

# QuickDraw

## SPRAY TENDER SYSTEM

### 3000



Keeping your sprayer spraying is what SureFire was focused on when it released QuickDraw in 2014. Seven years and thousands of batches later, QuickDraw 3000, released in 2020, features a faster, bigger and brighter display. In 2021 additional new features and models are available. All with the goal to make mixing and loading your sprayer even easier. These include new 9-product model, auto start iGX Honda transfer pump, carrier blending and automated air purge.

#### 4 Product



3 - 1" Port Valves, 1 - 1 1/2" Port Valve

#### 6 Product



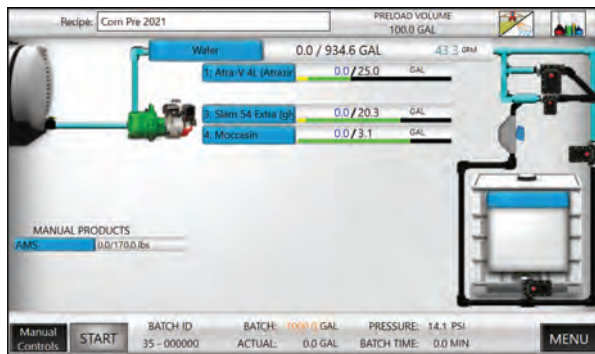
5 - 1" Port Valves, 1 - 1 1/2" Port Valve  
3 - 1" Port Valves, 3 - 1 1/2" Port Valve

#### 9 Product

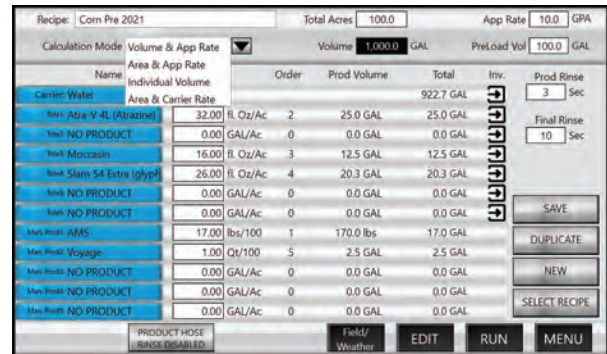


6 - 1" Port Valves, 3 - 1 1/2" Port Valve

#### Run Screen - Start and Monitor Batch Progress



#### Job Setup Screen - Auto Calculation Based on Batch Size



## Mass Flow Meter Chemical Measurement

Mass Flow is the most accurate flow meter technology available. The Micro-Motion mass flow sensor used in QuickDraw measures the mass flow (weight) and density of the product as it moves through the sensor. With those two measurements, it calculates the volume of any liquid with extreme accuracy, regardless of physical properties.



# Trailer Installation



# Trailer and Truck Installation



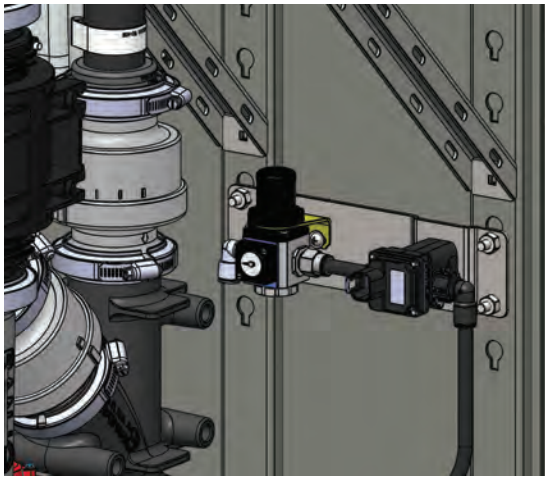
# Plant/Stationary Installation



# New Features Model Year '21

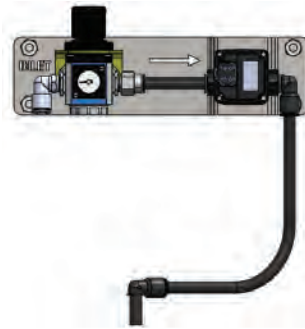
## Automated Start of Honda iGX Engine Driven Transfer Pump

On "Batch Start" QuickDraw Provides Start Signal  
iGX Engine has Automated Choke  
Start Batch and Engine from iPad App  
Two Speed Electronic Throttle (Controller with Toggle Switch  
Installed in QuickDraw)

