For Earth, For Life Kubota

KUBOTA PP SERIES



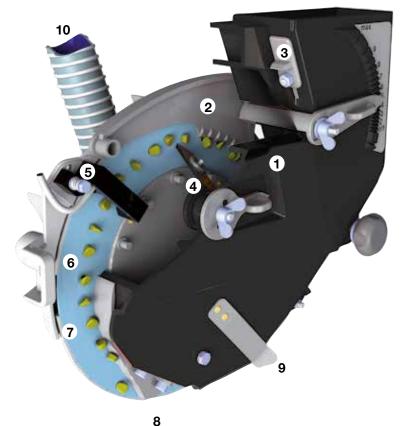






Precise and efficient with the correct seed heart

Today Precision Farming has become more and more important. The more precise and evenly the seed is sown, the higher the possible yield. With GEOCONTROL and GEOSEED® Kubota offers two applications that maximise the machines output and prevent double seeding. Even in total darkness your seeding results will be exceptional.



Precise separation of small, large, round elongated and flat seeds.

- By using vacuum, the seeds are sucked out of the stock and transported directly to the seed disc. While turning the seed disc, the seeds are allocated to each of the holes.
- The adjustable, upper scraper singulates the seeds to every hole.
- The filling height limiter regulates the stream of small seeds
- The adjustable, lower scraper prevents doubles of bigger seeds.
- 5. The opto-electronic sensor (optional for mechanic driven machines; standard for e-drive) controls the correct allocation of seeds on the disc. In case of missing seeds, the sensor transfers a signal to the terminal. The opto-electronic sensor also serves as a low level sensor.
- 6. The seed disc turns on to the point of drop. The seed disc is directly fixed to the turning back of the vacuum heart. No sealing, only at the bearing, ensures that there are no leaks to the vacuum. The patented seeding heart is the only one in the market that gets along without a wearing sealing. This minimises friction and power needed for turning.
- 7. The standard vacuum interruptor (optional rotating vacuum interruptor) closes the holes of the seed disc from the back side. The vacuum is interrupted and the seeds drop down controlled from the seed disc.
- 8. The end-scraper cleans the seed disc from seed residues, like coating or dust.
- The emptying flap is located at the lowest point of the seeding heart. This ensures a complete and easy emptying and cleaning of the seeding heart.
- 10. The vacuum hose is connected directly either with the fan or with the vacuum channel. This ensures a constant vacuum, every time. The vacuum is always shown on a manometer, which is easily visible from the tractor cab.



Seeding heart without seals

The patented seeding heart technology is the result of development which has reduced maintenance costs to a minimum.

- No friction no wear
- Low drive torque
- Minimum maintenance

The seed disc rotates in the seeding heart together with the vacuum chamber. This seeding drum is connected to the vacuum fan via a hollow shaft. This seeding heart principle results in no loss of vacuum, and therefore a low vacuum requirement. The upper toothed scraper singulates the seeds on the seed disc.

It can be infinitely adjusted to suit seed size and type by means of a scale. The adjustable lower scraper centralises difficult seeds (e.g. sunflowers) over the holes on the seed discs. During calibration the correct loading of the seed disc can be checked via a window.

Presicion at High Speed

With the pressurised seeding heart the seeds are "shot" by an airstream of up to 70kph into the furrow. A smooth, flexible intermediate press wheel catches and protects the delicate seeds. Any negative impact such as vibration on the way between release point and soil contact is eliminated due to the high air stream. The seeds reach their perfect position in the soil. Each sowing row is electrically powered by ISOBUS connection. An additional generator or other power sources are not required. The complete power supply and control is via ISOBUS.

- By using air pressure, the seeds are pressed out of the stock and taken directly to the seed disc. Whilst turning the seed disc, the seeds are allocated to each of the holes.
- The filling height limiter regulates the stream of the seeds, especially of small seeds.
- The adjustable upper toothed scraper singulates the seeds to everyhole.
- The adjustable, lower scraper prevents doubles of bigger seeds. The seed disc rotates to the point of release.
- The seed disc is directly fixed to the turning back closed only by a bearing. The seeding heart is without sealing for minimised friction, wear and power requirement.
- At the point of release, the seed drops down, controlled by the seed disc into the seed tube supported by the high air stream.
- An infrared photo sensor monitors the perfect allocation of the seed disc. Defects or doubles as well as low level alerts of the seed hopper and seed counter are reported to the terminal.





Superior precision and ease of handling

If you are looking for perfect execution: preparing the seed furrow, seed placement as well as covering and re-consolidation in one single pass. The intelligents of the seed rows, if HD-II or SX combines easy adjustment and precision seed placement where seeds is needed. It brings savings less seed usage, versatility and high yields.

Conventional and conservation sowing

The sowing units - like the whole machine - are modular in design. The basic element always remains the same and the equipment can vary according to individual requirements.



Standard row for sowing in prepared conditions



Tandem for light and marshy soil. The depth of the row is guided by the front and rear wheel.

Parallelogram

Special washers are used at the parallelogram bushes to protect against dust. Only top quality components are used to ensure extremely low maintenance costs.

Sowing coulters

The sowing coulters are designed with a high attachment point. This enables them to work deeply when sowing beans or on dry soil, without the housing being subject to wear.

Press wheels

The press wheels run on maintenance free ball bearings. The sowing depth can be infinitely adjusted by means of a screw jack. A scale ensures even depth adjustment over all rows.



PP HD-II row heavy duty

The heavy basic weight (129kg) of the row combined with the possibility to add additional pressure (up to 100kg) onto each individual sowing unit via the spring loaded system allows optimal depth control even under extreme conditions.



High speed sowing row SX for up to 18km/h.

