



TILLAGE SYSTEMS MOUNTED PRODUCT RANGE





Harvest Starts Here

TILLAGE

The key to a successful harvest is good preparation. Eliminating compaction in the soil to maximise the roots' uptake of moisture and nutrients is vital, as is the preparation of a fine, level, weatherproof seedbed. Whether you operate a conventional tillage or reduced tillage regime, Great Plains offers a wide range of innovative soil loosening, cultivation and consolidation equipment to suit different soil types and operating practices.

SEEDING

Consistent seed spacing and seed depth and good seed-to-soil contact are vital in your drive to maximise yields. Great Plains drills are designed and built around these fundamental principles. Our range of cultivator and air drills individually combine innovative features, field-proven technology and outstanding build quality to offer first-class seeding solutions in reduced tillage, plough-based and direct drilling regimes.

PLANTING

The accuracy of the planter is critical to the success of your operation. The planter must be able to precisely place the seed in widely varying residue and soil types. Achieving the optimum seed spacing and seed depth and good seed to soil contact are essential. Every Great Plains Yield-Pro® Planter incorporates all of the key features that enable you to produce outstanding yields season-after-season.

Mounted Tillage Equipment

Great Plains offers a wide range of innovative mounted tillage equipment including disc and tine cultivators, subsoilers, presses and rollers. Designed and manufactured around proven agronomic principles, our products provide effective solutions that meet your needs for seedbed preparation, soil loosening and consolidation. Machines are available in various working widths/depths and to suit all soil types and conditions.

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Mounted Equipment Range













X

X-Press

ST Bar



Flatliner 500

Flatliner Hydraulic Reset



- a DD Ring a DD Lite
- a Aqueel II Roller
- a HD Roller
- a V-Roller
- a Maxlift Roller
- nical Specifications



Subsoiler



Consolidation Systems



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



"As agricultural producers, we're all aware of the increasing pressure to produce more with less. The demand for higher efficiency and increasing productivity on the farm has never been greater. At Great Plains, we listen closely to our customers. We work as a team, continually breaking new ground and innovating new products that position your

operation to profit in a changing agricultural environment.

Roy Applequist. *Owner, Great Plains Mfg., Inc.*









ELLSWORTH PLANT Grand ELLSWORTH, KS

Green





CORPORATE OFFICE SALINA, KS

PRODUCT DEVELOPMENT ASSARIA, KS Great Pating





KIPP PLANT KIPP, KS

Great Plains

PRODUCT DEVELOPMENT ASSARIA, KS

FROM STRENGTH TO STRENGTH

Founded in 1976 by President and Owner Roy Applequist, Great Plains Manufacturing employs more than 1,400 people in eight Central Kansas communities and Sleaford, England. In addition to its domestic ag equipment division, which manufactures seedbed preparation, nutrient placement, and seeding equipment, Great Plains Manufacturing also includes Great Plains International, Great

Plains Trucking, Great Plains Acceptance Corporation, and its Land Pride Division that manufactures grounds maintenance tools such as mowers, tillers, rotary cutters, and snow removal equipment. The company is one of the largest and fastest growing family-owned "short line" implement companies in the United States and across the world.

TIPTON PLANT TIPTON, KS





UK PLANT SLEAFORD, UK





ABILENE PLANT ABILENE, KS





LUCAS PLANT LUCAS, KS





SALINA, KS







EASY DEPTH ADJUSTMENT - The depth of the rear roller can be quickly and easily adjusted to suit different ground conditions and tasks



FULL DISC ANGLE ADJUSTMENT - Easy to use, fully adjustable disc angling enables you to vary how aggressively the soil is worked. Select an acute angle for maximum mixing of stubble in one pass and a shallower angle to chop down ploughing when required



LIMITED DISC ANGLE ADJUSTMENT - For those who farm consistent soils and do not need fully adjustable disc angling the DTX is available with limited disc angle adjustment via three fixed setting

Designed as a mounted onepass stubble incorporator/ soil loosener for tractors in the 200-360hp range, the DTX[®] is extremely versatile.