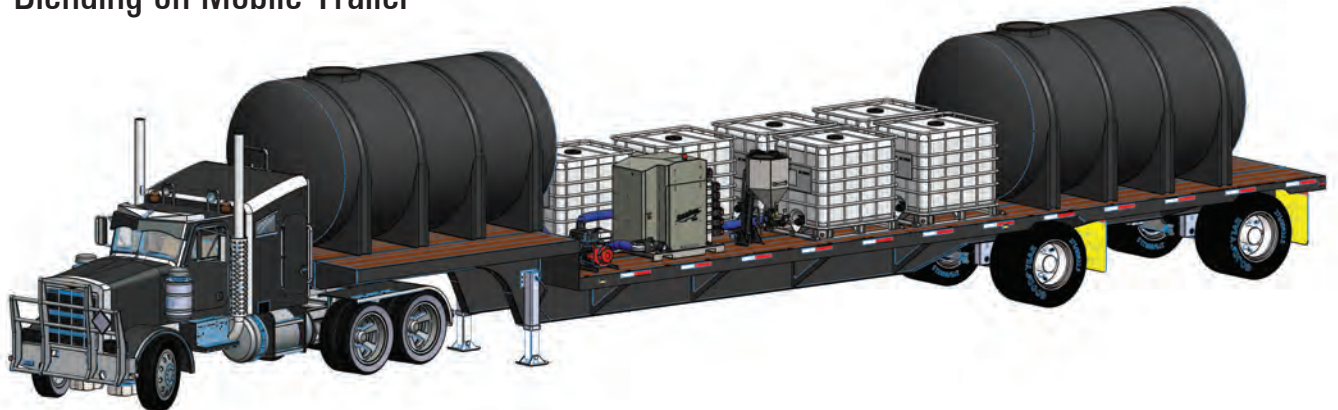


## Automated Air Purge of Load Hose

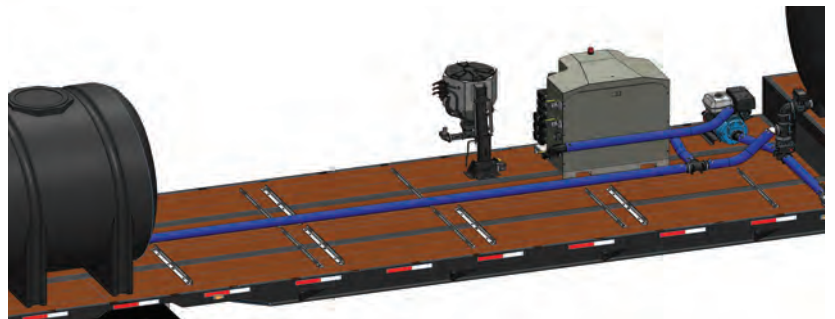
Install Air Purge Kit & Connect to Air Source.  
Valve opens for set amount of time.



## Carrier Blending on Mobile Trailer



Utilize multiple tanks on trailer to create fertilizer blends. Add micronutrients, biologicals or other products from totes to the blend.



# Accessories

## Stainless Steel Eductors

20 Gallon stainless steel tank equipped with ChemBlade and auxillary jug rinse nozzle.

Empty and rinses jugs quickly.

Incorporate dry AMS quickly  
(2 Bags/Minute)



Swing Down configuration allows operator to work from ground



Stand Mount Configuration

## CHEM Caddy

CLOSED TRANSFER SYSTEM

Closed Transfer System that safely measures partial jug doses precise to the ounce.

Equipped standard with easyFlow closed transfer system which allows operators to safely transfer product without being directly exposed to hazardous chemicals. Also can be equipped with Securalink closed transfer system used in Gramoxone packaging.



Swing Down configuration allows operator to work from ground



Stand Mount Configuration

## BULK BLASTER

Rinse totes when you empty them. QuickDraw has rinse cycle functions specifically designed to work with BulkBlaster to quickly rinse totes at the time you empty them.

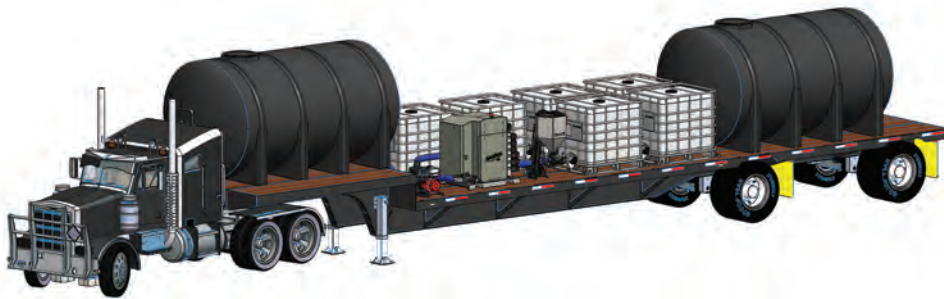


# Carrier Blending

QuickDraw mixes the desired amount of up to 4 different carrier products. Blend multiple carrier products and chemical/micronutrients or only carrier in the case of mixing fertilizer blends.