SX ready for high speeds

The PP SX high speed sowing row ensures maximised performance and efficiency. With accurate seed singulation, precise seed placement and higher working speeds of up to 18km/h, the PP1601TF is up to 50% more efficient than the standard HD-II row.

SX for different seeds

All basic components of the row (cast-iron single-arm, parallelogram, double disc coulter, open gauge wheels, trash wheels, V-press wheels etc.) are taken from HD-II seeding row.

The differences are:

- High speed seed tube.
- Pressurised PP SX seeding heart.
- Integrated engine with GEOSEED® function.
- Smooth flexible intermediate press wheel for good seed placement and recompaction.
- Infrared monitoring of singulation quality.



Precise seed placement by the small coulter which forms a clean furrow. Good placement and seed covering is done by the smooth flexible intermediate press wheel and multi-adjustable V-press wheel.



Always ready with the right equipment

Kubota offers the right solution for all conditions. Even under extreme conditions an optimal depth control is achieved due to the individual spring-load system. The small coulters form a clean furrow, and together with the intermediate press wheels and multi-adjustable V-press wheel ensure precise seed placement and covering.



- 1. 60l seed hopper (standard)
- 2. 30l seed hopper (optional)
- Parallelogram with 100kg adjustable weight transfer (standard)
- 4. Trash wheel (optional)
- 5. Clod deflector (optional)

- 6. 25mm V-press wheels (standard) with angle and pressure adjustment
- 7. 50mm V-press wheels (optional)
- 8. 120mm width closed gauge wheel (optional)
- 9. 120mm open gauge wheel for wet condtions /(standard)
- 10. Notched double disc fertiliser
- 11. Spindle for stepless depth adjustment with clearly arranged scale
- 12. Intermediate press wheel stainless steel with scraper (optional)
- 13. Intermediate press wheel cast iron with rubber ring (optional)



HD-II and SX: Electric driven microgranule applicator micro-drill

With an increasing amount of insects killing plants during growing, and an increased need of microfertiliser, grows the need of micro-granule applicators. Each microgranule applicator micro-drill unit is electrically powered by ISOBUS connection and regulates the dosing process for different granules. In combination with GPS and GEOCONTROL (option), each electric driven element is automatically switched on or off at exactly the right place. The function of the micro granule applicator is linked to the seeding heart following their action which is controlled by the GEOCONTROL function of the sowing row. Each hopper has a capacity of 17 liter. Different cell wheels in 3mm, 6mm and 9mm width

| for Granule, Micro fertilizer and slug pellets are available. |
|--|
| The Institute for Application Techniques in Plant Protection (JKI) has |
| granted the approval for the Kubota micro granule applicator, micro-drill, |
| to comply with defined standards. (Reference G 2196). The aim of the |
| JKI is to optimize the use of plant protection products and contribute to |
| a sustained increase of plant production systems. |

| Microgranule applicator mi | cro-drill | |
|---|-----------|-------------|
| Hopper capacity | (l) | 17 |
| Minimum application rate (37.5cm row width & 2km/h) | (kg/ha) | 2 |
| Maximum application rate (80cm row width & 18km/h) | (kg/ha) | 25 |
| Maxi. power requirement | | 3 A / 12 V |
| Electronic system | | ISOBUS |
| Electronic standard | | AEF conform |
| Weight (without granule/ferilizer) | (kg) | 8.9 |

HD-II: Rape kit

For sowing rape a special rape seeding kit has been developed. The seed disc has 96 holes and is continuously cleaned by a small toothed gearwheel to ensure the seed disc is kept clear of any blockages. The rape kit is available for all PP-models fitted with HD-II rows!



HD-II: Channel Extra (Option)

The Channel Extra is specially designed for shallow seeding of small seeds such as sugar beet, rape and maize (up to a thousand grain weight of 325g). Perfect placement is guaranteed by the special design of the Channel Extra which guide the seed towards the furrow left by the coulter. Rolling or bouncing of seed in the furrow is almost 100% eliminated.

HD-II: Plantirium Sensor

The Plantirium sensor is a seed tube sensor that uses imaging sensors, which enables the detection of seeds also of very small seeds than rape seed and this even in difficult conditions. Also, the sensor recognises overlapping seeds as multiples. It can be retrofitted in combination with the Channel Extra to all exisiting HD-II with e-drive II machines.









The PP1001 has no lengthwise transport device, so larger working widths are particularly suitable for farmers who do not need to cross public roads.

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Effective and versatile for a cost-efficient performance

Rigid frames are an easy and costwise alternative for all kinds of customers. The rigid PP models can be combined with an optional mounted fertiliser hopper, front hopper or micro-granule applicator.

Wide choice of working width

The rigid PP1001 models are available in 3.0 to 6.0m working width with a row width from narrow 35cm up to wide 80cm or for pumkins 150cm are possible, depending on the kind of row and equipment.

All rigid PP1001 frames can be equipped attached with either mechanic or electric drive thus, ready for GEOCONTROL® and GEOSEED®. Standard, Tandem, HD-II or SX rows are available and can be choosen according to field requirements.

The PP1001 can be combined with a large central fertiliser hopper which has a capacity of 1,000 l or a front hopper system to reduce the fill-up time and to increase the capacity. The micro-granule applicator, micro-drill, is also available as an option.

| PP1001 | PP1301 | PP1351 | PP1401 | PP1451 | PP1501 | PP1601 |
|-------------------------------------|--------|--------|--------|--------|--------|--------|
| Working width (m) | 3.0 | 3.5 | 4.0 | 4.5 | 5.0 | 6.0 |
| Number of rows | 2 - 8 | 3 - 8 | 3 - 8 | 3 - 8 | 4 - 8 | 5 - 8 |
| SX row | • | • | • | • | • | • |
| HD-II row | • | • | • | • | • | • |
| Standard row | • | • | • | • | • | • |
| Tandem row | • | • | • | • | • | • |
| e-drive II / GEOSEED® | • | • | • | • | • | • |
| Mechanical drive | • | • | • | • | • | • |
| Mounted Fertiliser | • | • | • | • | • | • |
| SH1600 / SH2200 | • | • | • | • | • | • |
| Microgranule applicator micro-drill | • | • | • | • | • | • |





Versatile and flexible for various crops and row widths

The PP1451V is the perfect precision drill for farmers and contractors who need a machine with various row widths. With the PP1451V, the row width is ready in next to no time which ensures a speedy response on changing requirements. Your benefit: a high level of flexibility and less time waste.

