



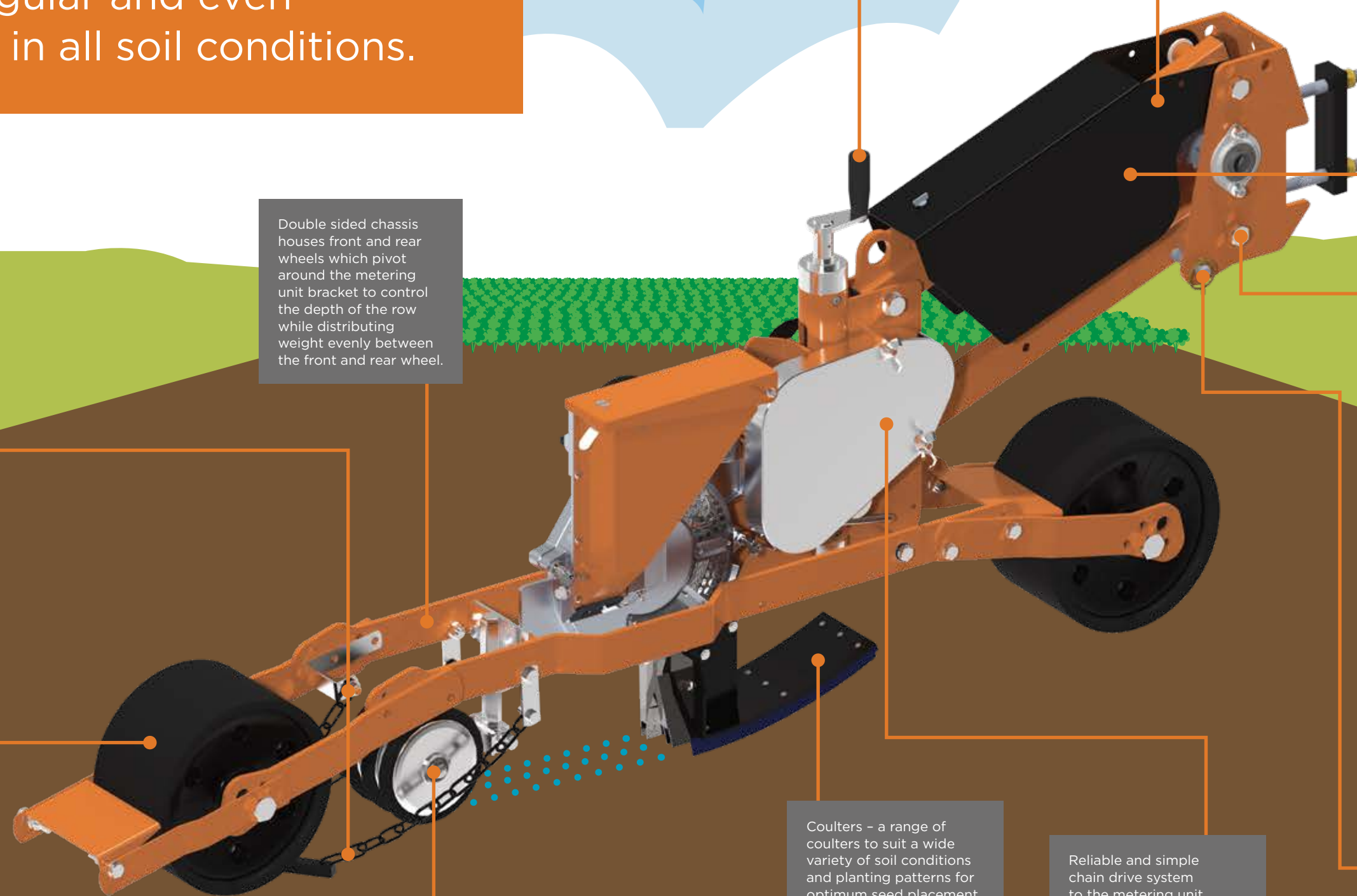
 **STARPLUS**

**PRECISION
SMALL SEED
DRILLS**

 **STANHAY**


ENGLISH

Designed to give uniformity of seed depth and seed soil contact to ensure regular and even germination in all soil conditions.



Infinitely adjustable depth control via the handle allows precise setting of the seeding depth which can then be locked in position in work.

Parallel links - a robust maintenance free parallel linkage design allows the entire row to float and maintain constant contact with the ground

Weight take-off spring allows the weight of the unit to be reduced - especially useful when working on softer ridges or beds.



Double sided chassis houses front and rear wheels which pivot around the metering unit bracket to control the depth of the row while distributing weight evenly between the front and rear wheel.



Seed coverers are either via a metal arm or drag chain system and adjustable to move the right amount of soil back over the seed prior to the rear row unit wheels

Clod Deflector (not shown) - an optional floating clod deflector in front of the front wheel is available to move larger clods or stones out of the row prior to the front wheel and is available in two width options 150mm or 190mm.



The front and rear wheels, equipped with scraper kits to keep the wheels clean, control the row unit depth and consolidate the row for optimal seed germination conditions.



Seed Press Wheels - a range of rubber tyre seed press wheels ensure optimum seed to soil contact in advance of the soil coverers where required.

Coulters - a range of coulters to suit a wide variety of soil conditions and planting patterns for optimum seed placement.



Reliable and simple chain drive system to the metering unit

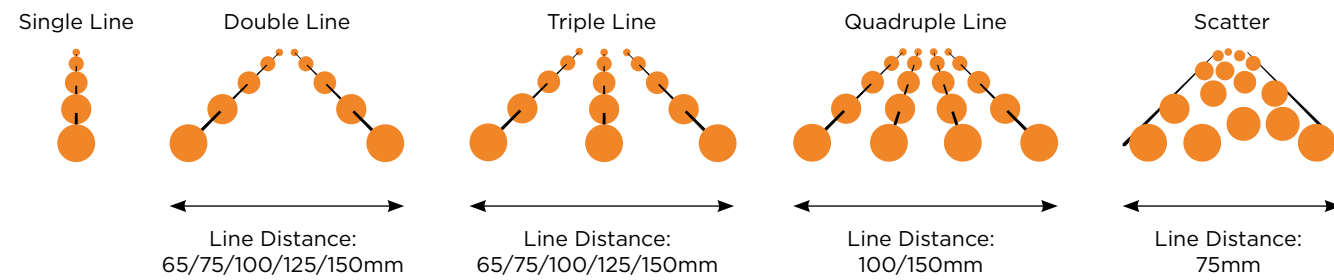


Ability to latch unit out of work when required.

