

FAST

# FASTAG SOLUTIONS LIQUID FERTILIZER APPLICATORS PLACE YOUR NITROGEN IN THE GROUND

**FAST**DESIGNED BY FARMERS | FOR FARMERS



**BY FARMERS | FOR FARMERS** 

Founded in 1990 by Verlyn Fast, a farmer seeking to increase the productivity of his own operations, Fast's mission is to provide quality products at competitive prices, backed by dependable service. Today, Fast represents farmers & engineers coming together to produce high quality sprayer & liquid fertilizer equipment that is both practical & productive. Our welders, fabricators, assemblers, & painters are skilled craftsmen who take pride in their work.

We realize how important it is for today's farmers to continue to become more efficient & profitable, so our equipment is designed & built to make your job quick, accurate, & safe. Your investment in Fast equipment will pay dividends for years to come.

Our goal at Fast is to make you a life-long customer, one piece of equipment at a time.

### **FAMILY OWNED** & OPERATED

In 2020, the Fast family, including Verlyn Fast & his son Cody Fast, invested back into Fast Ag Solutions, along with an investment team that has a significant background in agriculture. The Fast family also farms corn & soybeans in southwest Minnesota, which provides an opportunity to run Fast equipment on their own farm to test new concepts/technology & fine-tune the design. One hundred percent of the manufacturing is performed in Windom, MN, with the original manufacturing facility in Mt. Lake, MN serving as a Parts Retail & Service location. Fast also operates a Parts Retail & Service location in Gilman, IL to better serve our customers in the eastern corn belt.

# QUALITY DESIGN

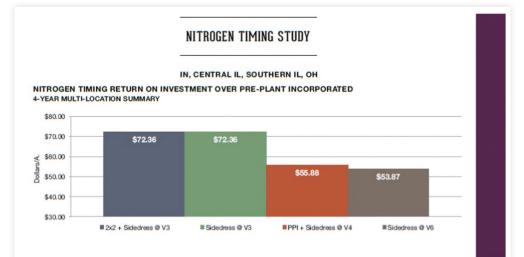
Over the years Fast has continued to invest in equipment to increase the automation & consistency of our manufacturing process to provide high quality machinery for farmers. Our manufacturing facility currently utilizes flat laser tables, a tube laser, multiple press brakes, & an automated powder coat paint system.

### **INDEPENDENT NITROGEN TIMING SUMMARY** 100% PREPLANT NITROGEN VS. V3-V6 SIDEDRESS

#### Four Locations, Four Years: Average Additional Income of \$63.62/acre for V3-V6 Side-Dress

The following study was conducted by Beck's Hybrids as part of their *Beck's 2015 Practical Farm Research Book*, with a stated mission to "provide you with the best farmer-focused research & advisors to add profitability to the farm".

The results below show a combination of 2015 results from their research plots, as well as historical data, since we all know that one year of data does not always repeat itself, but over three to four years the best methods tend to prove themselves out. As you can see below, they have proven a significant advantage to side-dress with coulter injection from V3-V6 time period. Consistently, we can see that this application method & timing, either through split application or 100% early season side-dress (V3-V6), beats out 100% pre-plant nitrogen applications & also significantly out-preforms late season side-dress application with high clearance equipment.



#### 2015 DETAILED PLOT DATA

| UAN TREATMENTS  | BU./A.* | BU./A.<br>DIFFERENCE | NET"<br>RETURN | RETURN ON |
|---|---------|----------------------|----------------|-----------|
| Control: 180 lb. Pre-plant Incorporated               | 148.8   |                      | \$493.78       |           |
| 180 lb. Sidedress @ V6                                | 194.0   | +45.2                | \$675.48       | +\$181.70 |
| 180 lb. Sidedress @ V3                                | 190.2   | +41.4                | \$660.20       | +\$166.43 |
| 30 lb. 2x2 + 150 lb. Sidedress @ V3                   | 187.3   | +38.5                | \$648.55       | +\$154.77 |
| 90 lb. Pre-plant Incorporated + 90 lb. Sidedress @ V4 | 172.6   | +23.8                | \$589.45       | +\$95.68  |
| AVG.  | 178.6   | +37.2                | \$613.49       | +\$149.65 |

†Bu/A. corrected to 15% moisture. "Net return is gross income (Bu/A x \$4.02/Bu) minus treatment cost. VPeturn on investment is Bu/A. difference x \$4. UAN \$0.58/tb. Individual results may vary.

Research courtesy of Beck's Hybrids 2015 Practical Farm Research Book

MULTI-LOCATION

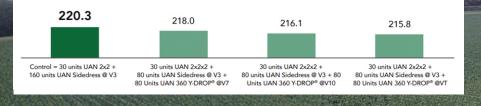
# BECK'S INDEPENDENT RESEARCH & STUDIES ON SIDE-DRESS APPLICATIONS

At Fast, we prefer to rely on independent studies & research to support the benefits of early season side-dress & applying nitrogen in the ground vs. dribbling on top or waiting for a late season side-dress application. The information & research below is courtesy of *Beck's Hybrids Nitrogen Resource Guide*.