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Did you know?

Gonshiro Kubota founded the company because he could no longer stand to see people dying from contaminated drinking water. He began by manufacturing products for clean water supply. Since then, we have been offering various products that help to improve the living conditions of people and society. That's what "For Earth, For Life" stands for.

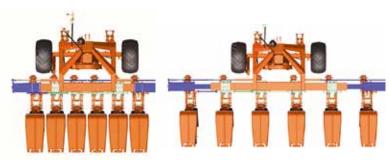




PP1451V with high speed SX rows.



Simple and fast adjustment of the row width.



PP1451V with 6 rows and row distances of 45cm to 80cm.

Clever telescopic light design

The headstock of the PP1451V is made of round tubes, which saves weight and increases the stiffness. The main telescopic frame is made of a 160mm squaretube. In this tube, plastic glide parts guarantee a longterm usage of the machine.

All inner rows are mounted on 8 maintenance free plastic rolls and are adjustable in different step widths. Optionally, the PP1451V can be equipped with a 1000l fertiliser hopper or front hopper solution. A microgranular applicator is also available. All PP1451V are electric driven and compatible with GEOSEED®!

- The PP1451V is available with 6, 6+1 or 8 rows.
- With 6 rows allows the flexible adjustment of the row width e.g. for
- The sowing of sugarbeet at 45cm or for maize at 75/80cm.
- 6+1 rows offers to work with 6 or 7 rows at various row widths.
- With 8 rows is ready for close row sowing for high yields.

The half-switch-off is possible when two electro-hydraulic fertiliser drives are installed on each hopper side. More comfort offers the tool box to have all at hand, the foldable stairs with maintenance platform and an optional filling auger.



Good overview of pressure and vaccum.



Optional hydr. frame ballasting kit.

| PP1451V | PP1451V | PP1451V | PP1451V |
|-------------------------------------|-------------|--------------------------|-------------|
| Working width (m) | 2.70 - 4.80 | 3.15 - 4.80 | 2.64 - 4.40 |
| Number of rows | 6 | 6 + 1 | 8 |
| Row width (cm) | 45 - 80 | (6R) 75+80 (7R) 45-65 | 33 - 55 |
| HD-II row | • | • | • |
| SX row | • | • | - |
| e-drive II / GEOSEED® | • | • | • |
| Mounted Fertiliser | • | • | • |
| Filling auger | • | - | - |
| SH1600 / SH2200 | • | • | • |
| Microgranule applicator micro-drill | • | • | • |

Possible - not availbale * On demand



Fits perfect on all field sizes

Kubota's parallel-hydraulic folding frame of the PP1601F with 6m working width catches the farmers attention with it's high performance, fast conversion from transport to work position or the other way around and the perfect overview. Thanks to the parallel hydraulic folding system, it is not necessary to empty each individual hopper before folding, which saves time.



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Did you know?

Did you know that Kubota produces its own engines and that Kubota is the global market leader for industrial diesel engines under 100 hp? You might be surprised to learn under which bonnets Kubota engines are at work. Top quality and efficiency are the main ingredients of this success.

Strong, user-friendly and universal

Following the farmers needs, the hydraulic foldable frame of the PP1601F can be equipped with 8 rows for maize, 12 rows for the combined usage in sugar beet,maize, sunflowers and soya or up to 16 HD-II rows for the combined usage for narrow seeding of maize and rape seeds.

Higher performance and better balance is achieved in combination with a front hopper SH1600 / SH2200 or equipped with a central mounted fertiliser hopper with a volumne of 1,125l.

Also, the microgranular applicator micro-drill is available. With electronic or mechanic drive, this frame secures all farmers' needs. The machine is fully ISOBUS compatible and ready for GEOCONTROL® and GEOSEED®.

Safe road transport (< 3m) thanks to the compact clear foldable design.



PP1601F in combination wiht front hopper SH1600



Optional hydr. frame ballasting kit



Optional external hydr. fan drive

| PH1601F | PP1601F | PP1601F | PP1601F | PP1601F | PP1601F |
|-------------------------------------|----------|---------|---------|---------|---------|
| Working width (m) | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Number of rows | 8 | 9 | 11 | 12 | 16 |
| Row width (cm) | 70/75/80 | 60 | 55 | 45/50 | 37.5 |
| HD-II row | • | • | • | • | • |
| SX row | • | • | • | • | - |
| e-drive II / GEOSEED® | • | • | • | • | • |
| Mounted Fertiliser (1,125 I) | • | - | - | - | - |
| SH1600/SH1600D/SH2200/SH2200D | • | • | • | • | • |
| Microgranule applicator micro-drill | • | • | • | • | • |
| PUDAMA | • | _* | _* | • | - |

Possible - not availbale * On demand



High performance with low pulling force

The PP1601TF series is the perfect combination of high performance and low tractor power requirement. The trailed, foldable frame with eight rows can be equipped with a 2000l fertiliser hopper and an optional available central seed hopper of 870l.

