

# Air Seeders

Precision seeding technology





# Welcome to Väderstad

“At Väderstad we continue to focus on our most important asset, our customers. We strive to continually bring to market the best solutions possible for our customers, focusing on our key values of precision, quality and innovation. These key values combined with industry leading agronomy continue to ensure we are your partner for outstanding emergence.”



# Precision seeding. Powerful crops.

Seeding marks the dawn of a new crop year and it's importance to a profitable bottom line cannot be understated. Seed Hawk Air Drills are known for their ability to maximize the potential of the plant with innovations in seed-to-fertilizer placement, accurate metering and superior functionality.



# Unparalleled accuracy

The heart of the Seed Hawk air drill is the individually mounted opener assemblies. Each independent dual-knife opener and packer assembly delivers unparalleled accuracy in all soil conditions. The result is an excellent quality crop with maximum yield potential.



## A perfect micro climate

The Seed Hawk air drill establishes the crop in shallow strips, while leaving the rest of the field untouched. Standing stubble rows beside the young plants offer protection from wind and soil erosion. The dual-knife system helps warm the soil while preserving moisture. This ensures quick and strong plant development with good vigor to withstand pests and disease.

## Right rate, right time

The Fenix III metering system found on the Precision Delivery Air Carts, allows for precise delivery of seed and fertilizer. Heavy-duty electric motors, in conjunction with application-specific rollers, produce the desired amount of product for each section of the toolbar.



## Ease of use

The iPad based operating system lets you take full control of your air drill. From the ability to control packing pressure, view blockages and section to section variance and the operation of individual sections, your Seed Hawk air drill continues to bring you the full benefits of a precision drill in an easy to use package. Beyond this, you can continue to expand your experience with the full feature benefits of technology like SCTx, continuing to provide you with the ease of use and precision that you expect.

## Top quality

The Seed Hawk air drill has a heavy-duty design with high quality components and few moving parts. The fertilizer and seed knives working in the soil are protected by carbide tips. You benefit from low maintenance costs, excellent performance and extremely long working life in the field.

# Excellent agronomic performance

Seeding is the operation that sets conditions for crop performance throughout the year. It is important to not only choose a seeding system that will produce crops of the highest quality and yield but will also perform under all types of weather conditions. Give your crop the best opportunity to succeed while reducing risk at the same time.



*Minimal disturbance seeder*



*Seed Hawk*



*Tillage*

## Optimal yield at minimum risk

By incorporating the main benefits of tillage into a no-till system, Seed Hawk manages to combine the best of both worlds. The key to success is providing fine tilth close to the seed, as well as a seed furrow free from residue that could disrupt early crop development.

Seed Hawk delivers high germination rates, enabling seed savings. No compromises are made on seed furrow hygiene or fertilizer placement, improving the chances of success with no-till seeding in varying conditions throughout the crop rotation.



## Outstanding small seed establishment

Small seeds, such as canola, are generally challenging in no-till seeding conditions, since they require a very shallow seedbed and coverage of fine tilth for even germination. Canola seeds are also very sensitive to fertilizer-induced seed burning. Seed Hawk delivers a perfect seedbed structure on uncompacted soil with safe fertilizer separation, ensuring very quick germination and strong plants.

## Quick and even germination

Seed Hawk is equipped with a double-acting opener, with two separate knives that follows the ground contours. This, combined with a frame able to adapt to the field terrain ensures excellent depth precision and an even germination. The evenly growing and maturing crop throughout the field is essential for crop management during the growing season.

A Seed Hawk field is characterized by its perfect green lines where every plant has the same condition – an excellent start for a healthy crop.





## Knife openers for a clean furrow

Knife openers are the prominent solution for creating fine tilth in the seed furrow. Additionally, the Seed Hawk knives ensure a clean, hygienic seed furrow free of residue where no hair pinning can occur.

The Seed Hawk opener features two knives, with the fertilizer placed via the first knife, separated from the seed but close enough for quick access. The second knife goes shallow and to the side. While placing the seed and fertilizer, the knives perform a shallow, focused tillage operation where it is needed most to ensure crop performance.

This focused micro-strip tillage minimizes the risk of yield variations while ensuring the crop is protected from erosion and soil structure damage.



# Depth maintenance in all situations

A successful crop requires each plant to be seeded at the same depth regardless of soil conditions and terrain. Seed Hawk's multi-plex frames and independent opener design allows each plant to begin its growth cycle evenly across the entire toolbar.





# Accurate seed depth, every time

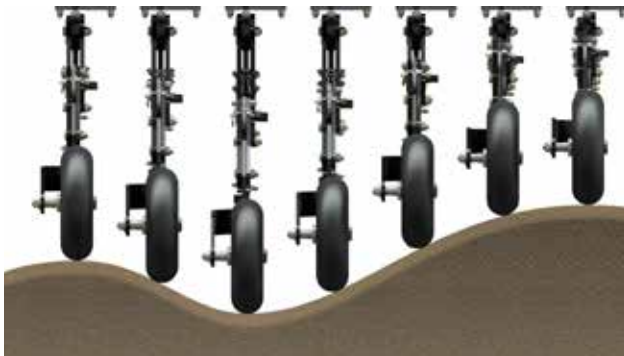
The working depth of the Seed Hawk opener is maintained by the packer wheel following the ground surface directly behind the fertilizer and seed knives. The hydraulic cylinder applies downforce on the wheel, which results in up to 330 lb (150 kg) pressure. Adjustable packing pressure ensures great results in any soil condition.