Utilize in a stationary/plant setup or installed on a mobile tender/mixing trailer.



Create recipe for blend based on application rate/acre, specific volumes or percentage.

## Fertilizer Blending on the Farm

Use QuickDraw spray tender trailer to blend fertilizer applied with planter. Have bulk semi-loads of fertilizer delivered direct to farm. Use totes of micronutrients, biologicals and other treatments. Create recipes for each field based on soil test and agronomic goals. Eliminate the logistical challenges of getting the correct blend for each field from your retail fertilizer supplier.



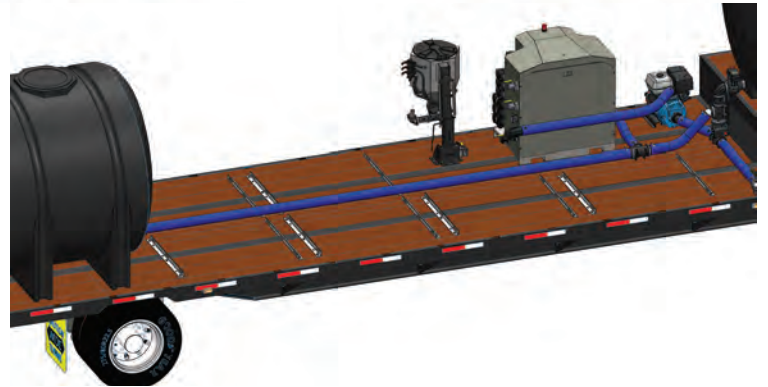
# Carrier Refill

Use QuickDraw and transfer pump on trailer to pull from ground storage tank and fill trailer tanks.

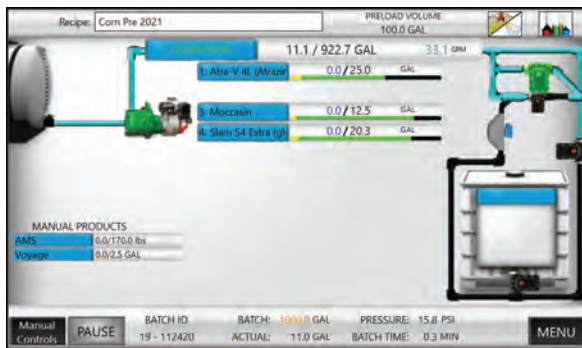
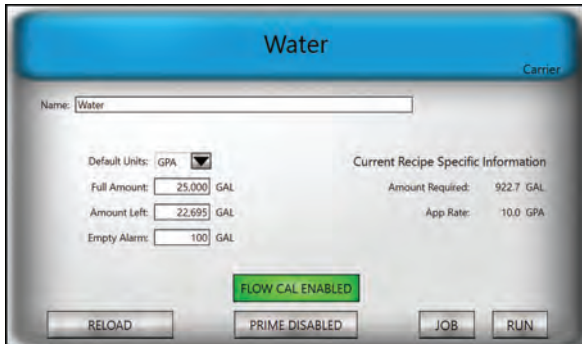
“Pre-Treat” water with AMS or water conditioner while filling trailer.

Use “Carrier Fill Recipe” to set volume to load, QuickDraw automatically shuts valve and kills pump when setpoint is reached.

Carrier Refill can be combined with Carrier Blending by adding carrier control valves to each tank.



# Carrier Flowmeter Auto Calibration



QuickDraw utilizes a 3" E-mag flowmeter to measure carrier solution. Utilize the Auto Calibration Cycle to fine-tune flowmeter accuracy. The auto cal process cycles carrier through both flowmeters utilizing the mass meter flow reading to set the calibration of the carrier flowmeter.



# Record Keeping

QuickDraw keeps a complete record of every batch mixed.