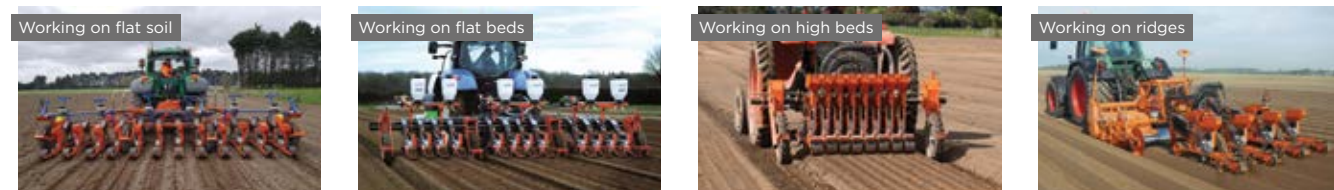
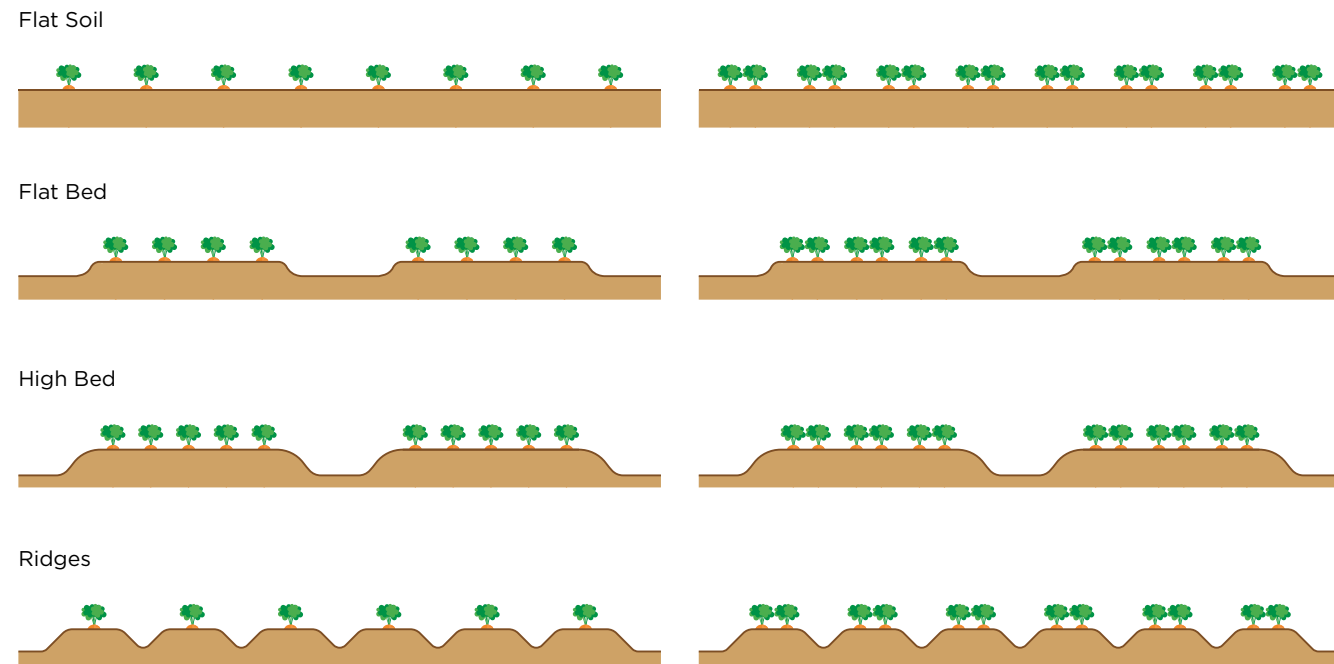
PLANTING LAYOUTS

The machines can be specified for any number of different types of planting either in flat field conditions or on ridges and beds. Each row can be specified to achieve a wide variety of different planting patterns.