It can be used in a number of different ways, for example, as a first entry machine into non- inversion tillage or to knock down ploughing, whilst loosening down to 400mm (16"). It is also ideally suited to establishing oilseed rape straight into stubble, as it leaves a very level, fine and consolidated seedbed.

This mounted machine also offers very good trash clearance. The front tines are staggered and the fully adjustable discs can have greater or lesser angle applied to improve cultivation effect.

Versatile and Cost-Effective

Consolidation

REAR ROLLER - The DTX[®] is available with a choice of rear rollers. Shown right, the DD 600 and DDL 600, both with shouldered press rings, consolidate the ground through to depth and leave a high quality weatherproof finish.



The full range of roller options available with the DTX includes the HD Roller, V-Roller and Maxlift Roller as well as the Aqueel II, DD 600, DDL 600 (200mm spacing) and DDL 600 (150mm spacing) rollers. See pages 16, 17 and 18 for more details.

Tine Selection



PRO-LIFT LOOSENING TINES - Five Simba Pro-Lift tines are fitted as standard. Spaced at 545mm, only 20mm thick and with three wing options, they work down to 400mm with minimal draught.

These tines excel in heavier soils and in conditions requiring deeper loosening.





Options



SIMBA DTX®





DTX® 300, 300AR 350, 350AR (Working widths 3.0m and 3.5m)

Disc Selection

TWO ROWS OF ADJUSTABLE DISCS -Mounted individually, the cultivation discs

are 500mm in diameter and spaced at 250mm. Their rotational speed is far greater than more conventional discs. The Pro-Active units enhance chopping and mixing, provide effective stone



Pro-Active Discs

protection and achieve a finer seedbed. All discs are fitted with a rotational armoured bearing housing for enhanced protection.

Other options include

Full European road lighting kit

HYDRAULIC AUTO-RESET OPTION - An

optional autoreset tine system can be specified for stoney conditions reducing downtime and increasing productivity.



SMALL SEED APPLICATOR AND FOLLOWING HARROW - When specified with the option of a Small Seed Applicator, an optional Following Harrow is also available. Ideal for OSR and cover crop establishment.

FULL DISC ANGLE ADJUSTMENT -Disc angling is fully adjustable between 0° and 25° enabling you to vary how aggressively the soil is worked and ensure good penetration.



LIMITED DISC ANGLE ADJUSTMENT - The X-Press is

fixed settinas



EXCELLENT TRASH CLEARANCE - With a massive amount o clearance between both gangs of discs and the rear roller, the X-Press can deal easily with high volumes of trash





THE FLEXIBILITY OF FULLY ADJUSTABLE DISC ANGLING - Individually mounted discs with tilt and adjustable angling gives you more flexibility. High angles cut and mix as a primary operation, lower angles chop and consolidate as a secondary operation. A compound disc angle including tilt reduces smear and the weight needed to penetrate. This compact disc harrow with integrated press roll can be used without tines for a high-speed primary shallow pass to depths of between 5 and 15cms, and for incorporating stubble. The X-Press produces consistently excellent results, even in the hardest soils, using a tractor from as little as 70hp. Add an ST Bar ahead of the X-Press and the machine is transformed into a one-pass cultivator which can restructure the soil, taking out compaction caused by harvest traffic, down to a depth of 250mms.

Use the machines separately or combined on a reduced tillage or plough-based system – that's real versatility.

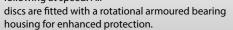
A Winning Combination

Disc Selection



TWO ROWS OF DISCS - Mounted individually, the cultivation discs are 500mm in diameter. The disc spacing is 250mm on both front and rear gangs.

Their rotational speed is far greater than more conventional discs. Chopping and mixing is enhanced and a finer seedbed is achieved. Pro-Active disc units with a trip height of 120mm give improved protection against stone damage and improved contour following at speed. All



Consolidation



CHOICE OF REAR ROLLER - The DDL 550 roller, with its familiar shouldered press rings, consolidates the ground through to depth, leaving a fine, corrugated, weatherproof finish. If preferred, the X-Press can be fitted with an Aqueel II Roller, Cage Roller, Heavy-Duty (HD) Roller, V-Roller or Maxlift Roller. See pages 17 and 18 for more details.