Defined fertiliser rates during work

The PP1601TF series can be pulled with an 90hp tractor – and requires no lifting capacity. Equipped with either an optional electro-hydraulic drive for the fertiliser application. Fertiliser rate can be adpated even during work. hydraulic drive or with a direct fan drive via PTO shaft, this machine can also be used with tractors that have little hydraulic power.

Good access

The fertiliser hopper can easily be filled with a front end loader or filling auger. The electric driven microgranular applicator micro-drill is available as an option.



Optional electro-hydraulic drive for the fertiliser application. Fertiliser rate can be adpated even during work.



Easy access to the fertiliser hopper due to the large hopper opening.



Weigh cells for the precise and controlled fertiliser application



An intelligent two piece hydr. cylinder for best ground following.







Intelligente and individual adaptation of the wheels due to the two-piece hydraulic cylinder.



4 wheels for better balance at the headland and depth guidance in the field. PP1601TF with SX or HD-II rows.



PP1601TF with SX rows and central seed hopper of 870l.



PP1601TF - Very compact in transport position. Designed for a transport speed of up to 40km/h with EU Type approval.

| PP1001TF | | PP1601TF |
|--------------------------------------|------|---------------------|
| Working width | (m) | 6.0 (6.4) |
| Number of rows | | 8 |
| Row width | (cm) | 70 / 75 / 76.2 / 80 |
| HD-II row | | • |
| SX row | | • |
| e-drive II / GEOSEED® | | • |
| Mounted Fertiliser (2,000 I) | | • |
| Central seed hopper (870 I) | | • |
| Filling auger | | • |
| Microgranule applicator micro-drill | | • |
| PUDAMA | | • |
| Possible - not availbale * On demand | | |



High Performance and Output

The PP1001S series is designed for farmers and contractors who are looking for a solid and easy implement but which is high efficient with a high performance.

The PP1001S frame is available in working width from 6.1m to 9.3m. In order to offer maximum flexibility, the configuration of the PP1001S can be adjusted to different row widths Starting from 35cm to 80cm in even and uneven configurations. It can be equipped with the Kubota sowing units HD-II and SX high speed sowing units. The solid and strong frame made by an 180mm x 180mm square tube is ready to carry up to 18 HD-II or SX sowing units.

The PP1001S can be fitted with a large 2000l fertiliser hopper or alternatively combined with the front hopper range SH for a good weight distribution. In addition, the electric driven micro-granule applicator is available for up to 18 rows.

For safe road transport, a strong lengthwise transport device is available – the machine complies with the new EU Type approval and is ready for transport at 40 km/h even with 18 rows and fertiliser, thanks to the optional pneumatic brake system.



Top view in transport position.

Transport width < 3m for safe road transport.





High manoeuvrability in transport due to the 90° turning cross-shaft linkage.



Easy access to the fertiliser hopper due to the loading step and platform.



Leafspring loaded track eradicators loose compaction created by follwing the tracks of the tractor wheels.



During seeding the road transport wheels are lifted up.



The hydraulic frame ballasting kit ensures good penetration of the sowing rows and an even sowing depth.

| PP1001S | PP1611S | PP1681S | PP1761S | PP1831S | PP1931S |
|--|---------|---------|---------|---------|---------|
| Working width (m) | 6.1 | 6.8 | 7.6 | 8.3 | 9.3 |
| Number of rows | 8-12 | 8-16 | 12-16 | 12-18 | 12-18 |
| Row width (cm) | 45-80 | 35-80 | 65 | 45-70 | 50-80 |
| HD-II row | • | • | • | • | • |
| SX row | • | • | • | • | • |
| e-drive / GEOCONTROL | • | • | • | • | • |
| Mounted fertilizer 2000l | • | • | • | • | • |
| Fertiliser in combination with SH front hopper | • | • | • | • | • |
| Microgranule applicator | • | • | • | • | • |

Possible - not availbale * On demand



The optimum application of fertiliser or seeds

With e-drive II Kubota offers complete control and monitoring of the machine from cab in accordance with ISOBUS standard.

e-drive II

With e-drive II each sowing unit is driven individually via an electric motor. All the data is entered and read by an ISOBUS conform terminal like IsoMatch Tellus PRO. The sowing distances are infinitely adjustable on the move. All the sowing units can be switched off individually. This solution saves seeds and money!

In conjunction with close row sowing widths of 37.5cm or 45/50cm another benefit of e-drive II comes into play: Individual tramline control. Tramlines can be set up for every sprayer width. The e-drive II features complete electronic monitoring of all machine functions. This includes the seed monitoring by opto-electronic sensors as well as the steering of hydraulic functions such as the control of trackmarker arms and folding processes. Only the design of the seeding heart without a sealing enables the steering of all these functions without external power supply. All functions for every machine can be used without an extra generator or accumulator.



Fertiliser application

For fertiliser placement Kubota supplies different hoppers for the different frame types – always fitting to the working width. Most frames have a mounted fertiliser hopper - these systems are mechanically driven. Application rates between 100 and 390kg/ha (depending on row width) are possible. The combination with a front hopper offers an perfect weight distribution. The front hoppers SH1600 and SH2200 series are both equipped with the electrically driven ELDOS.

Double Disc Fertiliser Coulter

The notches of the fertiliser coulter give perfect traction and allow perfect fertiliser placement. The overload protection ensures blockage-free operation especially in conditions with stones or with high amounts of residues. The integrated scrapers are useful for sticky soil.