ROW UNIT POSSIBILITIES

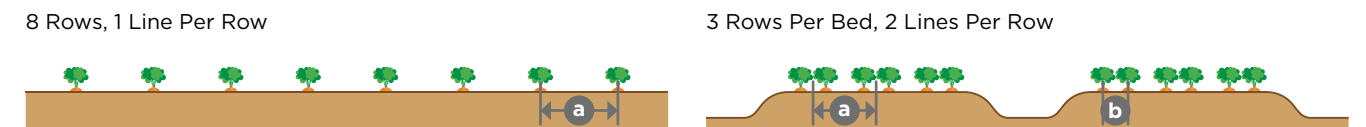


MACHINE LAYOUT POSSIBILITIES

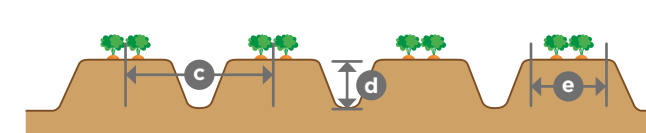


KEY LAYOUT TERMINOLOGY

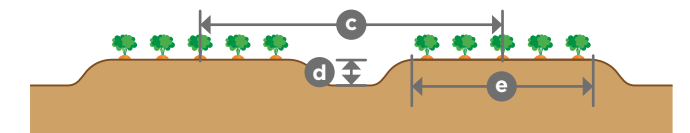
NUMBER OF ROWS / NUMBER OF LINES



RIDGE DIMENSIONS

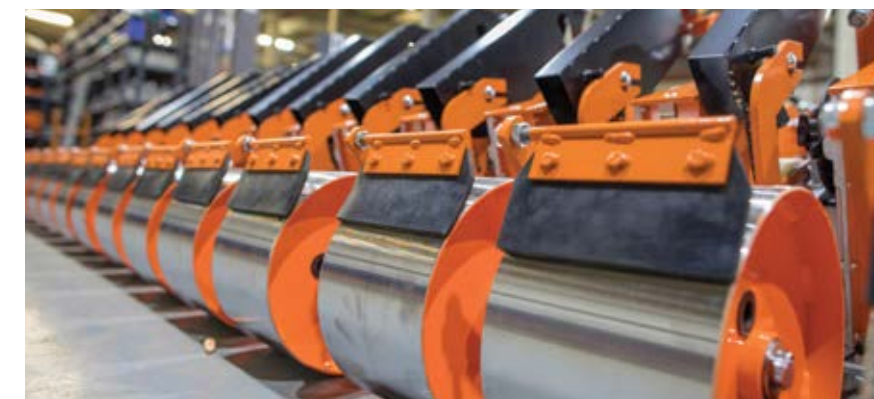
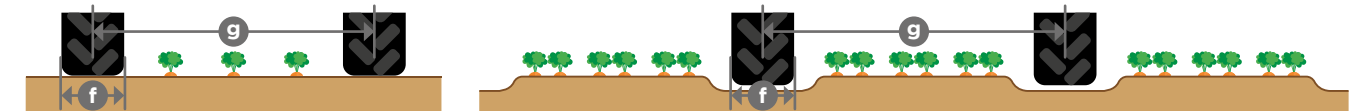


BED DIMENSIONS



WHEEL TRACK / WIDTH

The wheel units can be adjusted in height to enable planting on flat ground or on beds/ridges. PLEASE NOTE: Minimum row width is determined by the wheel options chosen.



- KEY**
- a Row Distance
 - b Line Distance
 - c Bed/Ridge Distance
 - d Bed/Ridge Height
 - e Bed/Ridge Top Width
 - f Tyre Width
 - g Track Width

THE METERING UNIT AND OPTIONS

The industry leading Stanhay small seed vacuum metering unit has been continually developed and improved over the last 30 years to give unmatched versatility and performance in the field.

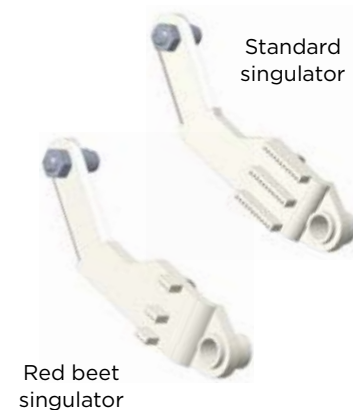
The only system currently available capable of distributing 1, 2, 3 or 4 lines of seed from a single metering unit.

[1] SEED DISCS

Thin seed discs flex to give a perfect air tight seal and consistent seed pickup while reducing the chance of seeds sticking in seed holes (see pages 8 & 9 for more).

[3] SINGULATORS

Simple design to enable precise singulation of up to 4 lines of seed with one cam adjustment, they also feature a simple calibration adjustment. They ensure all metering units perform the same on the same singulation setting. Various versions are available for different seed types.



[2] GALLERY BLOCK

A hard wearing plastic moulding that directs vacuum and pressure to exactly where they are needed for high quality seed pickup and disc cleanout after the seed release. Easily replaced when required.



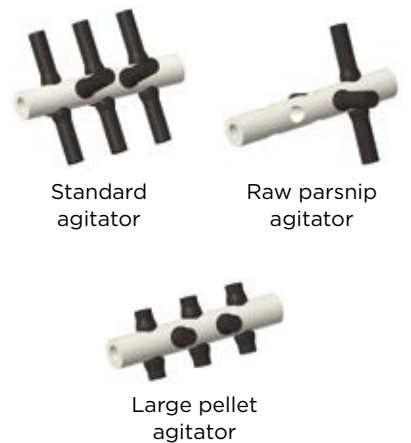
A large area of the disc is viewable to aid initial setup and check performance.

Highly accurate, durable and corrosion resistant alloy castings

Choice of hopper sizes from 1L-8L. Easy to fully empty seed hoppers via plastic trapdoor at base of the hopper.

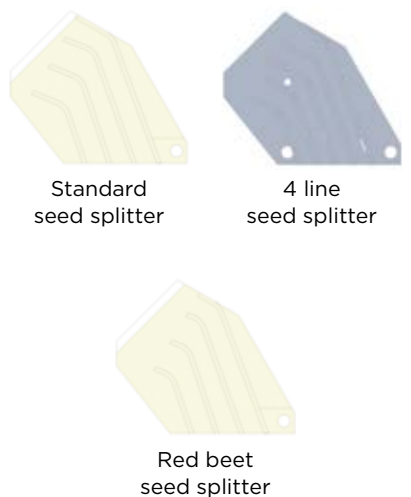
[4] AGITATORS

Easily adjustable agitator system to ensure seed keeps flowing and does not bridge. They are easily replaced and adjustable to suit any seed type.



[5] SPLITTERS

Precise guidance of each line of seed from release on the disc to the coulters. Optimised versions are available for particular seed types like red beet.