The Seed Hawk opener is always able to maintain its selected working depth, resulting in an evenly-maturing crop every time.



## Extreme adaptability

The opener assemblies follow the ground independently by pivoting at the frame. With a contour following range of +/- 8 inches, each independent opener delivers consistent seed depth, regardless of the terrain.



*The Seed Hawk opener performs seedbed preparation, fertilizer and seed placement as well as reconsolidation in one pass. A simple pin adjustment allows for quick and precise depth setting.*

## Row by row control

By controlling each row individually, each seed is granted the same great conditions for growth. A consistent contour following ability is crucial in no-till operations where variable field conditions are present. The Seed Hawk opener excels in this area.



### Knife design promotes depth keeping

The fertilizer knife is angled forward, improving entry in tough conditions. This also helps pull the opener down, maintaining accurate depth control with a low hydraulic requirement.



### Depth keeping on micro level

The packer wheel is placed behind the two knives, ensuring that it always runs in tilled soil. This avoids the situation where smaller variations in the surface affect the seed depth where it is not intended or needed. Thereby, the opener operates smoothly and delivers excellent depth precision.



# Unlock the potential of the seed

A seed's greatest potential is at the time it is placed in the ground. For over thirty years, Seed Hawk's innovative opener design has provided the precision seed-to-fertilizer placement required for the plant to produce a quality, high-yielding crop in all soil types and conditions.





# Two knives, the key to success

The separation of fertilizer and seed is obtained through the dual-knife system where the second knife covers the fertilizer with soil before dropping the seed. Having two knives doubles the creation of fine tilth, thereby ensuring seed-to-soil contact as well as perfect closing and reconsolidation of the seed slot.



## Optimized fertilizer placement

When seeding on wider row distances, the fertilizer deposit for each row is larger; for summer crops, this effect is accelerated due to higher rates. On Seed Hawk, the second knife covers the fertilizer with soil before dropping the seed on a separate shelf, ensuring perfect separation. This creates a barrier between the seed and the fertilizer, preventing fertilizer burn. The sideways separation ensures that no seed is placed on top of the fertilizer, which would cause broken capillarity and moisture competition. The distance is short enough to allow the roots quick access to nutrients.

## Different angles – different job

The fertilizer knife has a strong forward angle and acts similarly to a chisel point, though without the mixing capabilities. The knife lifts moist soil and pushes larger clods to the side, leaving a fine tilth in the seed slot. Its soil-searching ability ensures maximum penetration with minimal weight requirements, thereby saving diesel.

The seed knife, with its backward angle, mills a shelf out of the sidewall, which is dressed with fine tilth to promote seed-to-soil contact and fast germination. The Seed Hawk dual-knife opener ensures very high germination rates, enabling low seed rates.