#### NITROGEN TIMING STUDY

This study evaluated various nitrogen (N) application timings and their effects on N uptake and yield. Each treatment in this study received a total of 190 units of N as UAN. Nitrogen (N) applications when corn N requirements are the highest (V6 to VT) consistently improves fertilizer nitrogen recovery efficiency (FNRE). Treatments where N is applied at later corn growth stages (up to tassel) almost always result in greater FNRE. However, these treatments do not consistently result in higher yields and/or return on investment over pre-plant and early sidedress application timings. This is because the landscape and soil variability in soil N mineralization and loss over the season result in variable N availability and corn N uptake.

#### 3-YEAR MULTI-LOCATION NITROGEN TIMING YIELD AVERAGE



#### NITROGEN SYSTEMS STUDY

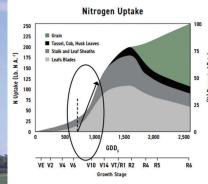
There are many different methods to apply nitrogen, and weather can certainly impact which system performs best in any given year. However, for multiple years, we have continued to see the best profitability by moving more nitrogen up front in a 2x2x2 system and applying the remaining portion at the V3 growth stage via a UAN application.

#### 3-YEAR MULTI-LOCATION NITROGEN SYSTEMS YIELD AVERAGE & RETURN ON INVESTMENT



#### NITROGEN MANAGEMENT

First, understand corn nitrogen needs over time and growth. The figure at left is a depiction of when corn uses N. The key takeaway is that corn from V8 to VT needs 7-10 lb. N/day. In order to ensure N is available, apply prior to the rapid uptake stage.



WHEN IS N USED? A corn plant uses a great deal of its N later in the growing season. In fact, over 75% of N uptake occurs after the V10 growth stage. The most rapid uptake usually occurs between V8 and VT when the corn plant takes up between 7 to 9 lb. of N each day. Ensuring that ample N is available in the correct form during the corn plant's growth is key to maintaining the potential in every field. Chart adated from Bender, et al., 2015

#### Split/Sidedress Nitrogen Applications

The advent of readily available sources of both granular and liquid sources of N and more flexible equipment to apply means it is no longer necessary nor agronomically recommended to have all N available at planting. However, applying the majority of recommended N as a late POST application is not recommended, either. In both cases, the risk is too great – the former, risk due to loss or positional unavailability; and in the latter, risk of crop needs and unavailability due to movement.

A split or sidedress N application can be planned, or added in response to weather-related losses early in the season. Applications made after the plants have emerged allow you to maintain more available N during key growth stages like ear development (V4 to V8), and the late vegetative and early reproductive stages from V12 to R1. By minimizing losses, you can see yield increases and minimize the negative environmental impact of N applications which.

Sidedressing is a PFR Proven<sup>™</sup> practice that has become the standard in our N programs across our PFR locations. Our standard N program is 2x2x2 up front followed by a sidedress application at the V3 growth stage. The split-application N program has proven to be the most efficient and most cost-effective way to fuel our corn for years at multiple locations.



## FAST ACCURATE PLACEMENT "AP" COULTER & FAST SEALER OPTION



Fast's patented AP coulter is standard on all applicators & designed to ensure that nitrogen is placed IN THE GROUND at a consistent depth & also provides industry leading flexibility in how the coulter mounts to the toolbar.

The AP coulter is made of three upper castings designed for long term durability, a "hex" shank design which allows the coulter to be offset in eight different positions (up to 5.5" each direction), & a cast design which provides increased stability to ensure a consistent coulter ride throughout varying soil conditions.

#### Fast AP Torsion Coulter Option

Fast's latest example of innovation is our AP Torsion coulter which is available as an option on all applicators. The AP Torsion design utilizes torsion rubber elements to significantly cushion the horizontal swivel of the coulter & provide increased stability in soil conditions that are difficult to penetrate. The coulter provides 30 degrees of horizontal rotation in each direction & the offset torsion rubber holds the coulter more stable when field conditions are tough. The AP Torsion coulter also provides 3" of additional crop clearance in field position.

#### Fast Sealers Option – Double Disc Closing System

Another great option for all Fast applicators is our Fast Sealers. The Fast Sealers utilize two 14" notched blades angled towards the center of the row to create a small berm & cover up the nitrogen placed in the ground. This helps ensure that your nitrogen investment is secure & also helps gather soil that is displaced from the primary coulter blade to move it back towards the center of the row & help protect the crop during early side-dress applications.

Beck's PFR Proven<sup>™</sup> – Independent yield studies from Beck's Hybrids showed an average yield benefit of 4.7 bu/acre for utilizing sealers. *Courtesy of Beck's Hybrids Nitrogen Resource Guide*.