Tine Selection



KRAVA UNIT WITH SPRING LOADED STTINES - The ST Bar, equipped with between 4 and 7 ST tines, works the soil down to 25cms, eliminating compaction layers. The Pro-Edge point lasts up to 50% longer than other ST points and offers substantial whole life cost-savings per hectare. ST tine options include Bolt-On units and Shearbolt protection. Low Disturbance (LD) tines are also available.



SIMBA X-PRESS + ST BAR



X-PRESS 2.5, 3.0, 3.5, 4.0, 4.0FW ST BAR 2.5, 3.0, 3.5, 4.0

(Working widths 2.5m - 4.0m)



8 9



Options

- Trailing Kit for Folding Wing (FW) model - allows a tractor from 125hp to pull the 4m machine
- Full European road lighting kit Small Seed Applicator available. If specified a Following Harrow is also available. Ideal for OSR and cover crop establishment.







THREE ROWS OF TINES - Ten tines on the 3.0m model and twelve tines on the 3.5m TL are staggered across three rows. The spacing between tines is 300mm and 900mm between tines on the same row.



KRAVA SPRING LOADED AUTO-RESET - Mountec on a coil spring unit the tines benefit from maximum protection against impact damage when working in stony conditions and positive engagement with the soil at all times.



EASY DEPTH ADJUSTMENT - The working depth of the tines is adjusted via the rear roller using a set of shims.



DISC LEVELLERS - Following the tines, a row of serrated sprung levelling discs chop and incorporate the surface trash and level the cultivated ground ahead of the press roller. The levellers can be extended wider than the roller t negate ridges.



SPRUNG LEVELLERS - can be specified as an alternative option to Disc Levellers



The versatile TL does it all

Great Plains

The TL is a linkage mounted tined cultivator designed primarily for use on lighter to medium soils. Easy to set up and use, this versatile and robust machine can work deep enough to incorporate large volumes of trash, such as potato haulm or the remains of field vegetables, or perform a thorough soil loosening action ahead of further

Proven in extensive field trials the TL delivers outstanding

cultivation.

results when used for primary and secondary cultivations in the autumn. It is also highly effective for performing spring cultivations of overwintered stubbles to open them up and help them dry out and warm up ahead of spring drilling.

Consolidation



CHOICE OF REAR ROLLER - With its 'V'shaped profile to the wheels which fill with soil in use to achieve soil-soil wearing, the V-Roller lifts soil and stays cleaner on the inside compared with similar U-shaped rollers. If preferred, the TL can be fitted with a DDL 550, Aqueel II, Cage, Heavy Duty (HD) or a Maxlift roller. See pages 17 and 18 for more details.







SIMBA TL

10 11





Tine Selection



KRAVA UNIT WITH MT SPRING LOADED TINES

Simba's Krava unit with MT Spring Loaded Tines can work down to 300mm deep to incorporate large volumes of trash, such as potato haulm or the remains of field vegetables, or perform a thorough soil loosening action ahead of further cultivation. The legs are fitted with bolt-on twisted chisel points and wings. The point, wing and shin are individual components allowing operation without wings for deeper working.

As an alternative to spring reset tines, shearbolt tines are available as an option.

Options include Full European road lighting kit



V' PROFILE TOOLBAR - Flatliner 500 and Hydraulic Reset Models. The 'V' form toolbar is designed to ensure low draft, ease of trash passag through the machine, and optimum shatter



POSITIVE DEPTH CONTROL - Positive control



ADJUSTABLE TINE CLAMPS - Flatliner 500



HYDRAULIC RESET SYSTEM - Flatliner Hydraulic Reset - The tines can cope with high stone conten soils and varying field conditions. Each tine is hydraulic, offering a fast responsive trip and re-setting action on the move. Auto resetting pressure is adjustable. The hydraulic system is fully



Maximum Soil Shatter Minimum Surface Disturbance

The benefits of selective soil loosening should never be underestimated, particularly following a wet autumn. Healthy root growth is essential if crop yields are to remain high. Any sub-surface pans must be identified and then removed. Incorporating the latest technology from Great Plains, the Simba Flatliner offers the perfect solution.