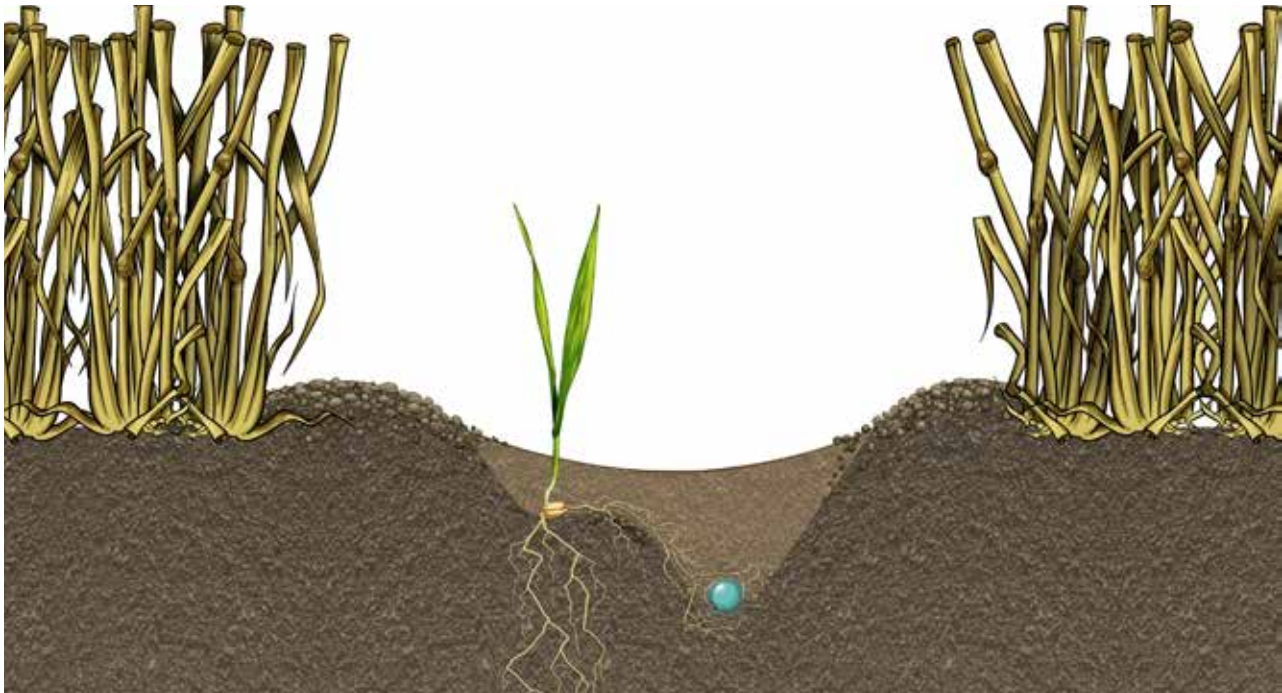
## Reconsolidates with precision

The Seed Hawk press wheel puts more pressure on the fertilizer row to seal in moisture and aid dissolving. By providing a slight side pressure over the seed, the press wheel prevents crusting. The result is a perfect contact between seed and soil.



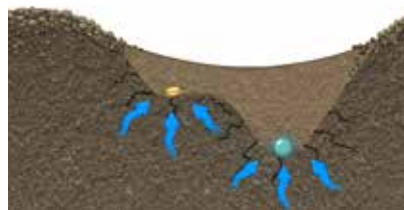
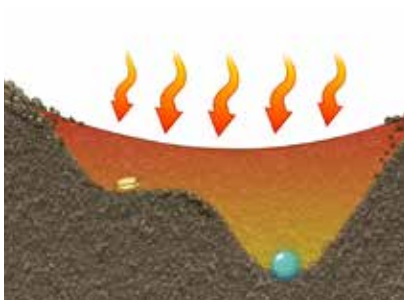
# Superior conditions for growth

Germination is the most critical stage of the growth process. It is crucial for the plant to be able to access nutrients quickly and safely in order to get the jump out of the ground it requires.



## Root development

The seed is placed on firm, moist soil so the radicle has immediate and continued access to moisture. The fine tilth beside the seed allows other roots to develop and rapidly branch out towards the fertilizer band. This aids quick emergence and vigorous growth of the developing plant.



## Quick warm-up

To trigger the seed growth, the right temperature must be reached in the seed furrow. The furrow created by the opener acts in the same way as strip tillage, where the strip warms up faster than the surrounding soil. This speeds up the germination process. Higher temperatures also increase the fertilizer uptake as well as the speed of mineralization, further boosting plant growth. The stubble prevents the wind from cooling the surface.

## Promotes growth

The flat faced design of the knives creates fine tilth, securing seed-to-soil contact. Additionally, the knives create an open sidewall and furrow bottom free of compaction or smearing which promote air and moisture exchange as well as root development. Both the fertilizer and the seed are placed on uncultivated soil, providing great access to capillary water. This secures a fast swelling of the seed.

## Moisture retention

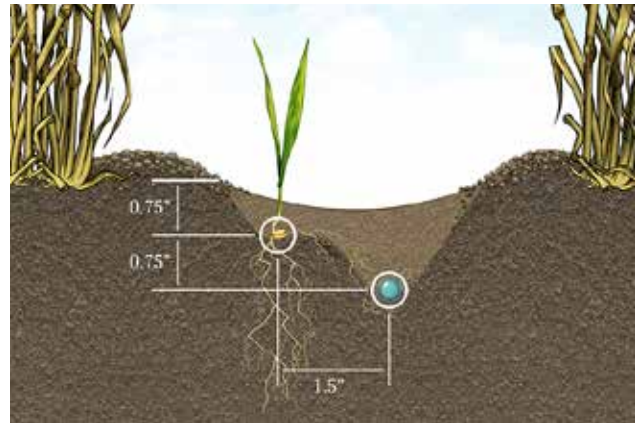
Moisture is the key for a safe germination. The Seed Hawk micro strip tillage concept benefits from both surface moisture as well as ground moisture being transported to the furrow. The fine tilth in the furrow minimizes evaporation and the immediate consolidation preserves the moisture for the seed.

# Knife options

## Single Side Band Knife

The Single Side Band Knife is the leader in precision seed and fertilizer placement. It cuts shallow, separate trenches for seed and fertilizer, placing seed on undisturbed soil and fertilizer in the best position for

superior uptake, while also protecting seedlings. The result is quicker germination and more even emergence, in all soil conditions.

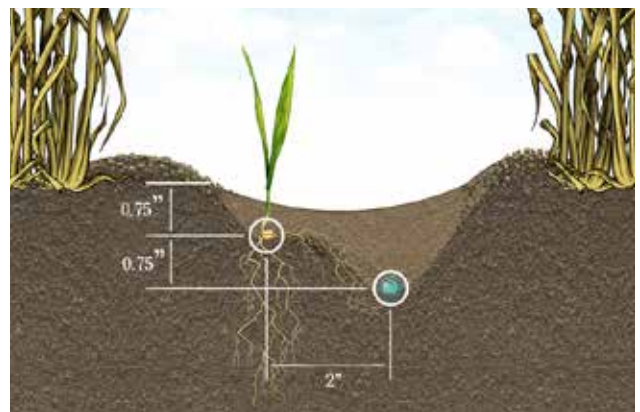


*Seed Hawk's Single Side Band Knife overcomes the limitations of all-in-one side band openers.*