Batch ID: 004-04/17/20  
 Grower: Matt Wolters  
 Farm: Matt Wolters  
 Field: 29-2-33  
 Operator: Matt Wolters  
 Machine: Pull behind sprayer

Recipe: Corn pre-plant  
 Date/Time: 04-17-2020 18:07  
 Wind/Temp: 8.0MPH W 8.0 F  
 Status: Completed  
 Total: 998.8  
 Acres: 100.0

Product (EPA ID)	Rate	Total
-Water ( )		916.7 GAL
Atra-V 4L (atrazine) (89167-38-89391)	32.00 OZ/Acre	25.3 GAL
Tomahawk 5 (glyphosate 5.4 lb/gal) (33270-15)	26.00 OZ/Acre	20.2 GAL
T-Rex (dicamba) (87895-5-80967)	16.00 OZ/Acre	12.4 GAL
AMS ( )	17.00 lbs/100	156.0 lbs
Undercover (mesotrione) (89168-54)	3.00 OZ/Acre	300.0 OZ
Varsity (flumioxazin) (89167-45-89391)	2.00 OZ/Acre dry	200.0 OZ
Venturi ( )	2.00 Quarts/100	640.0 OZ

# QuickDraw 3000 iPad App

Companion iPad app provides additional user features.

- Remote Operation Display
- Control all Batching Functions
- Monitor Batch Progress
- Execute Hose and Tote Rinse Remotely
- Manually Operate Any Valve
- Create Recipes and Enter Record Keeping Inputs Offline
- Wirelessly transmit to QuickDraw Controller
- Manage Historical Records
- Download Records from QuickDraw Controller
- Filter, Sort & Create Reports



# Product Hose Rinse

Rinse hose from chemical tote to QuickDraw.

When changing chemical totes, enable the Product Hose Rinse Cycle, enter length and diameter of hose and select product(s) to be rinsed. When the chemical cycle is complete, the Product Hose Rinse window appears, close tote valve and press the button for the product to be rinsed. The remaining chemical in the hose is drawn into the batch. Connect hose to Product Hose Rinse port and carrier flushes the hose. All carrier used to rinse is measured as part of total needed to complete the batch.

	Length Units		Diameter Units		Hose Volume (GAL)	Rinse Hose
	Feet	Inches	Hose Length (Feet)	Hose Diameter (Inches)		
Tote1: Atra-V 4L (Atrazine)			11.5	2.0	1.87	<input checked="" type="checkbox"/>
Tote2: NO PRODUCT			0.0	0.0	0.00	<input type="checkbox"/>
Tote3: Moccasin			14.5	1.5	1.33	<input checked="" type="checkbox"/>
Tote4: Slam 54 Extra (glyphosate)			0.0	0.0	0.00	<input type="checkbox"/>
Tote5: NO PRODUCT			0.0	0.0	0.00	<input type="checkbox"/>
Tote6: NO PRODUCT			0.0	0.0	0.00	<input type="checkbox"/>

Product Hose Rinse

NOTE: OPENING VALVES WILL PULL PRODUCT INTO THE BATCH. ENSURE YOU OPEN THE CORRECT VALVE. FOR THE FULL INSTRUCTION SET, CLICK ON THE HELP BUTTON.

Set Point	Actual	Rinse Volume	Set Point	Actual	Rinse Volume
Atra-V 4L (Atrazine)	12.5 GAL	17.7 GAL	Slam 54 Extra (glyphosate)	10.2 GAL	0.0 GAL
Valve 1: 100%	12.5		Valve 4: 0%	10.2	
NO PRODUCT	0.0 GAL	0.0 GAL	NO PRODUCT	0.0 GAL	0.0 GAL
Valve 2: 0%	0.0		Valve 5: 0%	0.0	
Moccasin	6.3 GAL	0.0 GAL	NO PRODUCT	0.0 GAL	0.0 GAL
Valve 3: 0%	6.3		Valve 6: 0%	0.0	