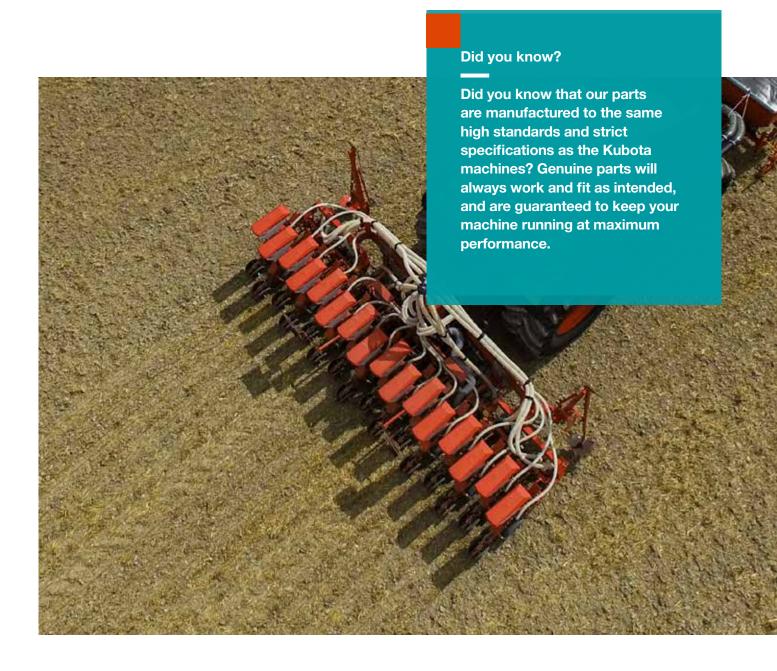
The ferilizer coulter are equipped with maintenance-free roller bearings.

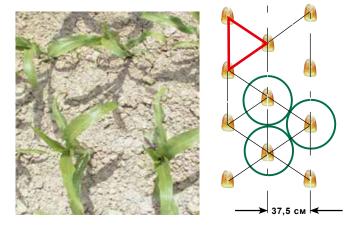


Precise metering by volume through cell wheel metering system with sealing lip

| Frame | PP1001 (3.0-6.0m) | PP1451V | PP1601F | PP1601TF | PP1001S (6.1-9.3m) |
|--------------------|----------------------|---------|---------|----------|-----------------------|
| Mounted fertiliser | • | • | • | • | • |
| SH1600 / SH2200 | • | • | • | - | - |

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GEOSEED® provides for a positive yield development

Close row sowing

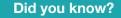
Efforts aiming at the optimum utilisation of growing space, even when sowing a wide variety of crops, have always been the farmers objective.

With regards to maize, the harvesting process previously required a row distance of 75cm. Close rows have only been possible since the introduction of chopping and picking attachments, that are not dependent on the standard row widths. Tests performed at various locations and over several years with distances between rows ranging from 30cm to 37.5cm have demonstrated that with a more even growing space the resulting photosynthesis rate achieved in yield increases by up to 10%. In practice, close row sowing with a distance between rows of 37.5cm provides the ideal conditions GEOSEED® provides for a positive yield development for growth, with all plants developing at the same place.

| Frame | PP1001 (3.0-6.0m) | PP1451V | PP1601F | PP1601TF | PP1001S (6.1-9.3m) |
|---------------------|----------------------|---------|---------|----------|-----------------------|
| Row distance 37.5cm | • | • | • | - | • |
| Row distance 45cm | • | • | • | - | • |



#GEOCONTROL/GEOSEED



Did you know that Kubota is not only one of the top-50 most recognised brands in Japan, but also one of the largest tractor manufacturers in the world? In 2020 alone, Kubota produced more than 270,000 tractors.







Each seeding row has to equipped with electric drive to be able to execute the functions ${\tt GEOCONTROL}$ or ${\tt GEOSEED}^{\scriptsize @}$.

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Precision seeding at perfection

Kubota offers two GPS steered systems to optimise the plant spacing. GEOSEED® is the patented 2-D seed placement. Seeds are placed perfectly in line and in relation to each other and increases the yields of the row crops significantly. GEOCONTROL automatically switched on or off in exactly the right place.

GEOCONTROL

The more precisely and evenly a seed is sown, the easier it is to work and harvest, and the greater the possible yield. Seeding with GPS and GEOCONTROL in combination with a PP model with e-drive II is a major step towards precision and cost.

Each electric driven seeding element, in combination with GPS and GEOCONTROL®, is automatically switched on or off in exactly the right place, ensuring there is no overlap with any row that has already been sown. This is especially handy in triangular fields, on curved or irregular shaped headlands. You can also continue seeding at night since the switching on/off of the seed elements is completely reliable.

GEOSEED

GEOSEED® increases the yields of row crops and ensures maximum efficiency. Seeds are placed perfectly in line and in relation to each other.

GEOSEED® Level 1 is the precise synchronization of seed placement across the full working width of the machine. This ensures that seeds are distributed evenly, achieving an optimal pattern—either parallel or diamond-shaped—across the soil surface. The positive effects of this technology are far-reaching. By enhancing seed distribution, GEOSEED maximizes the efficient use of key resources such as nutrients, water, and sunlight, fostering optimal plant growth. Additionally, this uniform planting pattern helps reduce the risks of wind and water erosion, as the even distribution of plants improves soil structure and coverage, leading to better water retention and minimizing soil degradation.



Efficient farming: discover the possibilities



Be a PRO in increasing productivity

The IsoMatch Tellus PRO 12-inch terminal provides you with the optimal solution for an all-in-one control system inside the tractor cab including automatic steering. It is the centre for connecting all ISOBUS machines, running precision farming applications and Farm Management Systems. It offers everything you need to get the maximum out of your machines and crop, as well as cost savings in fertiliser, chemicals and seeds by using automatic section control and variable rate control. With the unique dual screen functionality it gives you the opportunity to view and manage two machines and/or processes simultaneously.