### **FAST**DESIGNED BY FARMERS | FOR FARMERS

All Fast equipment has been field-tested to be durable & is specifically designed to meet the needs of today's farmers. We have focused on providing toolbar flex & ride that is second to none, a short coupled trailer design to limit crop damage, & making the most out of today's technology to be compatible with ISO, prescriptions, & variable rate application. Most importantly, we focus on our quality & durability to ensure we will keep you running out in the field.



#### #1 – Industry Leading Toolbar Flex

Studies show there is an advantage to getting your fertilizer in the ground. Therefore, we have focused on maximizing your toolbar flex to ensure that your fertilizer investment is placed in the ground at a consistent depth through all types of terrain & soil conditions.



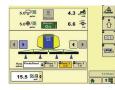
#### #2 – Active Hydraulic Downforce

To further ensure that your coulters stay in the ground at a consistent depth, Fast makes hydraulic downforce standard on all of its toolbars to effectively work through all types of soil conditions.



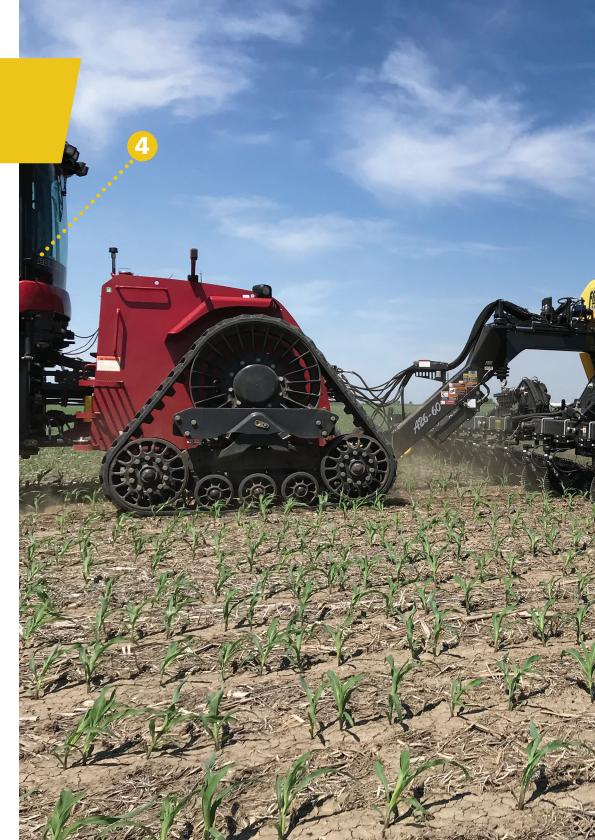
#### #3 – Hydraulic Wing Kick

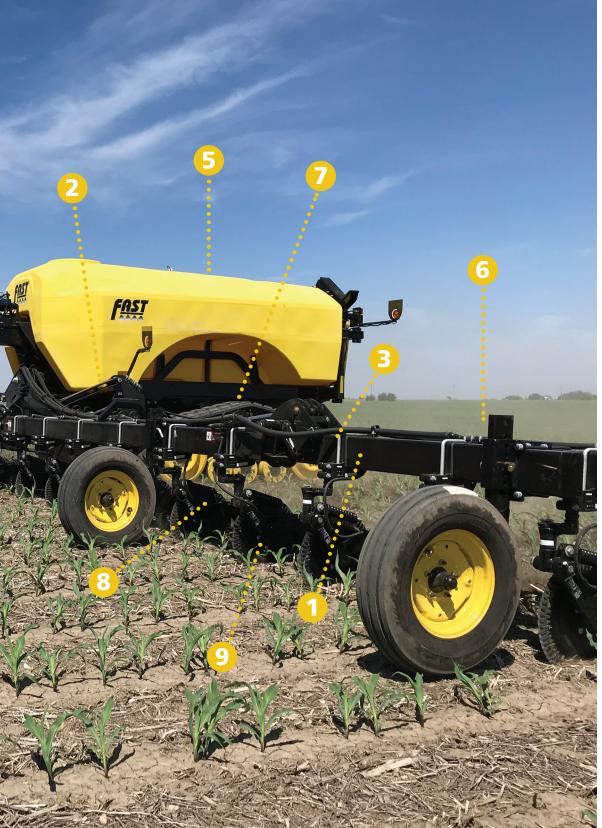
Fast's hydraulic Wing Kick tilts the outer toolbars up when turning on the headlandss to help ensure that the coulters don't dip into & damage your crops. This is a more dependable system than many of Fast's competitors & helps widen your application window.



#### #4 – ISO Compatibility/Variable Rate Technology

Fast offers many different controller options to best fit your operation & provide you with the amount of precision that is desired when applying fertilizer. Tying into your in-cab display allows you to reduce clutter & also gives you the capability, along with variable rate tips, to use fertilizer prescriptions.











US Patent #7,585,000. A lower center of gravity & large trough sloped sump with excellent cleanout keeps the tank primed on long slopes. This tank allows Fast to achieve its short-coupled design along with dual option configurations.