A choice of two ranges provide maximum shatter of deeply embedded

compaction layers with minimum surface disturbance across the working width. Flatliner Hydraulic Reset models are ideal for use in stony conditions. The Flatliner 500 series, with standard shear bolt protection on the tines, includes a folding model capable of working down to 500mm.

Flatliners feature low draft and a consolidating rear roller.

Tine Selection

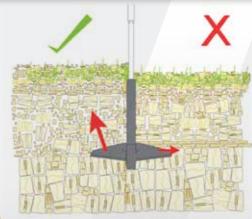
3.0m



PRO-LIFT LOOSENING TINES - The Pro-Lift leg and point provide a very effective soil conditioning action with prolonged wear rates. The tines can work down to depths of 350mm in the Hydraulic Reset models and down as far as 500mm in the 500 Series and Folding Flatliner.



CHOICE OF WINGS - A choice of three different wings each imparting a different degree of lift - enables the amount of work completed to be matched to the prevailing soil conditions and moisture levels.



B.Sm

12 | 13



FLATLINER 500 3.0, 3.5, 3.8, 4.2, 4.2HD, 4.5 (Working widths 3.0m - 4.5m)

Consolidation



DD 600 REAR ROLLER

- The patented and wellproven 600mm diameter DD rear roller provides positive depth control and leaves a high quality corrugated, weatherproof surface. The roller is equipped with heavyduty scrapers.



The Pro-Lift Loosening Tine lifts and loosens the soil above it, reducing bulk density and compaction, whilst minimising disturbance at the surface.

Overall soil flow should be UPWARDS (as shown left of centre) rather than outwards or smearing downwards (as shown right of centre). Tines that move the soil SIDEWAYS will not remove compacted layers and may even make them worse.

Options

Tine assembly complete with clamp and point Front mounted depth wheels 11.5/80-15 fully adjustable HD Chassis (4.2m) for 300 to 400hp Small Seed Applicator (exclude 4.5FW model) is available. When Small Seed Applicator is



specified a Following Harrow is also available. Ideal for OSR and cover crop establishment. Full European road lighting kit



LD Tine available as an option on Flatliner 500 models



TRIP RESET - All tines come with shear bolts as



ADJUSTABLE GAUGE WHEEL - A screw jack simple task



500mm UTILITY COULTERS - A coulter runs ahead of each tine to cut residue and reduce plugging



HEAVY-DUTY HINGES - Reinforced heavy steel gussets mean the wings can take as much abuse as the center section.



Eliminates Compaction Layers

The Great Plains Sub-Soiler is a vertical tillage tool that can be used in conventional, reduced tillage or no-till farming systems.

In conventional tillage regimes it can eliminate the compaction layers created by the plough, disc harrow or cultivator, which can adversely affect yields and form a barrier to essential moisture. In a no-till environment, the Sub-Soiler can first be used as a preparatory tool and then as a maintenance tool. Prior to phasing-in no-till, repairing the soil structure with the Sub-Soiler can help to protect yields.

As well as maintaining a uniform soil structure, sub-soiling helps to keep soil organisms, such as worms, alive and reduces surface compaction from tractors and combines.

Options







Tine Selection



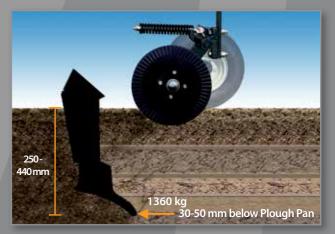


SUB-SOILER SS300 (working width 3.0m)





The Sub-Soiler shatters the soil over the full width of the machine through lifting and resetting of the entire profile. The tines, arranged in a straight line to shatter horizontally between them, should be set 30-50mm below the plough pan to achieve best results.



Once the working depth has been determined, the gauge wheel is set to prevent the Sub-Soiler from losing its pre-set depth. It runs ahead of the tip to control the depth even in undulating conditions.