Easy control management

The IsoMatch Tellus GO+ is a cost-efficient 7-inch terminal, especially developed for managing the machine in a simple way. You are in full control of the machine in exactly the way you want. Easily set up the machine with the soft keys via the 7-inch touch screen and for optimal control while driving simply use the hard keys and rotary switch. Controlling the implement has never been so easy.







compatibilites

in AEF certifified ISOBUS

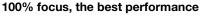
IsoMatch Grip

This ISOBUS auxiliary device is made for maximum machine control and efficient farming. Operate up to 44 implement functions per machine.



IsoMatch Global 3

The IsoMatch Global 3 is the GPS antenna. with DGPS accuracy, in the IsoMatch product range. It enables satellite navigation for site-specific section control, variable rate application, manual guidance and field registration



As tractor steering with IsoMatch AutoDrive-E is handled automatically, you have the freedom to control and monitor your work in an easy way. While the work is more efficient and overlaps are avoided, you can completely focus on the result in the field. (Only in combination with IsoMatch Tellus PRO).

Advanced precision farming software

IsoMatch GEOCONTROL is an advanced software application within the IsoMatch terminals that helps you to control all ISOBUS compatible Kubota machines. Combined with a GPS receiver it fulfils the future needs in terms of innovative and efficient farming! The IsoMatch GEOCONTROL precision farming application includes Manual Guidance and Data Management free of charge. It is possible to expand this application with Section Control and/ or Variable Rate Control.

Enhance your success with E-learning

IsoMatch Simulator is a free downloadable virtual training program. It simulates all functions of the IsoMatch Universal Terminals and Kubota ISOBUS machines. Train yourself and make yourself familiar with your machine to avoid errors and enhance your machine performance.



IsoMatch InLine

Light bar for manual guidance including section status information. Manage the distance from the A-B line and steer for the ideal position.



IsoMatch (Multi)Eye

Connect up to 4 cameras to the IsoMatch Universal Terminals. It gives you full control and overview of the entire machine operation.

#Farm solutions



Kubota Farm Solutions

360° performance for 100% success

We understand that you need more than a powerful tractor to succeed: namely, an integrated system of products and services to increase your competitiveness and preparation for the future. With Kubota Farm Solutions, we have brought together our solutions in a system – and targeted our proposition to you. From intelligent technology to individual services, the Kubota Farm Solutions advantages complement each other, forming a circle that ends where it begins: with our commitment to support you a little better every time, now and in the future.

26 PP SERIES -

Fertiliser hopper

A mounted fertiliser hopper with high capacity and wide opening for easy filling with a loader, big bag or trailer. An optional filling auger is as well available.

micro-drill

An electric driven micro granule applicator can be mounted as backpack behind the sowing unit. Micro nutrients, micro fertilizer, small amounts of insecticides or fungicides ensures best start of the crop.

Synchron

Synchronized sowing in line or over the entire field ensuring optimal seed placement. Each seeding row automatically switched on or off at the right place. Ready for GEOCONTROL® and GEOSEED®.

Precision Farming

Modular Design

Sowing units like the whole machine are modular in design. The basic element always remains the same and the equipment can vary according to individual requirements.

Sowing unit

Standard, Tandem, HD-II or the high speed row SX are available. The heavy basic weight of the HD-II or the SX high speed row combined with the possibility to add additional pressure onto each individual row allow optimal depth control even under extreme conditions.

Seeding Heart

The seeding heart is made of cast aluminium and guarantees accurate seed placement. Without seals - no friction, no wear and low drive torque. With the pressured seeding heart of the SX row the seeds are "shot" by an airstream into the furrow.

PUDAMA - 100% Yield with 25% less starter fertiliser

PUDAMA ensures systematic, precise placement of starter fertiliser. This targeted application delivers nutrients exactly where plants can reach and need it for optimal growth. PUDAMA offers targeted, discontinuous fertiliser placement directly around maize seeds, leading to better nutrient absorption by plant roots compared to conventional row fertiliser spreaders. This approach reduces fertiliser use between rows, cutting nitrate and phosphate runoff into water systems.

Research from the University of Applied Sciences Cologne shows that PUDAMA can save at least 25% of starter fertiliser while maintaining yield potential. By using resources efficiently, PUDAMA supports sustainable crop production and protects soil, water, and air quality The fertiliser is collected at the fertiliser coulter in a defined quantity and shot by an airstream into the soil as a deposit. A sensor link between the fertiliser coulter and seeding unit ensures synchronised seed and fertiliser placement. The PP SX PUDAMA achieves speeds up to 15 kph, placing up to 25 fertiliser spots per second. The PP1601F and PP1601TF can be supplied with the PUDAMA system.





GEOFORCE - Automatic pressure control of the row

The Kubota GEOFORCE system is designed to meet the challenges of varying soil conditions by ensuring precise seed placement. Light soils require less pressure, while heavier soils demand more. The system adapts seamlessly, maintaining even depth control and consistent weight on the gauge wheel across different soil types and working speeds. Equipped with advanced sensor technology and double-acting hydraulic cylinders in the setup of the row parallelogram, GEOFORCE automatically adjusts oil pressure to keep each sowing unit at the optimal depth. This ensures uniform germination and consistent field emergence, even in compacted areas like tractor tracks.

The system also allows for the lifting of individual rows to create tramlines. GEOFORCE's automated control minimizes operator workload, enhances sowing quality, and reduces production costs, resulting in higher, better-quality yields. Uniform seed placement promotes rapid leaf coverage, lowering weed pressure and the need for chemicals or mechanical weeding. The risk of bird damage and poor emergence from deep seed placement is minimized, benefiting shallow-sown seeds like rapeseed. Precise pressure application reduces fuel consumption by preventing bulldozing effects and allows smooth operation at higher speeds. Additionally, the system extends the lifespan of coulters and wearing parts through on-the-go pressure adjustments, supporting more efficient maintenance cycles.