#### #6 – Flexible/Narrow Row Spacing Options

No two farming operations are exactly the same. Fast prides itself on being flexible & offering solutions that will fit your needs all the way down to 10" or 15" on most toolbars. We have designed our equipment for a multitude of different row spacing options to fit with many different types of crops & grower applications.

#### #7 – Dual Wheel/Track Capability

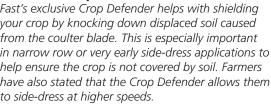
Our Stealth tank design allows us to offer many different tire & axle spacing options. Increase your flotation & decrease your compaction with many different dual options or CAMSO (formerly Camoplast) 15" track system. This also helps increase your application window & fits well with our 2400 gallon tank.

#### #8 – Fast Advanced Placement "AP" Coulter

Standard on all Fast Applicators, our exclusive, patent pending Fast AP Coulter provides superior flexibility & stability in the field. This innovative cast design has allowed Fast to add strength where it is needed to ensure this coulter will stand up to the demands of your operation. Fast's "hex" shank design provides eight different coulter offset positions.

#### #9 – Fast Crop Defender

Fast's exclusive Crop Defender helps with shielding your crop by knocking down displaced soil caused from the coulter blade. This is especially important in narrow row or very early side-dress applications to help ensure the crop is not covered by soil. Farmers have also stated that the Crop Defender allows them to side-dress at higher speeds.





### 60' A-SERIES APPLICATOR

The Fast 60' A-Series Applicator features an innovative toolbar design for a narrow transport width of 11'10". This design increases safety, eases operator stress, & helps decrease operator liability while on the road.

The 60' A-Series Applicator utilizes many previous Fast toolbar design concepts, which have been proven to exceed the demands of your operation, with our Flex-Hinge™ design, Wide-Stance Cast Parallel Links, Hydraulic Wing Kick™ & Active Hydraulic Downforce.

The 60' A-Series model offers both 1,800 & 2,600 gallon tank capacities with a larger sump, enhanced weight distribution & lower profile to significantly increase operator visibility from the cab. This applicator will also accommodate row/coulter spacing from 10-40".

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#### *Hydraulic Folding Gauge Wheel - Optional*

Fast offers an optional folding gauge wheel that ties into the applicator's hydraulic fold circuit. This premium add-on will help reduce liability on the road with its reduced transport width.

#### Transport Width Under 12'

Fast's innovative toolbar & new tank design allows this applicator to fold under 12' wide in transport, which makes it over 3' narrower than any other 60' toolbar design on the market! This significantly lowers liability on the road, eases operator stress, & allows the applicator to be roughly the same width as the tractor on the road.



#### Fast Steerable Hitch (Optional on 60' A-Series)

Fast's Steerable Hitch option is an ISO system that compensates to keep the applicator in the tractor tracks both on hillsides on while turning on headlands to reduce crop damage. The pictures above show how much crop is saved with the steerable hitch enabled vs. disabled.

### **STANDARD** FEATURES

- 1,800 or 2,600 Gallon Tank Design Low center of gravity & large, trough-sloped sump
- Standard Tires
  - 1800 Gallon 380/90R46 Singles
- 2600 Gallon 480/80R50 Singles
- Industry Leading Toolbar Flex Fast's focus is to maximize toolbar flex to allow the coulters to apply nitrogen at a consistent depth throughout the field in varying field conditions
- Multiple Row Spacing Options 10" to 40" coulter spacing is available as options
- Active Hydraulic Downforce Adjustable downforce provides superior ground penetration & consistent application
- Hydraulic Wing Kick<sup>™</sup>– The outer toolbar raises for headland turns to minimize crop damage & maximize yields
- Ace 205-304F Hydraulic Pump & Over-Speed Protection The hydraulic flow limiter provides over-speed protection, adding to pump longevity
- Overall Quality Manufacturing The Fast commitment to quality presents itself in the details of our products. With our castings, DOM's & greaseable pins in higher wear pivot points, & the Magni treatment of every nut, bolt, & hardware piece, we build machines to last
- Centralized Grease Bank on center section, inner wing, & main wing pivot hinges to simplify the greasing process

### **KEY OPTIONAL** FEATURES

- Fast Steerable Hitch Compensates on hillsides & headlands
- Flip Wing Hydraulic Down Pressure/Toolbar Flex Hydraulic down pressure on flip wings provides unmatched upward & downward toolbar flex & ability to follow field contours
- CAMSO Tracks –15" wide, unmatched durability & flexibility
- Capstan Tattler Electronic Flow Monitoring full ISO option integrates ISO rate control & electronic row-by-row flow monitoring into one page on the tractor's ISO display
- Fast Sealers double disc closing system
- Wet Seal Hydraulic Pumps Ace 255-304 or 750 Oasis



### **30'/40' A-SERIES** APPLICATOR

The Fast 30'/40' A-Series Applicator features an innovative toolbar design that achieves narrow transport width while maximizing toolbar flex & performance in the field. This applicator offers 11'10" transport width with hydraulic folding gauge wheels for safer road transport while reducing operator stress & liability.