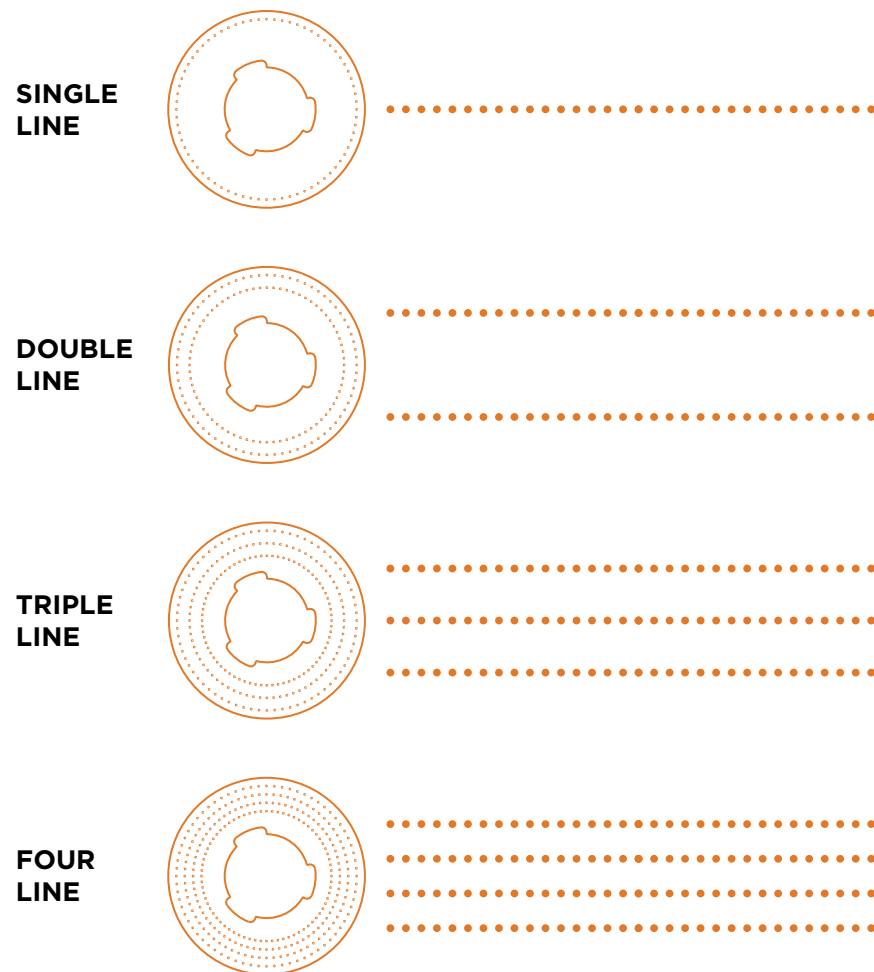


THE METERING UNIT SEED DISCS

The selection of the correct seed disc is vital to ensure hole size matches the seed type and size; the number of holes in the disc and the number of lines planted per row.

The Stanhay thin seed disc flexes to form a perfect seal and ensures high air velocity around the hole for excellent seed pickup while minimising the opportunity for holes to become blocked. Seed discs are available in a huge range of configurations to suit every seed type and seeding system.

The only system currently available capable of distributing 1, 2, 3 or 4 lines of seed from a single metering unit.

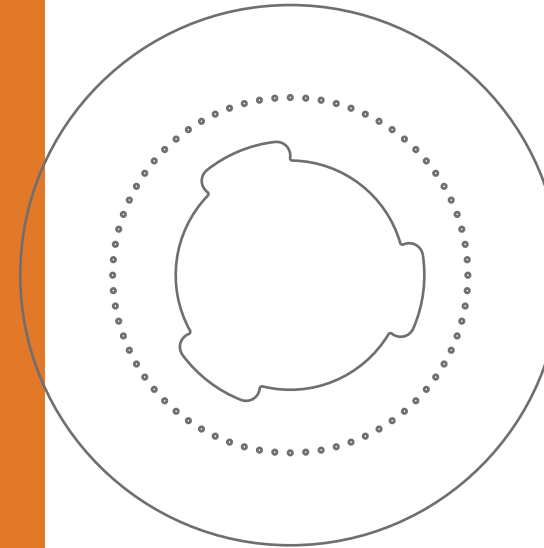


An example of disc terminology is: 0.6x96x3L or 0.8x96/96/96

Just some of the seeds you can handle are listed below:

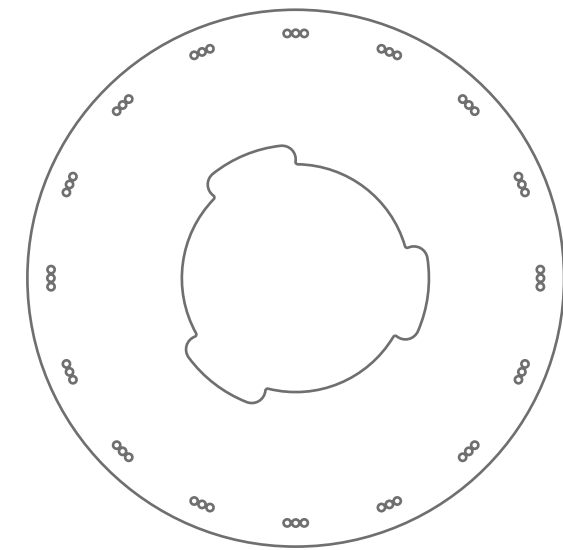
- Alfalfa
- Anise
- Aramanthus
- Asparagus
- Balm
- Basil
- Borage
- Brassicas
- Broccoli
- Cabbage
- Cantaloupe
- Caraway
- Carrot
- Carthamus
- Cauliflower
- Celery
- Chervil
- Chicory
- Chives
- Chrysanthemum
- Coriander
- Courgette
- Cucumber
- Cumin
- Delphinium
- Dill
- Fennel
- Fenugreek
- Helichrysum
- Larkspur
- Leek
- Lettuce
- Marjoram
- Melon
- Millet
- Mustard
- Nigella Black Pod
- Nigella Oreintalis
- Oilseed Rape
- Onion
- Paprika
- Parsley
- Parsnip
- Peas
- Pepper
- Pinus Radiata
- Poppy
- Radish
- Red Beet
- Rosemary
- Sage
- Sorghum
- Sorrel
- Soya
- Spinach
- Sugarbeet
- Swede
- Sweet Corn
- Sweet William
- Thyme
- Tomato
- Turnip
- Watermelon
- Wheat

NON-STANDARD SEED DISCS



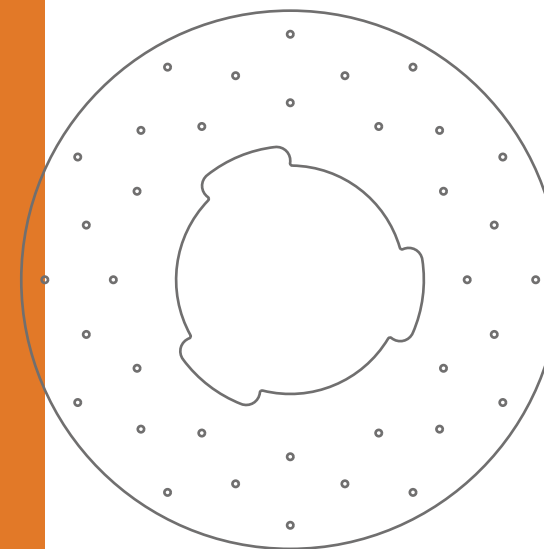
GROUP DISCS

These allow 2 or 3 seeds to be planted at a station, suitable for particularly high value crops where the growers want to ensure 1 plant per station and will thin the crop post germination.