## Inline Side Band Knife

The Inline Side Band Knife achieves side band placement with an inline knife design. The seed knife cuts a separate shallow trench where an angled seed tube is used to place the seed 2 inches away from and 0.75 inches above the fertilizer. The inline design allows for better soil flow and

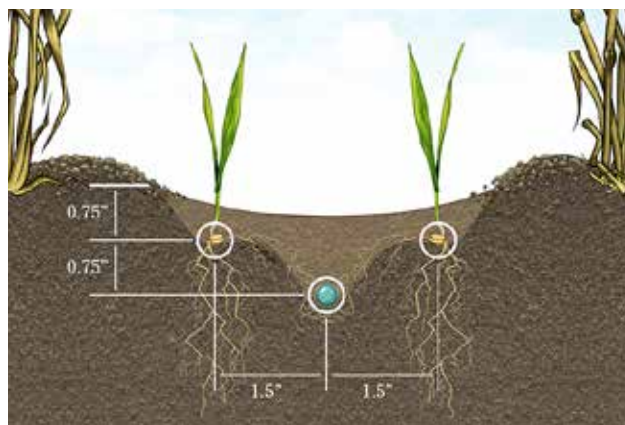
performance in residues resulting in a smoother field finish. The inline system also allows the grower to easily switch from Inline Side Band to Twin Row placement if desired.



## Twin Wing Knife

If narrower spacing is desired, growers have the option to equip their 12 inch toolbars with twin wing openers to create 9 inch spacing between seeded rows. The design ensures that two distinct rows emerge, while providing proper separation of seed and fertilizer. The wider

shank distribution improves residue clearance, and tighter row spacing increases seed bed use, making the emerging crop a better competitor for weeds.



*Independent research\* shows the Twin Wing precisely places seed and fertilizer separately to ensure fast, uniform germination. \*WADO Research*

			Performance Overview							
	Available on	Power Requirements	Soil Disturbance	Trash Flow	Propensity for Plugging	Moist Conditions	Dry Conditions	Heavy Soils	Medium Soils	Light Soils
Single Side Band	10" or 12" Row Spacing	5 hp per opener	Average	Average	Minimal	Excellent	Excellent	Excellent	Excellent	Excellent
Inline Side Band	10" or 12" Row Spacing	5 hp per opener	Minimal	Improved	Average*	Marginal	Excellent	Average	Excellent	Excellent
Twin Wing	12" Row Spacing, creating 9" rows	6 hp per opener	Increased	Improved	Average**	Marginal	Excellent	Marginal	Excellent	Excellent

\*Propensity for plugging largely depends on soil types and moisture. With heavier soils and high moisture, the propensity factor will be increased.

\*\* Propensity for plugging largely depends on soil types and moisture. With heavier soils and high moisture, the propensity factor will be increased. Additionally, pulses and other large seeds may see difficulty at the flat plate of the knife during high application rates.

# Quality metering, quality performance

With planting season often being a time-critical operation, Väderstad customers depend on the line of Precision Delivery air carts featuring the patented Fenix III metering system for unmatched product delivery. Its precise, reliable and simple operation allows for a wide range of flexibility to suit all types of seeding applications.



VÄDERSTAD

Fenix III

# Fenix III



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## Precision and performance

Farming's most advanced seed metering technology is engineered for exceptionally precise seeding, reliable performance and easy maintenance, year after year.

## Constant precision

Fenix III guarantees a consistent flow of all products. Its design ensures the meter can handle difficult products such as inoculants, micronutrients, high fertilizer rates and large seed sizes.

A high torque motor makes it possible to meter a wide range of seed and products at a variety of rates.

## Even product flow

The Fenix III offset rollers do not fill and empty across the entire width at the same time. Instead, they alternate feeding from one side of the roller to the other. Together with an angled design of the meter outlet, this ensures a smooth, constant product flow with minimized pulsing.



## Reliable metering

Fenix III has heavy-duty components to ensure a robust, durable meter able to withstand a wide variety of abrasive products.

Having soft roller flutes prevents jamming and motor failure, thereby ensuring a reliable rate of delivery.

## Simple operation

The design of the Fenix III meter, where the roller is placed directly on the electric motor axle, makes it an easy-to-use system. With only a few moving parts and no grease zerks, maintenance is simple.