Narrow transport width does not compromise the in-field toolbar performance that Fast is known for. The 30'/40' A-Series has 15 degrees downflex & 10 degrees up-flex with three even toolbar sections to follow ground contours & provide effectively consistent nitrogen placement. This applicator features Fast's wide-stance parallel linkage & a flex hinge that ensures the toolbar moves straight up & down when following contours – this is unique compared to competitors' toolbars that often flex forward or backward & change the application angle.

This model is offered in 1050, 1350, 1800, & 2400 gallon tank capacities & row spacings from 20"- 40".

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#### *Hydraulic Folding Gauge Wheel – Optional*

Fast offers an optional folding gauge wheel that ties into the applicator's hydraulic fold circuit to reduce transport width to 11'10". This premium option will help reduce liability on the road with its reduced transport width.

### Innovative Toolbar Flex

This toolbar is designed to follow ground contours effectively & ensure nitrogen is getting consistently placed in the soil. It offers three even sections of toolbar flex with 15 degrees downflex & 10 degrees up-flex. The toolbar is also designed to flex straight up & straight down which ensures that nitrogen is placed at a consistent angle in the ground.

### Fold Sequence/Flip Wings

The 30'/40' A-Series utilizes a fold box & hydraulic block to simplify the folding process & reduces the number of total hydraulic outlets required to operate the applicator to three with a 40' toolbar. The operator also no longer needs to manually pin the flip wings in field operation.

### **STANDARD** FEATURES

- 1050, 1350, 1800, or 2400 Gallon Tank Design – Low center of gravity & large, troughsloped sump
- Standard Tires 380/90R46 Singles
- Industry Leading Toolbar Flex Fast's focus is to maximize toolbar flex to allow the coulters to apply nitrogen at a consistent depth throughout the field in varying field conditions
- Multiple Row Spacing Options 20" to 40" coulter spacing is available as options
- Active Hydraulic Downforce Adjustable downforce provides superior ground penetration & consistent application
- Hydraulic Wing Kick<sup>™</sup>– The outer toolbar raises for headlands turns to minimize crop damage & maximize yields
- Ace 205-304F Hydraulic Pump & OverSpeed Protection – The hydraulic flow limiter provides over-speed protection, adding to pump longevity
- Overall Quality Manufacturing The Fast commitment to quality presents itself in the details of our products. With our castings, DOM's & greaseable pins in higher wear pivot points, & the Magni treatment of every nut, bolt & hardware piece, we build machines to last.
- Powder Coat Paint

### **KEY OPTIONAL** FEATURES

- Hydraulic Folding Gauge Wheels Reduces Transport Width from 15'2" to 11'10"
- Capstan Tattler Electronic Flow Monitoring full ISO option, integrates ISO rate control and electronic row-by-row flow monitoring into one page on the tractor's ISO display.
- Vari-Rate Nozzles
- Ace 255-304 Wet Seal Hydraulic Pump



### 8200N SERIES APPLICATOR

The Fast 8200N Series features a robust toolbar design that will perform very similar to Fast's 60' A-Series model but has a wider transport design which allows this model to arrive at an attractive price point.

The 8200N utilizes many previous Fast toolbar design concepts, which have been proven to exceed the demands of your operation, with our Flex-Hinge™ design, Wide-Stance Cast Parallel Links, Hydraulic Wing Kick™ & Active Hydraulic Downforce.

The 8200N model offers both 1,800 & 2,400 gallon tank capacities with Fast's patented Stealth style tank design. This applicator is desirable in areas where narrow transport width isn't as critical but doesn't sacrifice in-field performance!





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#### Optional Folding Gauge Wheels

The hydraulic folding gauge wheel option reduces transport width from 19' to 16'8". All four gauge wheels pivot 90 degrees when folding to transport position to reduce transport width and operator stress during road transport.

#### Fast Sealers

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Available on all Fast Applicators, Fast Sealers utilize two 14" notched blades angled towards the center of the row to create a small berm and cover up the nitrogen placed in the ground. Helps ensure that your nitrogen investment is secure.

#### Capstan Tattler Electronic Flow Monitoring

Available on all Fast Applicators, full ISO option that integrates ISO rate control and electronic row-by-row flow monitoring into one page on the tractor's ISO display. Alarms operator when there is a row blockage/significant flow restriction.