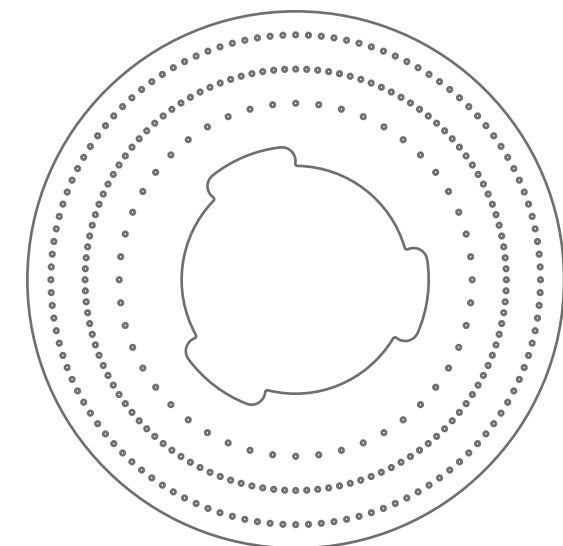
INSIDE LINE DISCS

These allow a single line of seed to be planted with a triple line coultter only by changing the seed disc.



VARIABLE RATE DISCS

Allows a different rate of seed to be applied in each line of seed from the metering unit, commonly used by root crop growers to apply a lower rate of seed on the middle line of a 3 line setup.

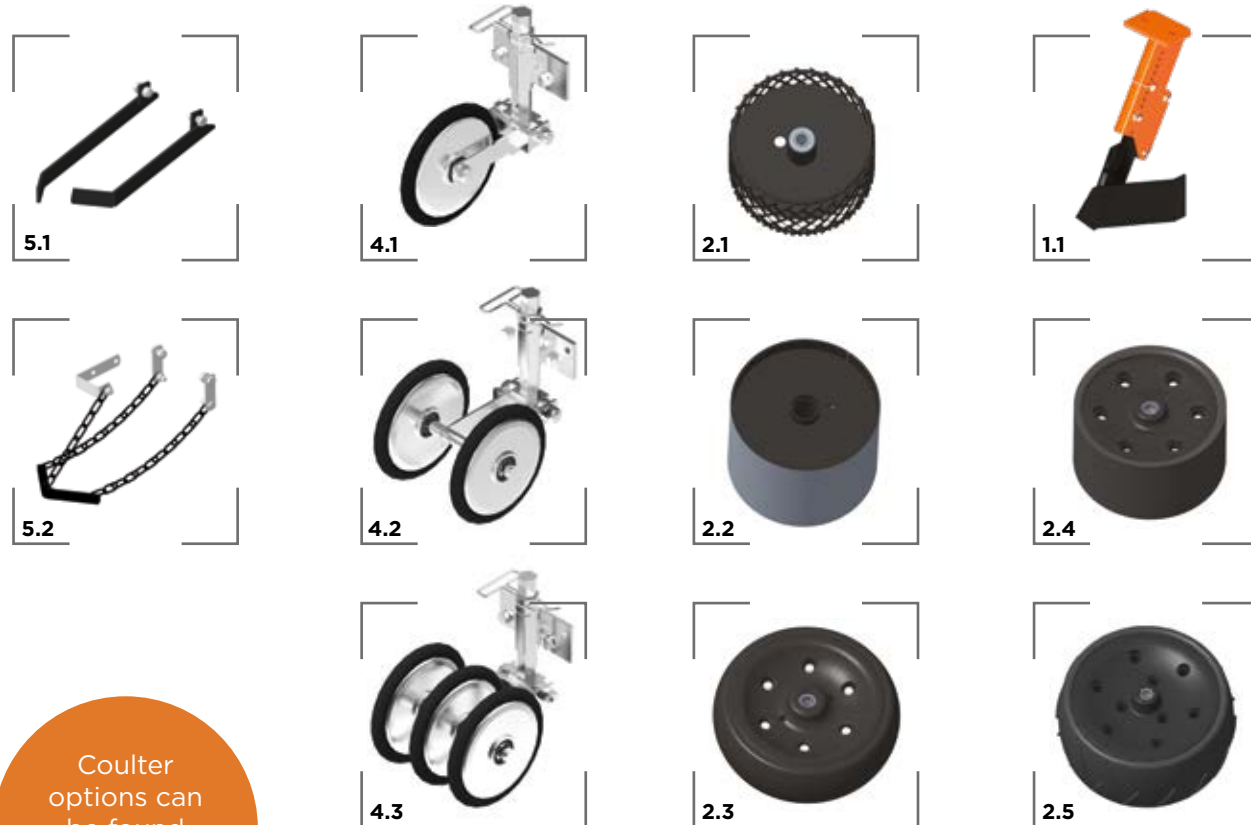
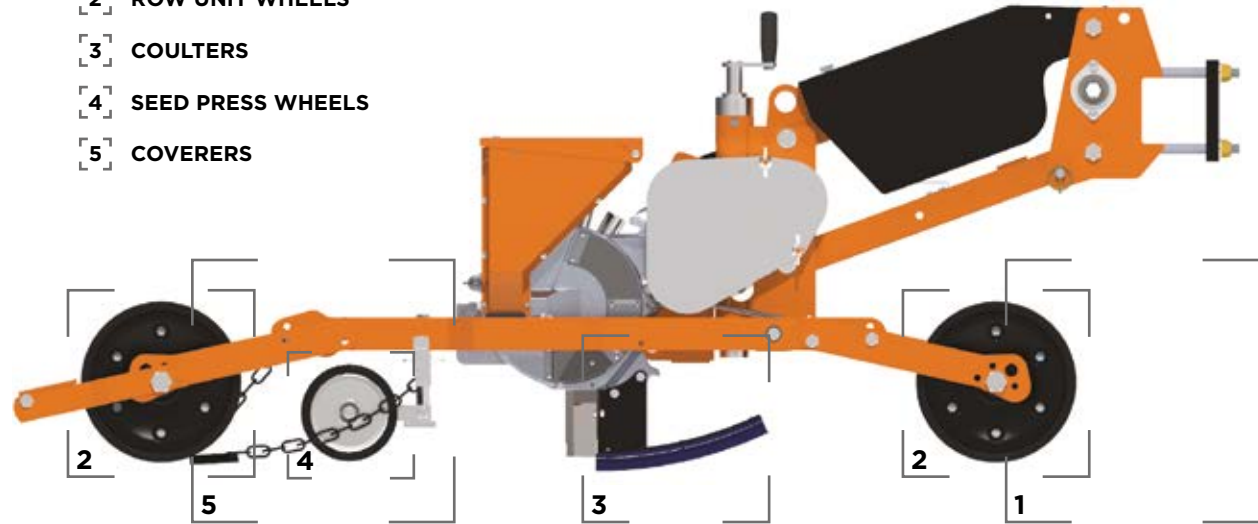


