4.0 m, 6.0 m</td>
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<tr>
<td>WIDTH (transport)</td>
<td>3.0 m</td>
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<tr>
<td>HOPPER CAPACITY</td>
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*4000L optional

### SAXON

<table>
<thead>
<tr>
<th>MODEL INFO</th>
<th>TRAILED MINIMAL DISTURBANCE DRILL</th>
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<tbody>
<tr>
<td>MODEL</td>
<td>CENTURION Saxon 300F, Saxon 400F, Saxon 600F</td>
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<tr>
<td>ROW SPACINGS</td>
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<tr>
<td>NUMBER OF ROWS</td>
<td>18, 24, 36</td>
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<tr>
<td>WEIGHT (approx.)</td>
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<td>WIDTH (transport)</td>
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*4000L optional

### SPARTAN II

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<thead>
<tr>
<th>MODEL INFO</th>
<th>6m NO-TILL AIR DRILL</th>
<th>9m NO-TILL AIR DRILL</th>
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<tbody>
<tr>
<td>MODEL</td>
<td>SPARTAN II 607</td>
<td>SPARTAN II 907</td>
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<tr>
<td>OPENERS - ROW SPACINGS</td>
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<td>190 or 150mm</td>
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<tr>
<td>NUMBER OF ROWS</td>
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<tr>
<td>HP REQUIREMENTS (min)</td>
<td>170</td>
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<td>WEIGHT (approx.)</td>
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<td>OPENER SERIES</td>
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<td>07 Series</td>
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<tr>
<td>COULTER DOWN PRESSURE</td>
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<td>(variable) 180 - 250kg</td>
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<tr>
<td>HOPPER CAPACITY</td>
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<td>2 - 3000L</td>
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### 3P1006NT

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<tr>
<th>MODEL INFO</th>
<th>3.0m MOUNTED</th>
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<tbody>
<tr>
<td>MODEL</td>
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<td>ROW SPACINGS</td>
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<td>NUMBER OF OPENERS</td>
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<td>TYRE SIZE</td>
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<td>HP REQUIREMENTS (min)</td>
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<td>OPENER SERIES</td>
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<td>HEIGHT (transport)</td>
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<td>MAIN BOX CAPACITY</td>
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<td>FERTILISER CAPACITY</td>
<td>280L</td>
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**Seeding and cultivation solutions developed on sound agronomic and economic principles**

Our philosophy at Great Plains is underpinned by a commitment to provide tillage and seeding equipment that delivers real economic and environmental benefits. Our product development, design and manufacturing processes are driven by an ethos of innovation with the core aim of improving productivity, reducing costs and increasing yields.

Whether it is to help you maintain healthy soil structures, reduce your crop establishment costs, increase your revenues through yield-enhancing technologies designed to deliver consistently outstanding seed placement accuracy or help you combat resistant grass weeds, Great Plains is behind you every step of the way - from expert agronomy-based product selection advice to life-long product support.
Our Mission

To Be a Company Where Innovation, Teamwork, and a Desire to Improve Combine to:

- Delight Our Customers
- Provide a Rewarding Workplace for our Employees
- Generate Profits for Stability and Growth

Founded in 1976 by Roy Applequist, Great Plains Manufacturing employs more than 1,300 people in eight Central Kansas communities and Sleaford, England. Now a Kubota company, Great Plains comprises five divisions: Great Plains Ag, which manufactures seedbed preparation, nutrient application, and seeding equipment; Great Plains International, which distributes Great Plains equipment across the globe; Land Pride, a leading producer of ground maintenance tools such as mowers, tillers, rotary cutters, and snow removal equipment; Great Plains Acceptance Corporation (GPAC), which provides product financing; and Great Plains Trucking, which delivers product to Great Plains dealers across North America.

At Great Plains, our philosophy is built upon investing in state-of-the-art technology and talented people to design, engineer, and produce leading-edge implements and products. Our dedicated, hardworking employees take great pride in the products we produce for our customers.

- Over 1,300 Dedicated, Hardworking Employees
- State-of-the-Art Products
- Worldwide Distribution
- Automated Manufacturing
- Exceptional Product Development
- 1.6 Million+ sq. ft. of Plant Space (155,546 sq. meters)

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