AUTO RESET TINE

This 19mm thick spring steel tine, with its exclusive 250mm no-till point, provides maximum soil shatter with minimum surface disturbance. It will leave more than 90% of crop residue on the surface.



STRAIGHT TINE - This shear bolt protected tine with either 50mm or 175mm point provides good fracture under the surface but will give more surface disturbance. A no-till point is available with the straight tine where minimal surface disturbance is required.



The need for consolidation

Effective consolidation plays a crucial, but often under-appreciated part in modern arable farming. As part of a reduced tillage regime, it can save valuable time, reduce costs and increase yields. Fundamentally, it plays a key role in combating the problem of compaction, which is a barrier to root growth and water infiltration and a major factor in poor soil structure leading to run-off and erosion.

Pioneers in Consolidation technology

With many years of experience in developing innovative roller technology, Great Plains offers a range of components that are proven to produce excellent results on a wide range of soil types and ensure users achieve the full benefits of good consolidation. These include:

- Effective soil to seed/root contact to enable efficient nutrient transfer
- Minimal moisture loss, especially important in dry years where crops which lack moisture suffer badly
- Improved drainage and water infiltration, especially important in
- wet years where a good, consolidated soil structure ensures access to plant root systems for water, air and nutrients
- Reduced soil erosion, as the soil is both structured and stable - an essential consideration for farmers





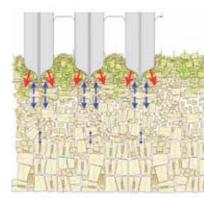
Manufactured from the highest quality Boron steel, the rings have a selfsharpening cutting edge mounted on a broad, carefully angled shoulder. This enables them to cut clods effectively, crushing the parted halves so they disintegrate, while also contacting over 80% of the soil surface so they consolidate and level the seedbed, leaving a ridged, weather-proof surface.



Clods are cut and fissures

propagate through a result

of the DD action, Broken or cracked clods are left in an ideal state for further weathering



DD Ring

Widely accepted as one of the best consolidation systems capable of working in all soil types, Great Plains Simba DD Press Rings set the standard for pressing efficiency and remain unique both in their patented design and their performance.

Setting the standard for press efficiency



DD Rings are available in diameters of 600mm (DD600 – pictured left) and 700mm (DD700). DD Lites are available in diameters of 550mm (DDL550) and 600mm (DDL600 – pictured above)

ALC: ALC

DD Lite

Light consolidation with mounted machines

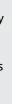
Ideal for mounted machines on lower hp tractors, the DD Lite is available in 550mm and 600mm diameters. Lighter in weight, the DD Lite shares the same unique features of the DD Ring including the unique axle tensioning system with steel spacers between the rings, which allows the roller to 'self-adjust' as it wears, maintaining its effectiveness.



These pictures show a typical DDL 600 surface tilth, ideal for seeding onto and surface rolling after.

CONSOLIDATION SYSTEMS

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Fissures Propagating

Pressed Surface



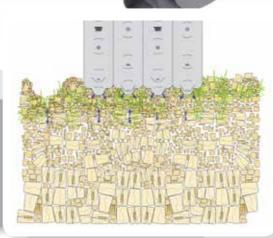
MACHINES AVAILABLE WITH DD LITE AS A REAR ROLLER OPTION

AQUEEL II

Consolidates the seedbed protects against erosion

The Great Plains Simba Aqueel II enables farmers to consolidate seedbeds after drilling and optimise crop performance. It minimises moisture loss, facilitates improved drainage and water infiltration and ensures excellent soil to seed/root contact, while also protecting soil against erosion at a time when it generally has no green cover and is at its most vulnerable.

The Aqueel II helps to conserve moisture in two distinct ways.