STAGGERED DISCS

Allow seeds to be placed into the ground in a staggered pattern rather than in-line

ROW UNIT OPTIONS

- [1] CLOD DEFLECTOR
- [2] ROW UNIT WHEELS
- [3] COULTERS
- [4] SEED PRESS WHEELS
- [5] COVERERS



Coulters options can be found on pages 12 & 13.





ADDITIONAL OPTIONS	Description	Width (mm)
1.1	Clod Deflector Floating clod deflector to clear row ahead of front wheel	150 190

ROW UNIT WHEELS	Description	Width (mm)
2.1	Cage Wheel For use on soil prone to capping. Leaves a broken surface on the seed bed. Rubber scraper kit included.	120 160 200
2.2	Stainless Steel Recommended for general purpose drilling work. Leaves a flat surface behind the drill. Plastic scraper kit included.	120 160 200
2.3	ZP Convex shaped zero pressure rubber wheel. Suitable for single line work and stickier soil conditions. Metal scraper kit included.	100
2.4	FZP Flat square edged zero pressure wheel suitable for multiline planting in sticky conditions. Metal scraper kit included.	145 170 200
2.5	LZP Large diameter, self cleaning treaded zero pressure wheel suitable for multiline planting. Leaves a treaded pattern behind to prevent capping.	165

SEED PRESS WHEELS	Description	Width (mm)
4.1	Zero Pressure Single Line	
4.2	Zero Pressure Double Line Individual self cleaning, zero pressure wheel that follows each coulters furrow. Not available for line widths of 125mm and over.	20
4.3	Zero Pressure Triple Line	


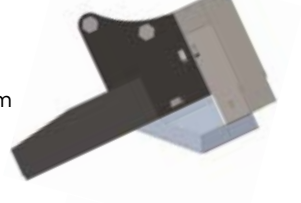




COVERER TYPES	Description	Width (mm)
5.1	Arm 1 or 2 adjustable sprung loaded arms cover the seed furrow.	-
5.2	Drag Simple chain and V shaped profile.	190 300

ROW UNIT COULTERS

SINGLE LINE	Description	
3.1 Single Line Universal Cast Tip	Replaceable cast tip. Stainless steel side plates. Recommended for general purpose work.	
3.2 Single Line Universal Ceramic Tip	Replaceable ceramic tip. Stainless steel side plates. Hard wearing. Recommended for sticky and/or abrasive soils.	
3.3 Single Line Hyline Ski	Replaceable polymer base with replaceable polymer or cast rib. Polymer rib is best suited to sticky and/or trashy non-abrasive soils while the cast rib is better suited where the soil is more abrasive. Ribs are 20mm deep as standard but up to two optional 6mm packing ribs can be fitted to increase seeding depth.	
3.4 Single Line Loline Ski	Replaceable polymer base with replaceable polymer or cast rib. Polymer rib is best suited to sticky and/or trashy non-abrasive soils while the cast rib is better suited where the soil is more abrasive. Ribs are 20mm deep as standard but up to two optional 6mm packing ribs can be fitted to increase seeding depth.	

NOTE: Single line coulters can be fitted to chassis in Hyline configuration using Hyline Adaptor for single line shoes.



MULTILINE	Description	Width (mm)	
3.5 Loline Shallow Fin	Replaceable cast base. Recommended for fine, cloddy or stony seedbeds: (for use where hyline chassis configuration is not achievable).	2 Line: 65/75mm 3 Line: 65/75mm	
3.6 Hyline Deep Fin	Replaceable cast base. Recommended for fine clean seedbeds: (deep fin shoes produce minimum soil disturbance).	2 Line: 75/100/125mm 3 Line: 75/100/125/150mm	
3.7 Hyline Shallow Fin	Replaceable cast base. Recommended for cloddy and/or stony seedbeds: (shallow fin shoes can handle stones and clods without blocking).	2 Line: 65/75mm 3 Line: 65/75/100mm	
3.8 Multiline Hyline Ski	Replaceable polymer base with replaceable polymer or cast rib. Polymer rib is best suited to sticky and/or trashy non-abrasive soils while the cast rib is better suited where the soil is more abrasive. Ribs are 20mm deep as standard but up to two optional 6mm packing ribs can be fitted to increase seeding depth.	2 Line: 65/75/100/125/150mm 3 Line: 65/75/100/125/150mm 4 Line: 100/125/150mm	
3.9 Multiline Loline Ski	Replaceable polymer base with replaceable polymer or cast rib. Polymer rib is best suited to sticky and/or trashy non-abrasive soils while the cast rib is better suited where the soil is more abrasive. Ribs are 20mm deep as standard but up to two optional 6mm packing ribs can be fitted to increase seeding depth.	2 Line: 75mm 3 Line: 75mm	
3.10 Knife Coulters	Single furrow multiline coulters capable of either dropping seed in controlled lines or with a scattered pattern	2 Line: 75mm 3 Line: 75mm Scatter: 75mm	

DRILL TOOLBARS

Stanhay can provide a range of different toolbars to suit a huge range of machine layouts whether it be rigid, folding or designed to fit behind other cultivation equipment. Frames are available from the smallest 2 row machines up to over 20 rows with working widths from 2m to 6m+. All frames can be completed with road lighting kits.