### **STANDARD** FEATURES

- 1,800 or 2,400 Gallon Tank Design Low center of gravity & large, trough-sloped sump
- Standard Tires
  - 1800 Gallon 380/90R46 Singles
  - 2400 Gallon 480/80R50 Singles
- Industry Leading Toolbar Flex Fast's focus is to maximize toolbar flex to allow the coulters to apply nitrogen at a consistent depth throughout the field in varying field conditions
- Multiple Row Spacing Options 20" to 40" coulter spacing is available as options
- Active Hydraulic Downforce Adjustable downforce provides superior ground penetration & consistent application
- Hydraulic Wing Kick<sup>™</sup>– The outer toolbar raises for headland turns to minimize crop damage & maximize yields
- Ace 205-304F Hydraulic Pump & Over-Speed Protection – The hydraulic flow limiter provides over-speed protection, adding to pump longevity
- Wide-stance cast parallel linkage reduces stress on center section, aids in even raising & lowering, & prevents toolbar from "walking" when higher ground speeds are reached

### **KEY OPTIONAL** FEATURES

- Flip Wing Hydraulic Down Pressure/Toolbar Flex

   Hydraulic down pressure on flip wings provides unmatched upward & downward toolbar flex & ability to follow field contours
- CAMSO Tracks 15" wide, unmatched durability & flexibility
- 380/90R46 or 380/90R54 Duals
- Vari-Rate Nozzle Bodies variable rate nozzles, 5-60 gpa at 8 mph – available on all Fast applicators
- Wet Seal Hydraulic Pumps Ace 255-304 or 750 Oasis



8300

Series

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### 8000N & 8300 SERIES APPLICATORS

Fast offers two vertical fold 30'/40' applicator models – the 8000N Series & 8300 Series. Both applicators feature Fast's field-proven design with single tube 7"x7" toolbar & the ability to fold a 40' toolbar to apply at 30' width. Both models feature Fast's patented Stealth style tank design with a low center of gravity & a deep sump.

The 8300 Series features tanks sizes ranging from 1050-2400 gallons while the 8000N model offers 1050 & 1350 gallon tanks. The 8300 model has the ability to be set up with 17 coulters on 30" spacing, comes standard with 380/90R46 single tires, & has shorter parallel linkage vs. the 8000N model. The 8000N model features narrower transport width at 15' wide, smaller standard tires, & arrives at a lower price point than the 8300 model.

Both models feature the same high quality design & dependability that Fast is known for. Both models come standard with active hydraulic downforce on the toolbar to effectively follow ground contours as well as hydraulic

WingKick  $^{\text{TM}}$  to hydraulically tilt up the outer wings when the toolbar is raised.

FAST APPLICATORS | PAGE 14



#### Short Coupled Design

Both models feature a short coupled, high clearance trailer with one of the shortest hitch-pin-to-axle lengths in the industry to provide superior tracking & minimized crop damage.

#### Industry Leading Toolbar Flex

Both models are designed to maximize both upward & downward toolbar flex, 10.5 degrees upward & 6.2 degrees downward. This ensures that the toolbar & coulters will follow contours throughout the field to inject your fertilizer in the ground at a consistent depth. This provides more efficient use of your fertilizer investment.

#### Hydraulic Wing Kick™

Both models are also designed with our hydraulic Wing Kick™ feature, which kicks up the outer toolbar when turning on the headlandss in order to minimize crop damage.

### **STANDARD** FEATURES

- Fast "Stealth" Tank Design low center of gravity & a large trough sloped sump with excellent cleanout
  - 8300 Series Tank Sizes 1050, 1350, 1800, 2400 gallons
- 8000N Series Tank Sizes 1050, 1350 gallons
- Standard Tires & Hub
  - 8300 Series 380/90R46 Singles with 10 bolt hub
  - 8000N Series 1050 Gallon Tank 13.6x38" Singles & 8 bolt hub
    - 1350 Gallon Tank 320/90R46 Singles with 10 bolt hub (optional upgrade to 380/90R46 Tires)
- Row Spacing Options
- 8300 Series Multiple options, including 10" or 15" spacing with the 8318DB double tube toolbar design. 20" & 22" also available along with wider row spacings such as 36" & 38". Can accommodate a wider toolbar for 17 coulters on 30" spacing.
- 8000N Series Only offered with 30" row spacing, max toolbar width is 15 coulters on 30" spacing
- Toolbar Width Versatility Equipped with an external hydraulic fold cylinder so the operator is able to fold the outer wing on a 40' toolbar & have the ability to use the same toolbar at 30' as well, making it easier to get a more consistent application on planter come-togethers
- Hydraulic Down Pressure All Fast applicators are designed to have hydraulic down pressure on the wings which will give the coulters better ground penetration & a much more consistent application depth allowing you to get the most out of your fertilizer investment
- Hydraulic Wing Kick<sup>™</sup> Hydraulic Wing Kick<sup>™</sup> tilts the outer wings when the toolbar is lifted to help ensure that the coulters do not dip into the crops when turning
- Hydraulic Pump Ace 150-206F hydraulic pump

### **KEY OPTIONAL** FEATURES

- Capstan Tattler Electronic Flow/Blockage Monitoring
- Fast Sealers double disc closing system
- Vari-Rate Nozzle Bodies variable rate nozzles, 5-60 gpa at 8 mph
- 8300 High Flotation Options Duals or 15" CAMSO Tracks



### **8400 SERIES** APPLICATORS

Fast's 8400 model is the **most field proven** 80', 88', & 90' applicator on the market. Built to last with standard heavy-duty lift assist wheels, 380/90R46 duals tires or tracks as an appealing option, & a 5"x7" double tube toolbar. The 8400 comes standard with a 2400 gallon "Stealth" style tank.