Kubota Sync – the Implement Gateway Always Connected – Easy and Direct

With Kubota Sync, your implement stays connected to Kubota online services, ensuring efficient, user-friendly data transfer to IsoMatch FarmCentre and ServiceCentre.



Remote Service

Reduce downtime with remote diagnostics via ServiceCentre, enabling technicians to quickly resolve electronic issues from a distance.

Task Management

Optimize reporting and transparency with real-time tracking, performance measurement, and secure data storage in IsoMatch FarmCentre. Perfect for managing logistics and invoicing in machine cooperations.

GEOFENCING

Protect your implement against theft with GEOFENCING and a backup battery, ensuring localization even without a tractor.

28 PP SERIES -

#Technical data

| PP row variants | Standard | Tandem | HD-II | SX | | | |
|--|---|--------|-------|-----|--|--|--|
| Hopper 60I | - | - | • | • | | | |
| Hopper 30I | • | • | 0 | - | | | |
| Mech. coulter pressure adjustment from 0 to 100kg with transfer to the parallelogram | - | - | • | • | | | |
| Hydr. coulter pressure adjustment from -40 to 120kg with transfer to the parallelogram | - | - | 0 | 0 | | | |
| Clod deflector | - | 0 | 0 | 0 | | | |
| Trash wheel | - | - | 0 | 0 | | | |
| V-press wheel 25mm | - | - | • | • | | | |
| V-press wheel 50mm | - | - | 0 | 0 | | | |
| Mountain Bike press wheel 50mm | - | - | 0 | 0 | | | |
| Farmflex 370mm | • | 0 | - | - | | | |
| Farmflex 500mm | 0 | - | - | - | | | |
| Monoflex press wheel | - | • | - | - | | | |
| Open gauge wheel 120mm | - | - | • | • | | | |
| Intermediate press wheel stainless steel & scraper | - | - | 0 | - | | | |
| Intermediate press wheel cast iron with rubber ring | - | • | 0 | - | | | |
| e-drive II | 0 | 0 | 0 | • | | | |
| Mechanical drive | 0 | 0 | 0 | - | | | |
| GEOFORCE 1) | - | - | - | 0 | | | |
| PUDAMA 1) | - | - | - | 0 | | | |
| Lifting device | • | • | 0 | 0 | | | |
| Rape kit | 0 | 0 | 0 | 0 | | | |
| Channel extra | - | - | 0 | - | | | |
| Plantirium Sensor | - | - | 0 | - | | | |
| Weight kg | 60 | 75 | 129 | 129 | | | |
| 1) only PP1601E and PP1601TE models | Standard equipment O Ontional equipment - not available | | | | | | |







Press-wheels HD-II and SX rows



V-press wheel 25mm (standard)

- Close the furrow by covering the seed with soil
- Moist and heavier soil
- Deeper sowing depth
- Targeted pressure
- Reliable and a long lifetime due to high resistance to abrasion and wear
- Adjustable intensity (angle and distance)
- Pressure can be easily adjusted without tools



V-press wheel 50mm (option)

- Close the furrow by covering the seed with soil
- Ensuring access to capillary water
- Moist and medium soil
- Deep and shallow sowing depth
- Reliable and long lifetime
- Carrying capacity
- Adjustable intensity (angle and distance)
- Pressure can be easily adjusted without tools



Mountain Bike press wheel 50mm (option)

- Close the furrow by covering the seed with soil
- Medium to lighter soils
- Optimal for shallow sowing, such as sugar beets and rapeseed
- Wheel with a profile that ensures sufficient carrying and grip
- Reduces the risk of erosion and capping
- Promotes a weatherproof surface
- Adjustable intensity (angle and distance)
- Pressure can be easily adjusted without tools

#Technical data

| Model | | PP1301 | PP1351 | PP1401 | PP1451 | PP1501 | PP1601 |
|--|------|-----------|-----------|-----------|-----------|-----------|-----------|
| Frame type | | rigid | rigid | rigid | rigid | rigid | rigid |
| Working width | (m) | 3.00 | 3.50 | 4.00 | 4.50 | 5.00 | 6.00 |
| No. of HD-II sowing rows | | 2-8 | 3-8 | 3-8 | 3-8 | 4-8 | 8 |
| Row width HD-II row | (cm) | 35-150 | 37.5-150 | 45-150 | 55-150 | 55-150 | 66-150 |
| No. of SX sowing rows | | 2-6 | 3-7 | 3-8 | 3-8 | 4-8 | 5-8 |
| Row width SX row | (cm) | 45-150 | 45-150 | 45-150 | 55-150 | 55-150 | 66-150 |
| No. of Standard / Tandem rows | | 2-8 | 3-8 | 3-8 | 3-8 | 4-8 | 5-12 |
| Row width Standard / Tandem row | (cm) | 37.5-150 | 37.5-150 | 45-150 | 55-150 | 55-150 | 66-150 |
| Transport width | (m) | 3.00 | 3.50 | 4.00 | 4.50 | 5.00 | 6.00 |
| Central seed hopper | (I) | - | - | - | - | - | - |
| Sowing row | | | | | | | |
| Mechanical drive of row | | 0 | 0 | 0 | 0 | 0 | 0 |
| e-drive II, ready for GEOSEED® | | 0 | 0 | 0 | 0 | 0 | 0 |
| Fan drive 1000rpm | | 0 | 0 | 0 | 0 | 0 | 0 |
| Fan drive 800rpm | | • | • | • | • | • | • |
| Hydraulic fan drive | | 0 | 0 | 0 | 0 | 0 | 0 |
| Frame | | | | | | | |
| Linkage | | Cat. 2/3N |
| Tyres 7.00-12AS | | 0 | 0 | 0 | 0 | 0 | 0 |
| Tyres 26x12.00STG | | • | • | • | • | • | • |
| Tyres 12.5/80-18 | | - | - | - | - | - | - |
| Hydraulically operated track marker | | • | • | • | • | • | • |
| Hydraulically frame ballasting kit | | 0 | 0 | 0 | 0 | 0 | 0 |
| Fertiliser | | | | | | | |
| Mounted fertiliser spreader | | 0 | 0 | 0 | 0 | 0 | 0 |
| Max. no. of rows with mounted fertiliser spreader | | 8 | 8 | 8 | 8 | 8 | 8 |
| Mechanical drive of fertiliser spreader | | • | • | • | • | • | • |
| Electro-hydraulic drive of fertiliser spreader | | 0 | 0 | 0 | 0 | 0 | 0 |
| Fertiliser hopper capacity | (I) | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Filling auger | | 0 | 0 | 0 | 0 | 0 | 0 |
| Weigh cells | | - | - | - | - | - | - |
| No. of rows with front hopper SH1600/SH2200 series | | 6/8 | 6/8 | 6/8 | 6/8 | 6/8 | 6/8 |
| Microgranule Applicator 6) | | | | | | | |
| Electr. micro granule Applicator micro-drill | | 0 | 0 | 0 | 0 | 0 | 0 |
| Hopper content | (I) | 17 | 17 | 17 | 17 | 17 | 17 |