Folding toolbars all achieve a transport width of under 3.5m and can be equipped with full road lighting.



COMPACT FOLDING TOOLBAR

The smaller of the two folding frames this is suitable for layouts with wider row spacings and allows a shorter folded height to be achieved in a lighter frame. With bolt on toolbars it can be adapted to work with a number of different machine layouts. Up to 6.5m working width can be folded to within 3.5m for road transport.



COMPACT RIGID TOOLBAR

Available with a hydraulic fan drive only this frame provides the smallest possible distance between the coulters and the machine pickup point, particular suited for mounting behind cultivation equipment.



HIGH DENSITY FOLDING TOOLBAR

Designed with optimal geometry and increased load carrying capacity to allow machines with the tightest achievable row spacings to be folded from a 6.5m working width to under 3.5m for road transport. Bolt on toolbars make it easy to customise for every application and frames can be specified with or without float in the wings to allow for greater ground contour following ability.



Rigid toolbar systems are available for small, medium and large machine layouts.



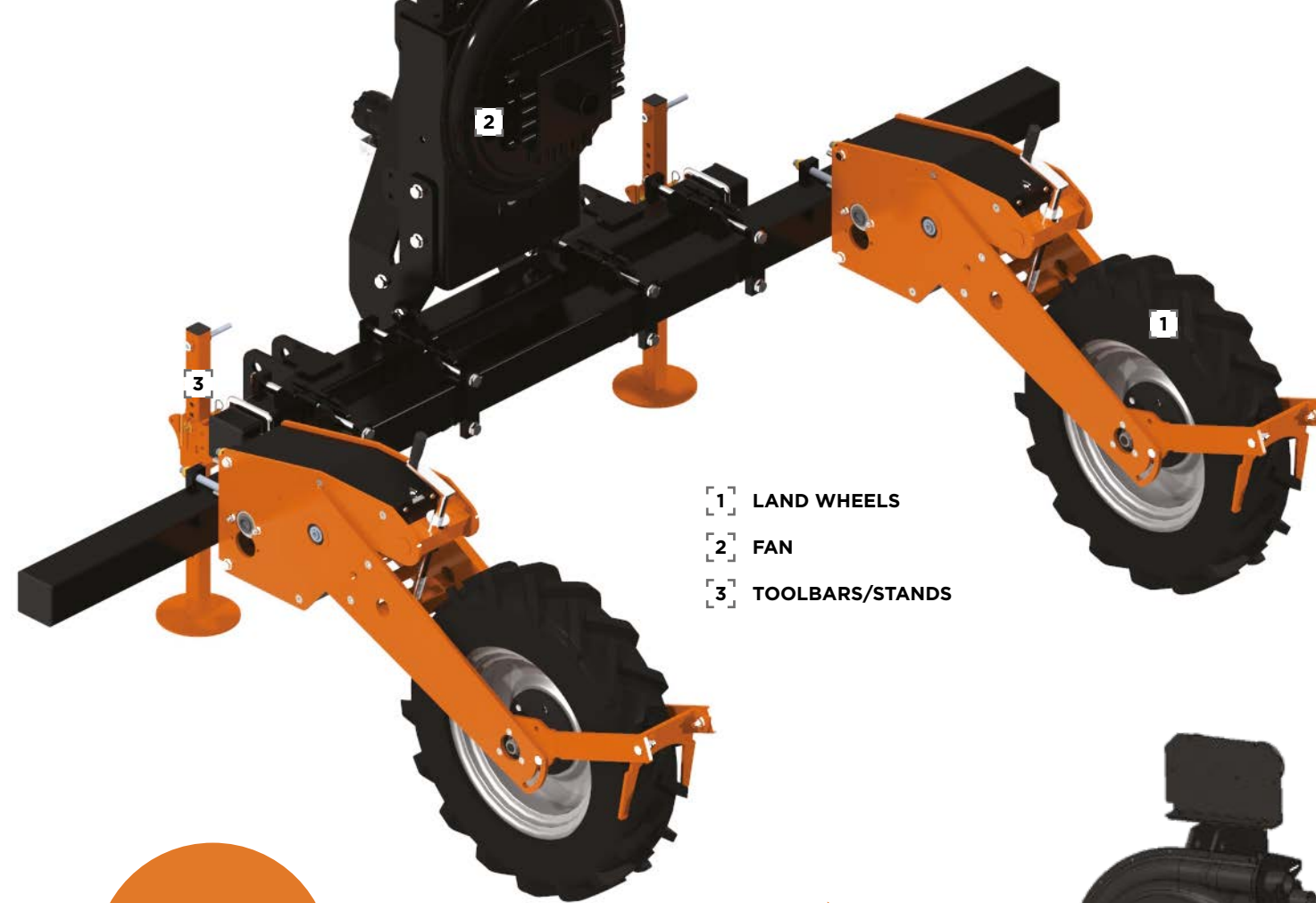
STANDARD RIGID TOOLBAR

The standard rigid frame design which is highly customisable to a range of machine configurations allowing the use of both styles of fan.



DRILL COMPONENTS

Stanhay seed drills can be configured to suit almost any planting layout and crop. From the metering units and seed discs to the row units and frames, everything is uniquely configurable to the customers' requirements. This section details the options available for land wheels and fans together with accessories that include fertiliser applicator frames and road lighting kits.