MOUNTED TILLAGE EQUIPMENT Product Specifications



SIMBA DTX								
Model	Working Width (m)	Transport Width (m)	No. of Tines	Guide Weight (kg)	Guide Weight (kg) Auto Reset (AR)	Power Req (hp)		
DTX◎	3.0	3.0	5	2,830	2,997	200-360		
300/300AR	3.0	3.0	5	2,953	3,120	200-360		
	3.0	3.0	5	2,766	2,933	200-360		
DTX◎	3.5	3.5	6	3,344	3,482	200-360		
350/350AR	3.5	3.5	6	3,477	3,615	200-360		
	3.5	3.5	6	3,233	3,371	200-360		

SIMBA X-PRESS								
Model	Working Width (m)	Transport Width (m)	No. of Discs	Guide Weight (kg)	Power Req (hp)			
XP 2.5	2.5	2.50	18	1,525	70-110			
XP 3.0	3.0	3.00	22	1,750	80-120			
XP 3.5	3.5	3.50	26	2,125	90-150			
XP 4.0	4.0	4.00	30	2,440	110-170			
XP 4.0*	4.0*	2.98	32	2,920	125-180			
* Folding Wing model								



Unique design creates water retaining 'saucers'

Durable rubber teeth are fixed to a rubber carcase. As well as crushing clods, these teeth press small reservoirs in the soil that catch water and retain it on the seedbed, preventing it from running off and carrying valuable soil, residual chemicals and nutrients with it. The saucers with their central divot do not inhibit emergence plants emerge straight through them.

MACHINES AVAILABLE WITH AQUEEL II AS A REAR ROLLER OPTION





This cost-effective, durable, fully welded steel roller with 'zone' consolidation is designed for minimal maintenance. It is ideal for use in rough ground conditions and soils with high stone content.



V-ROLLER

MACHINES AVAILABLE WITH HD, MAXLIFT AND 'V' ROLLERS AS A REAR ROLLER OPTION

the wheels which fill with soil in the V-Roller lifts soil and stays cleaner on the inside compared with similar U-shaped rollers. This roller works well with or without scrapers, depending on the conditions. Light in weight, it enables the use of smaller tractors with mounted machines.

X-Press and TL also available with the Cage

With its 'V' shaped profile to use to achieve soil-soil wearing,



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ALC: N	Мос
- 2 - 5	TL3
	TL3





				-,		
* Folding Wing model						
SIMBA ST BAR						
Model	Working Width (m)	Transport Width (m)	No. of Tines	Guide Weight (kg)	Power Req (hp) with Mntd X-Press	
ST 2.5	2.5	2.08	4	470	145	
ST 3.0	3.0	2.64	5	560	180	
ST 3.5	3.5	3.18	6	690	200	
ST 4.0	4.0	3.58	7	750	220	

SIMBA TL								
Model	Working Width (m)	Transport Width (m)	No. of Tines	Guide Weight (kg)	Power Req (hp)			
TL300	3.0	3.0	10	1,750/2,000	120-200			
TL350	3.5	3.5	12	2,250/2,600	140-200			

SIMBA F	SIMBA FLATLINER HYDRAULIC RESET					SIMBA FLATLINER 500				
Model	Working Width (m)	Transport Width (m)	No. of Tines	Power Req (hp)	Model	Working Width (m)	Transport Width (m)	No. of Tines	Power Req (hp)	
FLHR 3.0	3.0	3.0	3	110-160	FL500 3.0	3.0	3.0	3	130-180	
FLHR 3.0	3.0	3.0	5	130-180	FL500 3.5	3.5	3.5	5	140-240	
FLHR 3.5	3.5	3.5	5	130-180	FL500 3.8	3.8	3.8	5	140-240	
FLHR 4.0	4.0	4.0	5	140-190	FL500 4.2/HD	4.2/4.2HD	4.2/4.2HD	7	190-310	
FLAR 4.5	4.5	3.0	7	210-360	FL500 4.5	4.5	3.0	7	210-360	

GREAT PLAINS SUB-SOILER								
Model	Working Width (m)	Transport Width (m)	No. of Tines	Tine Spacing (mm)	Power Req (hp)			
SS300	2.1-2.5	3.0	3	700 or 750	150 – 240			
	2.8-3.0	3.0	4	700 or 750	200 – 320			
	3.4-3.5	3.0	5	680 or 700	250 – 400			
	3.2-3.4	3.0	6	540 or 560	300 – 480			

All working widths and guide weights are approximate depending on the machine configuration and settings.



Make Ownership a Reality

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