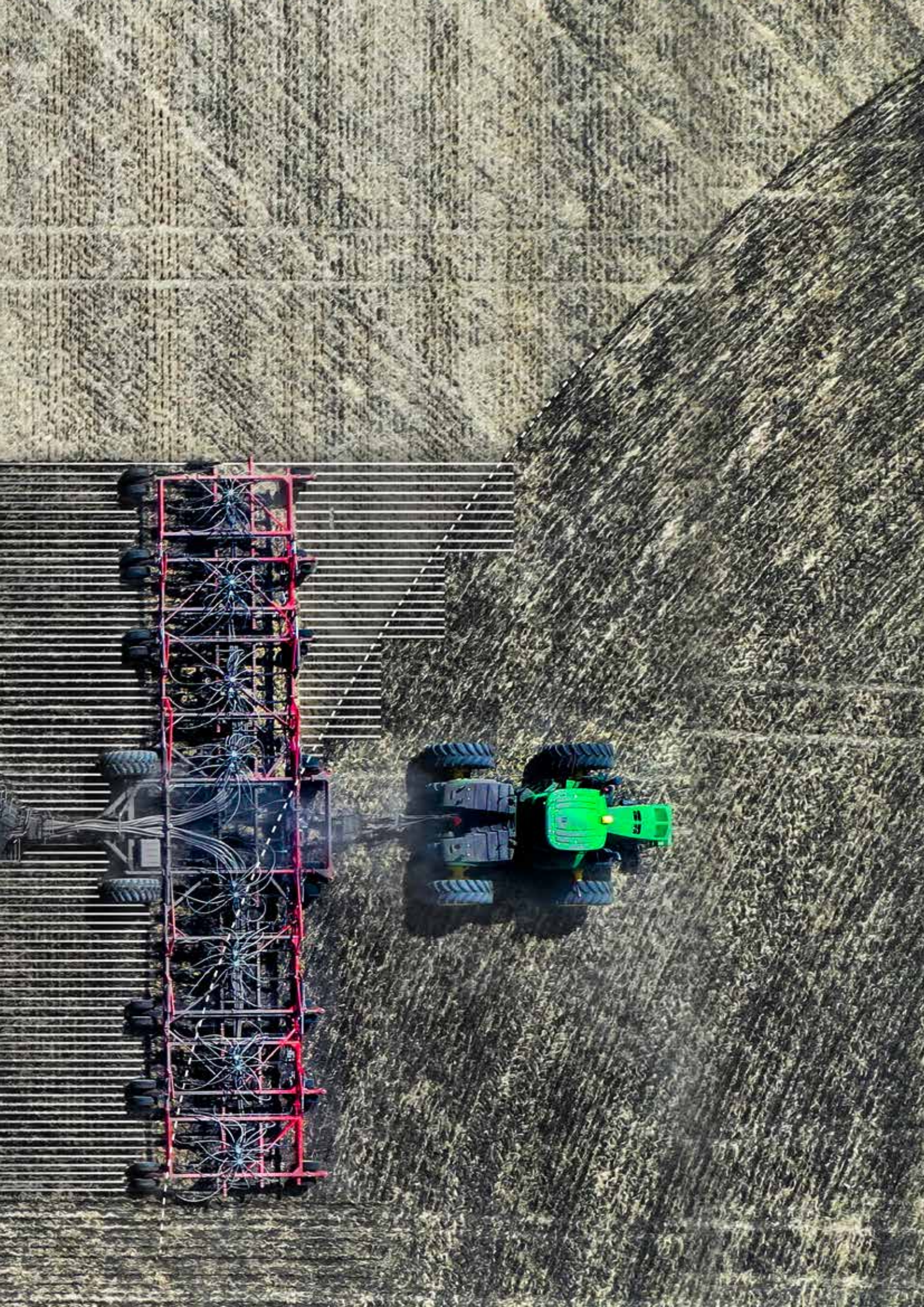
Changing rollers between crops is performed in a matter of seconds.

# Full control by 10 foot sections

Crop inputs are a substantial investment on every farm. Maximize the return on your investment by using Väderstad's precision farming technology to focus the product on where it needs to go. In the field, the Fenix III meters on the Air Cart seamlessly works together with the Toolbar to allow full control of the output on each 10 foot section of the machine.









# Variable rate

The amount of fertilizer and seed required to achieve desired yield will vary across the field and, most times, over the width of the toolbar. Vaderstad's iCon system is compatible with industry leading prescription mapping to dial in the exact amount of product desired, reducing the amount of inputs used. Each 10 foot section of toolbar has its own seed and fertilizer meter to ensure greater accuracy in variable terrain.



## Blockage Monitoring

In order to achieve a uniform plant stand across the field, fertilizer and seed runs must be free of blockage at all times. Vaderstad's blockage system constantly monitors the flow of each run right on the iPad.

## Product flexibility

With four tanks on the air carts plus the option to add liquid or NH<sub>3</sub> fertilizer, Vaderstad air seeders are able to adapt to any preference regarding the use of different products in a seeding application. All products are controlled through the iPad-based iCon control system.



# Seed Hawk 40-84

The Seed Hawk air drill comes in 2 different main frame configurations, depending on machine width. The Seed Hawk 40-60 boasts a narrow transport width of under 16', while the transport height is under 17'. The Seed Hawk 70-84 have slightly larger transport parameters, coming in at 29'-29'6" in width and 17'11" in height. Both frame styles can be configured for 10" or 12" row spacing.