Maximize your efficiency & cover more acres by matching up with your 80/88/90' planter to put your nitrogen in the ground as quickly as possible.

CAMSO 15" Tracks are also a great fit with this applicator to achieve even greater flotation with large tank capacity.





#### Proven & Productive Design

Fast's 8400 design has been field proven over hundreds of thousands of acres, & its heavyduty design is able to withstand the added stress on an 80' or 90' toolbar to cover more acres than any other machine on the market.

#### Flex-Hinge™ Design

The 8400 has a Flex-Hinge<sup>™</sup> design, giving the operator excellent fertilizer placement. It includes industry-leading five-section flex & a toolbar flex of 15 degrees upward & eight degrees downward. This ensures the fertilizer is consistently placed at optimum depths, even on hilly terrain.

### High Capacity & High Flotation

Fast's 8400 model can cover significant acres between fills with the standard 2400 gallon Fast "Stealth" tank, along with 380/90R46 duals with 20k pound hub & spindle. Add tracks to further increase your flotation.

### **STANDARD** FEATURES

- Fast "Stealth" Tank Design U.S. Patent #7,585,000, 2400 gallon capacity offers a low center of gravity & a large troughed sloped sump with excellent cleanout which will keep the pump primed on long slopes
- Hydraulic Wing Kick<sup>™</sup> These models are designed with Fast's Wing Kick<sup>™</sup> feature, which kicks up the outer toolbar to help reduce crop damage when turning on headlandss
- Hydraulic Down Pressure All Fast applicators are designed with a hydraulic down pressure on the wings, which gives the coulters better ground penetration & consistent application
- Single Reach Tongue The single reach tongue on all Fast applicators is specifically designed to reduce crop damage so the operator is able to have a sharper turning radius & reduced crop damage
- Lift Assist Wheels Two heavy-duty lift assist wheels give added support to the toolbar
- Hydraulic Folding Gage Wheels Both models come standard with hydraulic folding gauge wheels which tie into the hydraulic fold circuit to reduce transport width by 15.1"
- Powder Coat Paint Fast's new automated five-stage wash & powder coat paint line provides a consistent process that gives our steel a durable, attractive finish
- Quality in the Details Fast's commitment to quality shows up in the details. We improve the life of our product by using castings, DOM's & greasable pins in highly corrosive areas, which leads to a longer-lasting, higher-quality product. Fast also uses Magni treatment of nuts, bolts & other hardware in highly corrosive areas which adds up to a longer-lasting higher-quality product
- Ten Gallon Hand Wash Tank

### **KEY OPTIONAL** FEATURES

- ISO Ready Connection
- Pentair Hypro Cleanload Chemical Eductor
- 15" CAMSO (Camoplast) Tracks



### 813P & 833P SERIES APPLICATOR & TRACK TANKS

Maximize the use of the 813P/833P in your operation by utilizing Fast tractor mounted tanks.

Fast Track Tanks are compatible with John Deere 8RT, Fendt Vario 900, Challenger MT700, & Case IH Steiger RowTrac (all 1000 gallon capacity) track tractors & give you maximum flexibility to utilize in multiple applications, such as starter fertilizer, side-dressing, & spraying. These tanks are made out of stainless steel for increased life with high durability & excellent cleanout. Operators praise the smooth ride & flexibility obtained from these tractor mounted tanks.

The 813P & 833P vertical fold is a three-point mounted fertilizer bar offered in 30', 40' (833P), & 60' (813P) toolbars, & is an excellent way to minimize crop damage in the field.



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#### **Toolbar Flex**

The 813P/833P is designed to have wing flex throughout the entire toolbar. This flex will allow for much better ground penetration & even depth control & fertilizer placement in uneven terrain.

#### Reduced Footprint

Minimize crop damage & increase your versatility with 3-point mounted toolbars. Exceptional in tighter fields & hilly conditions.

### 813P & 833P STANDARD FEATURES

- Hydraulic Fold Toolbars— 7x7 single tube toolbar available in 30' & 40', 4x6 double tube toolbar for 60' units, external hydraulic fold cylinders, 40' bar can be folded & used at 30'
- Hydraulic Wing Kick<sup>™</sup> to reduce crop damage
- TeeJet Ball Valves Two sections for 30' & 40' toolbars, three section on 60' toolbars
- Flow Meter & 1-1/2" Motorized Control Valve
- Wing Gauge Wheels Two on 30' & 40' toolbars, four on 60' toolbars
- Ace Hydraulic 150-206 pump on 30' & 40'
- Ace 205-304F pump for 60'
- Pump Hydraulic Flow Limiter Provides overspeed protection
- Powder Coat Paint Durable, attractive finish
- Parking Stands
- Hitch Option





#### **Rinse Out System**

Track Tanks come with a rinse system that utilizes a sparger tube & rinse balls to spray clean water throughout the tank when switching chemicals to reduce contamination. This, along with the tanks' SS design, helps ensure excellent chemical cleanout.