| | PP1451V row widths with different settings | | | | | | | | | | |
|--------|--|------|------|------|------|------|--------|------|------|-----------|--|
| SMO. | Туре | Rows | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Transport | |
| of r | 6 | 6 | 80cm | 75cm | 70cm | 65cm | 60cm | 55cm | 50cm | 45cm | |
| ıber | 6+1 | 6 | 80cm | 75cm | | | | | | | |
| Number | 6+1 | 7 | | | 65cm | 60cm | 55cm | 50cm | 45cm | | |
| | 8 | 8 | 55cm | 50cm | 45cm | 40cm | 37.5cm | 35cm | | 33cm | |

30 PP SERIES ——

| PP1451V | PP1601F | PP1601TF | PP1611S | PP1681S | PP1761S | PP1831S | PP1931S |
|-------------|--------------|------------------------|-----------|-----------|-----------|-----------|-----------|
| variable | PH folding | trailed | rigid | rigid | rigid | rigid | rigid |
| 2.70 - 4.50 | 6.00 | 6.00 | 6.10 | 6.80 | 7.60 | 8.30 | 9.30 |
| 6/6+1/8 | 8-16 | 8 | 8-12 | 8-16 | 12 | 12-18 | 12-18 |
| 33-80 1) | 37.5-80 | 70-80 | 45-80 | 35-80 | 65 | 45-70 | 50-80 |
| 6 / 6+1 | 8-12 | 8 | 8-12 | 8-12 | 12 | 12-18 | 12-18 |
| 45-80 | 45-80 | 70-80 | 45-80 | 45-80 | 65 | 45-70 | 50-80 |
| - | - | - | - | - | - | - | - |
| - | - | - | - | - | - | - | - |
| 3.00 | 3.00 5) | 3.00 2) | - | - | - | - | - |
| - | - | o 870 ⁴⁾ | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| | | | | | | | |
| - | - | - | - | - | - | - | - |
| • | • | • | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| • | • | • | • | • | • | • | • |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | |
| Cat. 3N | CAT 3N/CAT 3 | CAT 3N cross schaft 3) | Cat. 3/4N |
| - | - | - | 0 | 0 | 0 | 0 | 0 |
| • | • | - | • | • | • | • | • |
| - | - | • | - | - | - | - | - |
| • | • | • | • | • | • | • | • |
| 0 | 0 | - | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8 | 8 or 12 | 8 | 18 | 18 | 18 | 18 | 18 |
| • | - | • | • | • | • | • | • |
| 0 | • | 0 | 0 | 0 | 0 | 0 | 0 |
| 1,000 | 1,125 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 | 2,000 |
| o (6 rows) | o (8 rows) | 0 | 0 | 0 | 0 | 0 | 0 |
| - | - | 0 | - | - | - | - | - |
| 6/8 | 8/12/16 | - | 8 - 16 | 8 - 16 | 8 - 16 | 8 - 16 | 8 - 16 |
| | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 17 | 17 | 17 | 17 | 17 | 17 | 17 | 17 |

 $^{^{\}mbox{\tiny 1)}}\mbox{Depending on no. of rows}$



• Standard equipment • Optional equipment - not available for this type

Visus Terminal for mechnical drive

The in-cab mounted Visus, Opto Electronic Control, constantly monitors the operation of the machine alerting the operator of any malfunction within the sowing heart.

The Visus monitors seeds as they are sown. If there is an interruption in seed delivery, an audible and visual alarm is immediately triggered. The Visus indicates the area worked, working time and forward speed. Suitable for all seed types. High degree of operational reliability for contractors and farmers alike.

^{2) 3.40}m if 80cm row width

³⁾ Optional Cat. 3/Cat. 3N cross shaft and K80

 $^{^{\}mbox{\tiny 4)}}$ Only with SX row version without single seed hopper

 $^{^{5}}$) > 3.00m transport width when 16 HD-II rows with 37.5cm row width

 $^{^{\}mbox{\tiny 6)}}$ only with HD-II or SX row and e-drive II

KVERNELAND GROUP

https://www.kubota-eu.com

The company reserves the right to change the above specifications without notice. This brochure is for descriptive purpose only. Some of the items pictured in this brochure are optional and not standard equipment.

Please consult your local Kubota dealer for warranty, safety or product information.

For your safety, Kubota strongly recommend the use of a seat belt in all applications.