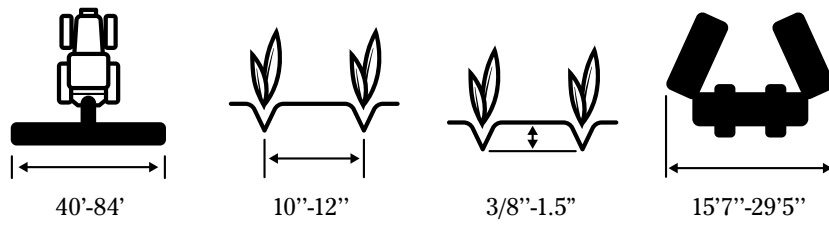
## **Big machines that follow the contour**

The Toolbars come in 5- or 7-plex frame sections, allowing them to follow the contours of the land. With a contour following range of 18", the independent opener assemblies deliver consistent seed depth, regardless of the terrain. Each opener assembly follows the ground independently by pivoting at the frame, controlled by its own adjustable hydraulic cylinder. A range of seed and fertilizer knives are available to suit every seeding style.

## **Section Control Technology**

The SCT system is a combination of components on both the Seed Hawk air drill and Precision Delivery air cart. While controlling product flow to the air drill is very important, the Seed Hawk is able to add market leading features to ensure a agronomically sound system is

maintained. When engaged, the sectional control system will automatically lift and lower the openers on the air drill when commanded to do so based off the coverage map. This ensures that there is minimal disturbance to previously seeded areas, continuing to ensure the seed in kept exactly where it should be. See pages 24-27 for further information on overall SCT technology.



# Unparalleled accuracy



*Seed Hawk's industry-leading opener assemblies operate independently for superior shallow seeding, depth accuracy, and optimal fertilizer placement.*



*The toolbars are available in 5- or 7-section frames, enabling them to adapt to the contours of the land.*

# Air Cart PD 400 - 1350

Combining capacity, flexibility and accuracy, Precision Delivery Air Carts will improve productivity on the farm. High capacity fans, large bins and high flotation tires allow you to apply the products you require, even in the toughest conditions.



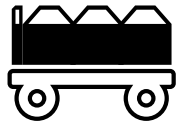
Innovative technology throughout the Fenix III metering, iCon wireless control system, load cells and intuitive iPad monitor, give the operator real-time data that can be used in the field and recorded for future reference.

## **When size matters**

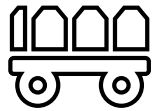
With their extreme capacity, Precision Delivery air carts are designed to give you more time seeding and less time filling. Offered in 5 sizes (400, 680, 820, 1,000 and 1350), these carts have a total capacity between 360 and 1350-bushels. The PD carts offer larger tire sizes for better traction and decreased compaction in wet conditions.

## **Individual bin load cells**

Stopping to guess how much product you have left in the tank is a thing of the past. The modular tank design of Precision Delivery Air Carts features individual compartment load cells. The load cells weigh each bin separately and provide real-time verification of remaining product. The iCon Wireless Control software uses the innovative Acres to Empty feature to calculate how many acres it will cover. This ensures more efficient filling times and allows you to pinpoint your required fill volume.



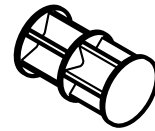
400-1350 bu



3-4



Individual Scales



18-500 cc

## Smart, flexible, efficient



*The modular tank design of Precision Delivery Air Carts feature individual compartment load cells.*



*Fill System remote for PD 680-1350 Air Carts allows for wide functionality including belt speed controls while displaying real-time load cell values for each bin.*

# Product range



## PD 400

The PD 400 comes factory standard as a three-bin, 360-bushel air cart. To increase capacity, customers can order the PD 400 with an optional 40-bu front bin to increase the capacity to 400 bu.

- 40+120+150+90 bu capacities
- Available in tow-behind (TBH) or tow-between (TBT)
- Rear Axle LSW850/55R30 Tires

## PD 680

The PD 680 offers the size and flexibility to keep your operation moving with the same technology found on larger Seed Hawk Air Carts.

- 60+160+160+300 bu. capacity
- Available in tow-behind (TBH) or tow-between (TBT)
- Rear Axle - Dual 30.5L32 Tires
- Optional Single 1250/50R32 Tires





### PD 1350

The PD 1350 Is an industry leading combination of capacity, flexibility and accuracy.

- 93+652+392+213 bu. capacity
- Available in tow-behind (TBH) configuration
- Front Axle Dual 710/70R42 Tires
- Rear Axle Dual 900/60R42 Tires



### PD 820

The PD 820 allows you to get through the day with fewer fills so you can seed more acres with precision.

- 60+300+300+160 bu. capacity
- Available in tow-behind (TBH) configuration
- Front Axle Single 800/70R38 Tires
- Rear Axle - Single 1250/50R32 Tires
- Optional Rear Axle 800/70R38 Dual Tires



### PD 1000

The PD 1000 combines capacity, flexibility and accuracy

- 60+480+300+160 bu. capacity
- Available in tow-behind (TBH) configuration
- Front Axle Single 800/70R38 Tires
- Rear Axle - Single 1250/50R32 Tires
- Optional Rear Axle 800/70R38 Dual Tires

# Väderstad iCon – New generation control system

The iCon Wireless Control System is a tablet-based control system for simple, complete control of your Väderstad Air Cart and Toolbar. You will benefit from user-friendly remote setup and calibration, as well as real-time monitoring and control.