- [1] LAND WHEELS
- [2] FAN
- [3] TOOLBARS/STANDS



◀ **SPRING LOADED DRIVE WHEEL**

▲ **STANDARD DRIVE WHEEL**

STANDARD DRIVE WHEEL

Supports the chassis of the drill and houses a 64 speed gearbox that is used to set the spacing of the seeds. Suitable for beds up to 300mm height. Wheel scraper kit included.

The standard support wheel is used in conjunction with the drive wheel to support the chassis. It cannot be used to drive metering units. Suitable for bed heights up to 300mm. Wheel scraper kit included.

SPRING LOADED DRIVE WHEEL

Used with triple bed drill configurations or uneven ground. Spring loaded to ensure a constant downforce to reduce wheel slip. Suitable for bed heights up to 300mm. Includes wheel scraper kit.

The spring loaded support wheel is used in conjunction with the drive wheel. Suitable for bed heights up to 300mm. Wheel scraper kit included.

For toolbars and stands see pages 14 & 15.

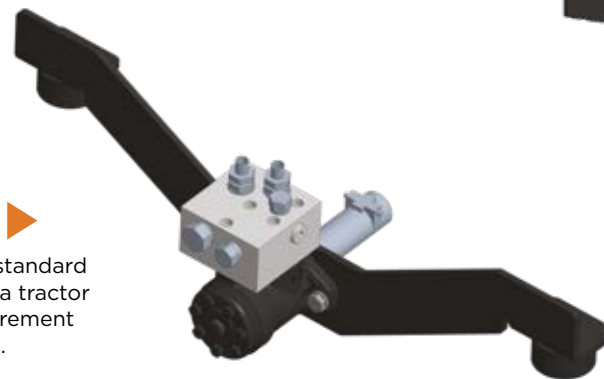


◀ VACUUM EMPTIER

Connects to the fan and uses the vacuum to empty the seed from the metering unit helping to reduce seed losses.

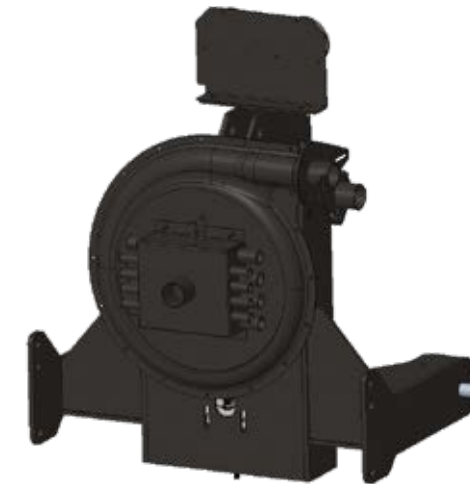
▶ HYDRAULIC DRIVE

Retrofittable onto a standard fan and couples into a tractor spool valve. Oil requirement is 30 lpm @ 180 BAR.



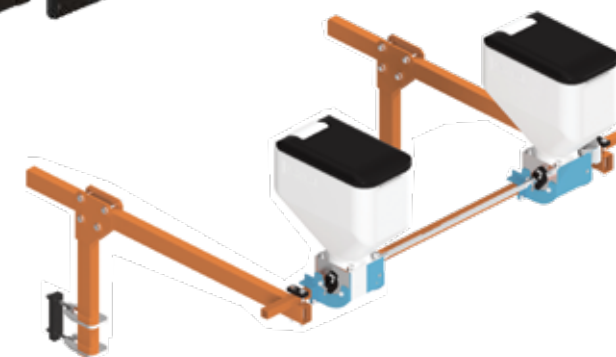
▶ 17 RIB FAN

Standard fan for most configurations drilling small seed up to 12 rows. Available in 540rpm only.



◀ 26 RIB FAN

Offers increased vacuum and pressure for larger drill configurations or large seed capabilities. Available in either 540 or 1000rpm.



▲ RIDGE WHEELS

For use when drilling on ridges. Guides the drill and ensures the row units follow the top of the ridges.

ROAD LIGHTING

LED road lighting kit can be fitted to rigid or folding toolbars. Reflective marker boards make the drill visible to other road users.



◀ FERTILISER ATTACHMENTS

Many aftermarket fertiliser applicators can be fitted with the available universal mounting brackets either at our factory or via your Stanhay dealer.

TECHNICAL SPECIFICATION

Planter type	Air
Seed type	Natural + pelleted
Multiline capability	1 / 2 / 3 / 4
Hopper capacity (litres)	1 / 2 / 6 / 8
Toolbar	100mm or 180mm square
Minimum seed spacing	7mm
Min/max seed size	1mm / 10mm
Min/max number of rows per machine	2-18+
Minimum row spacing	250mm
Minimum line spacing	21.6mm
Approx row unit weight	70kg
Row unit length	1750mm
Depth control	Infinite control
Coverer options	Drag or arm
Wheel options	Stainless / cage / rubber
Seed press wheels available	Yes
Row unit down force adjustment	Yes
Drive system	28 Speed chain drive
Landwheel tyres	6.00-16
PTO Fan	540RPM or 1000RPM
Linkage category	Cat 2 / 3

SPECIAL PROJECTS TEAM

Specialist growers often require drill configurations or combinations that are built to suit their crop.

96 Line 3 bed air drill with front mounted foldable roller drilling spinach for a UK grower in the West Midlands.



4 row Star Plus with specially adapted headstock for mounting onto a rotary tiller drilling carrots onto ridges in Germany.



Although Stanhay already offers a more flexible and generous standard build specification than any other comparable drill manufacturer, the Company also has a specialist team of designers and engineers able to produce one-off variants, literally tailor-made to special customer requirements like multi-bed high density machines or sled mounted and tandem bed drills for almost any type of seed.

Extensive use of CAD and other advanced design software means that such prototypes can be viewed from every angle before they pass to production. This ensures that the customer is totally happy with the design before production begins. Similarly advanced manufacturing techniques mean that what the customer sees is what the customer gets – delivered on time and on budget.

Stanhay leads the world in the design and manufacture of precision seed drills for every kind of crop. Our reputation is built on innovation, quality and performance that delivers the results growers expect.



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