#### Inboard Mounted Design

These inboard tanks are mounted inside the track which keeps the tanks from increasing the transport width of the tractor, while giving the operator excellent visibility while in the cab.

### TRACK TANK STANDARD FEATURES

- All New! Fendt Vario 900/Challenger MT700 Series – 1000 gallon capacity
- Case-IH Steiger Rowtrac Compatible Tanks -1000 gallon capacity
- John Deere 8RT Compatible Tanks 1000 gallon capacity
- Challenger E Series Compatible Tanks 850 gallons
- Excellent Weight Distribution
- Made from 10 Gauge Stainless Steel
- Stainless Steel Welded in Baffles
- Rubber Mounted on Frame
- Powder Coat Paint

### FAST AG SOLUTIONS LIQUID FERTILIZER APPLICATOR SPECIFICATIONS



| MODEL                    | 8000N VERTICAL FOLD                          | 30'/40' A-SERIES<br>(W/ FOLDING GW)  | 60' A-SERIES<br>(W/ FOLDING GW)                                | 8200N<br>(W/ FOLDING GW)                                       | 8300 VERTICAL FOLD                                 | 8400 SIDE FOLD                          |
|--------------------------|--|--------------------------------------|--|--|--|---|
| Transport Height         | 12'8" (15 coulters)                          | 13'3"                                | 12'0"  | 12′  | 14'6"  | 11'4"                                   |
| Working Transport Width  | 15'0"  | 11'10″                               | 11'10"   | 16'8"  | 16'6"  | 22'0"                                   |
| Shipping Transport Width | 12′  | 11'10″                               | 11'10"   | 14'4"  | 12'9"  | 20'8"                                   |
| Transport Length         | 15'3"  | 21'3"                                | 24'0"  | 23'6"  | 17'4" (1050 & 1350 gal) 21'1"<br>(1800 & 2400 gal) | 29'9"                                   |
| Hitch Pin-to-Axle Length | 12'0"  | 13'1" (1350 gal)<br>15'9" (1800 gal) | 15'10"   | 15′9″  | 13'1" (1050 & 1350 gal) 15'9"<br>(1800 & 2400 gal) | 17'8"                                   |
| Empty Weight (lbs)       | 8,100 (1350 gal, 15 coulters)                | 9,505 (15 coulters)                  | 18,250 (1800 gal)  | 16,000 (1800 gal)  | 8,320 (1350 gal, 15 coulters)                      | 15,378 (35 coulters)                    |
| Tank Size(s) (gal)       | 1050, 1350                                   | 1,050, 1,350, 1,800,<br>2,400        | 1,800, 2,600   | 1800, 2400   | 1050, 1350, 1800, 2400                             | 2400                                    |
| Toolbar Size(s)          | 30', 40'                                     | 30', 40'                             | 60', 66'   | 60', 66'   | 30', 40', 44'                                      | 80', 88', 90'                           |
| Standard Tires           | 13.6x38" (1050 gal) 320/90R46"<br>(1350 gal) | 380/90R46"                           | 380/90R46 Singles (1,800 gal)<br>480/80R50 Singles (2,600 gal) | 380/90R46 Singles (1,800 gal)<br>480/80R50 Singles (2,400 gal) | 380/90R46"   | Duals 380/90R46"                        |
| Delivery Type            | Knive or Injection                           | Knive or Injection                   | Knive or Injection   | Knive or Injection   | Knive or Injection                                 | Knive or Injection                      |
| Standard Hydraulic Pump  | Ace 150-206F                                 | Ace 150-206F                         | Ace 205-304F   | Ace 205-304F   | Ace 150-206F                                       | Ace 205-304F                            |
| Toolbar Tube Size        | 7"x7" single bar                             | 7"x7" single bar                     | 5"x7" double bar, single on<br>outer wings                     | 5"x7" double bar, single on<br>outer wings                     | 7"x7" single bar                                   | 5"x7" double bar, single on outer wings |
| Hydraulic Down Pressure  | Yes  | Yes                                  | Yes  | Yes  | Yes  | Yes                                     |
| Hydraulic Wing Kick™     | Yes  | Yes                                  | Yes  | Yes  | Yes  | Yes                                     |
| Engine HP Required       | 150-180                                      | 150-180                              | 220+   | 220+   | 150-180  | 240-260                                 |
| Quick Fill Size          | 2"   | 2″                                   | 3″   | 3″   | 2″   | 3″                                      |





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