## Highly productive meets highly intuitive

The iCon Wireless Control System lives on an iPad, making it intuitive and easy to use – just like the machine it controls. It features a simple interface, home screen automation and perating enhancements like the Acres to Empty and in-field calibration features. Acres to Empty tells you instantly how many acres remain until your next product fill. The in-field calibration function confirms static calibration values while seeding, using load cell data. This information is transmitted wirelessly to the iCon Control System to ensure you are applying products at the correct rates throughout the field.

## Freedom to move

Wireless control provides big benefits for seed drill systems. Carry your iCon controlled tablet with you to gain full seeder control and eliminate the need to go back and forth between the tractor cab and machine. The portability simplifies calibration and helps to troubleshoot for blockages, fill the tanks to the appropriate level, or even use the meters to empty the air cart. Plus, you get less in-cab wiring and fewer connection points.



## Always up to date

At Väderstad, we find it very important to support and service all our customers to the fullest. Therefore, all iCon software updates are easy to download free of charge. With iCon, you are always sure to benefit from the latest technology and the newest innovative solutions from Väderstad.

## Fit-to-Field rate adjustment

The Fit-to-Field function makes product changes much easier. This iCon feature automatically adjusts seed and fertilizer rates to empty\* the Seed Hawk air cart over the remaining acres in your field. It's easy and efficient, eliminating the guess work when emptying the cart.

\* Customers set a target weight for remaining product.

## Your Data. Your Way

iCon utilizes a cloud based system to download prescription maps and upload completed job reports so you can access them from anywhere. Expanded capability of the cloud now offers it as the place to retrieve any feature unlocks and subscriptions purchased for your machine.



# Accessories



## Fill system

Growers have the choice between either a 10" fill auger or a conveyor with a 15" belt.



## Airguard™ - Blockage Prevention

helps prevent blockage of product due to moisture in the air lines and helps keep oil temperatures lower. \*\*See your dealer for more information.\*\*



## Cart tires options

On the 680 cart, upgrade to single IF800 tire or single 1250 from standard 30.5L32. For the 820/1000 carts upgrade to dual IF800 tire from standard single 1250.



## Bag lift

Allows up to 10 bags of canola to be lifted from the ground to the front tank, avoiding unnecessary strain of carrying individual bags.



## Acoustic blockage monitoring

Blockage monitors on each seed tube registers the product passing through. If a blockage would occur you are immediately notified on its location via the iCon control system.



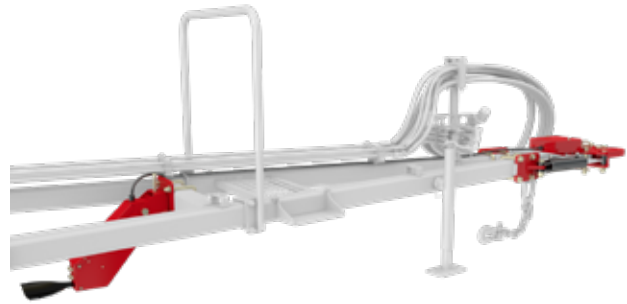
## Toolbar tires options

Upgrade to 30.5L32 tires on the rear centre frame for improved floatation in the field and weight carrying during transport.



### **iCon Bluetooth Switchbox**

Traverse in-field obstacles with ease using the manual switches.



### **SBR Hitch**

Curved paddle sensor detects stubble rows to seed in between. Provides shelter for young seedlings and improves trash flow.



### **Devloo mud scrapers**

Scrapers are mounted above each packing wheel to continuously clean the packer wheel while opener assembly is engaged in the ground.

	<b>PD 400</b>	<b>PD 680</b>	<b>PD 820</b>	<b>PD 1000</b>
Metering	Electric	Electric	Electric	Electric
Total volume (bu)	360-400 bu (14,095 l)	680 bu (23,200 l)	820 bu (28,900 l)	1000 bu (35,200 l)
Volume Bin 1 (bu)	40 (1,410 l)	60 bu (2,100 l)	60 bu (2,100 l)	60 bu (2,100 l)
Volume Bin 2 (bu)	120 (4,230 l)	160 bu (5,600 l)	300 bu (10,600 l)	480 bu (16,900 l)
Volume Bin 3 (bu)	150 (5,285 l)	160 bu (5,600 l)	300 bu (10,600 l)	300 bu (10,600 l)
Volume Bin 4 (bu)	90 (3,170 l)	300 bu (10,600 l)	160 bu (5,600 l)	160 bu (5,600 l)
Transport width with standard tires (feet)	11'5" (3.49 m)	20' (6.1 m)	17'4" (5.3 m)	17'4" (5.3 m)
Transport width with optional tires (feet)	11'10" (3.61 m)	18'5" (5.61 m)	20'5" (6.2 m)	20'5" (6.2 m)
Transport length (feet)	29' (8.84 m)	37' (11.28 m)	44' (13.41 m)	50'5" (15.38 m)
Transport length with auger (feet)	30'4" (9.25 m)	37'4" (11.38 m)	N/A	N/A
Transport length with conveyor (feet)	N/A	40'9" (12.42 m)	47'4" (14.43 m)	53'10" (16.41 m)
Transport height (feet)	13'1" (4.0 m)	16'2" (4.93 m)	15'10" (4.8 m)	15'10" (4.8 m)
Ground clearance (inches)	18" (457 mm)	18" (457 mm)	17.25" (438 mm)	17.25" (438 mm)
Configuration	TBH or TBT	TBH or TBT	TBH	TBH
Recommended working speed (mph)	4.5-5 (7-8 km/h)	4.5-5 (7-8 km/h)	4.5-5 (7-8 km/h)	4.5-5 (7-8 km/h)

#### **PD 1350**

Metering	Electric
Total volume (bu)	1350 bu (47,572 l)
Volume Bin 1 (bu)	93 bu (3,277 l)
Volume Bin 2 (bu)	652 bu (22,975 l)
Volume Bin 3 (bu)	393 bu (13,849 l)
Volume Bin 4 (bu)	213 bu (7,505 l)
Transport width with standard tires (feet)	21'10" (6.65 m)
Transport width with optional tires (feet)	N/A
Transport length (feet)	50'6" (15.4 m)
Transport length with auger (feet)	N/A
Transport length with conveyor (feet)	53'11" (16.43 m)
Transport height (feet)	16'6" (5.03 m)
Ground clearance (inches)	17.25" (438 mm)
Configuration	TBH
Recommended working speed (mph)	4.5-5 (7-8 km/h)

<b>Air drill size/width</b>	<b>40', 12.2 m</b>	<b>50', 15.2 m</b>	<b>60', 18.3 m</b>
Row spacing (inches)	10/12 (250/300 mm)	10/12 (250/300 mm)	10/12 (250/300 mm)
Number of rows at 254mm (10") spacing	48	60	72
Number of rows at 305mm (12") spacing	40	50	60
Weight (lbs)****	24,895 (11,290 kg)	29,965 (13,590 kg)	32,745 (14,850 kg)
Transport width (feet)	15'7" (4.75 m)	15'5" (4.7 m)	15'5" (4.7 m)
Transport length (feet)*****	35'2" (10.7 m)	35'2" (10.7 m)	35'2" (10.7 m)
Transport height (feet)	16'1" (4.9 m)	16'9" (5.1 m)	16'9" (5.1 m)
Ground clearance (inch)	12" (300 mm)	12" (300 mm)	12" (300 mm)
Frame sections	5-plex	5-plex	5-plex
Recommended working speed (mph)	4.5-5 (7 - 8 km/h)	4.5-5 (7 - 8 km/h)	4.5-5 (7 - 8 km/h)
Hydraulic circuits required	2	2	2

<b>Air drill size/width</b>	<b>70' (21.3 m)</b>	<b>80' (24.4 m)</b>	<b>84' (25.6 m)</b>
Row spacing (mm)	10/12 (250/300 mm)	10/12 (250/300 mm)	12 (300 mm)
Number of rows at 254mm (10") spacing	84	96	N/A
Number of rows at 305mm (12") spacing	70	80	84
Weight (lbs)****	43,365 (19,670 kg)	46,005 (20,865 kg)	47,205 (21,410 kg)
Transport width (feet)	29' (8.84 m)	29' (8.84 m)	29'5" (8.96 m)
Transport length (feet)*****	36'11" (11.25 m)	36'11" (11.25 m)	36'11" (11.25 m)
Transport height (feet)	17'11" (5.5 m)	17'11" (5.5 m)	17'11" (5.5 m)
Ground clearance (inches)	12 (300 mm)	12 (300 mm)	12 (300 mm)
Frame sections	7-plex	7-plex	7-plex
Recommended working speed (km/h)	4.5-5 (7 - 8 km/h)	4.5-5 (7 - 8 km/h)	4.5-5 (7 - 8 km/h)
Hydraulic circuits required	2	2	2

\*Assumes dual 30.5L32 tires on Air Cart 660 and dual IF800 tires  
\*\*Assumes all bins are full of 60lb/bu material (wheat & blended fertilizer)  
\*\*\*Depends on tractor configuration  
\*\*\*\*Assumes 12" spacing, front hitch with SBR, single 30.5 rear axle and clevis rear hitch  
\*\*\*\*\*Assumes clevis style hitch. If equipped with SBR hitch, add 34 cm (13.5")

## Fill System Specifications

	<b>PD 400</b>	<b>680 Auger</b>	<b>680 Conveyor</b>	<b>820/1000 Auger</b>	<b>820/1000/1350 Conveyor</b>
Make	Meridian	Brandt	Batco	Westfield	Batco
Diameter in inches (mm)	8" (203 mm)	10" (254 mm)	10" (254 mm)	10" (254 mm)	10" (254 mm)
Overall length in feet (m)	25'2" (7.4 m)	33'5" (10.2 m)	32' (9.75 m)	38'11" (11.8 m)	40'5" (12.3 m)
Overall width in feet (m)	3'2" (1 m)	3' (1 m)	3'3" (1 m)	3'1" (0.9 m)	3'3" (1 m)
Rated Flow Rate (bu/min)*	****	60	69	57	82
Incline in degrees	42	29	29	25	26

# Reliable and durable farm machinery



*Entire machine comes  
with 12 month or 25,000  
acres warranty from  
Warranty Start Date.\**



*Frame structure comes  
with 36 month or 25,000  
acres warranty from  
Warranty Start Date.\**

*\* Warranty valid period is whichever limit occurs first.*