PAUSE Batch: 500.0 GAL Actual: 254.2 GAL Finished

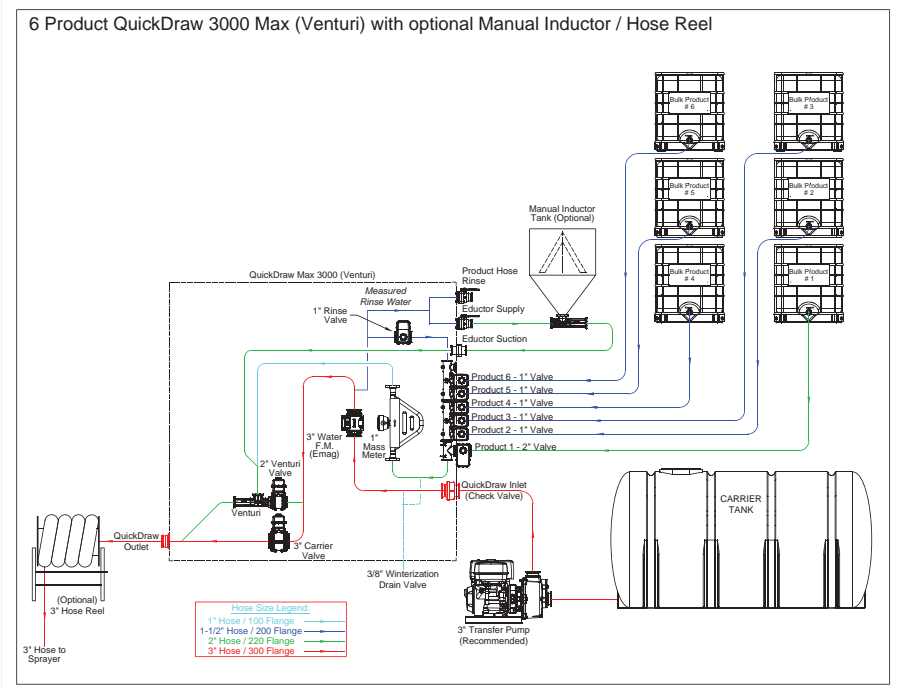


# Venturi Configuration

QuickDraw comes standard in Venturi Configuration. The transfer pump is located on the inlet of QuickDraw and provides 45-50 PSI on the venturi inlet producing suction that draws chemical from totes at 15-25 GPM (flow rate depends on the physical properties of each chemical).

In the venturi configuration, the pump is never exposed to chemical reducing risk of contamination.

30 percent of batch total can be chemical.



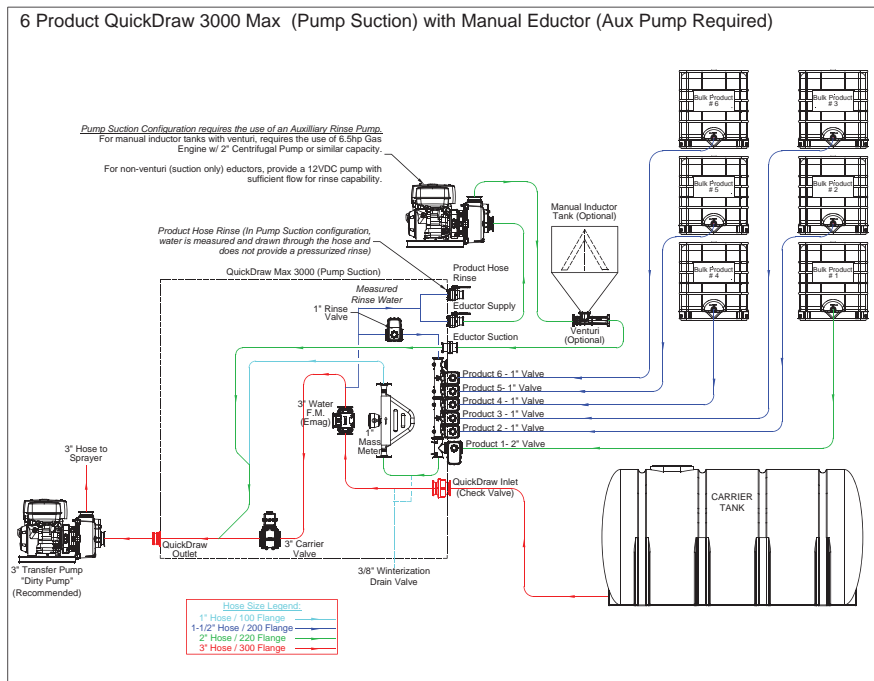
# Pump Suction Configuration

QuickDraw is available in optional Pump Suction Configuration. The transfer pump is located on the outlet of QuickDraw. Both carrier and chemical are drawn through QuickDraw via the transfer pump. Chemical flow rate is 20-30 GPM.

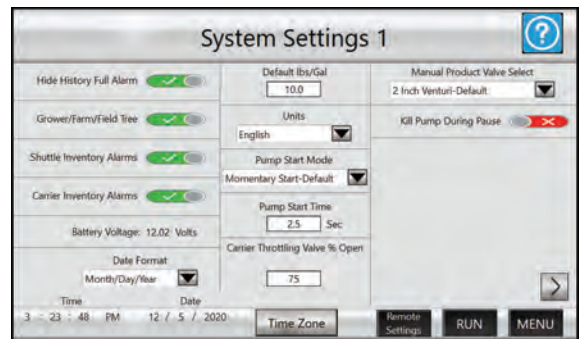
In the pump suction configuration, the pump is exposed to chemical. Proper flushing after the chemical cycle is necessary to prevent contamination.

70 percent of batch total can be chemical.

Requires auxiliary rinse pump to pressurize carrier for rinsing jug.



Carrier Throttling Valve % Open sets the position of the carrier throttling valve during the chemical cycle.



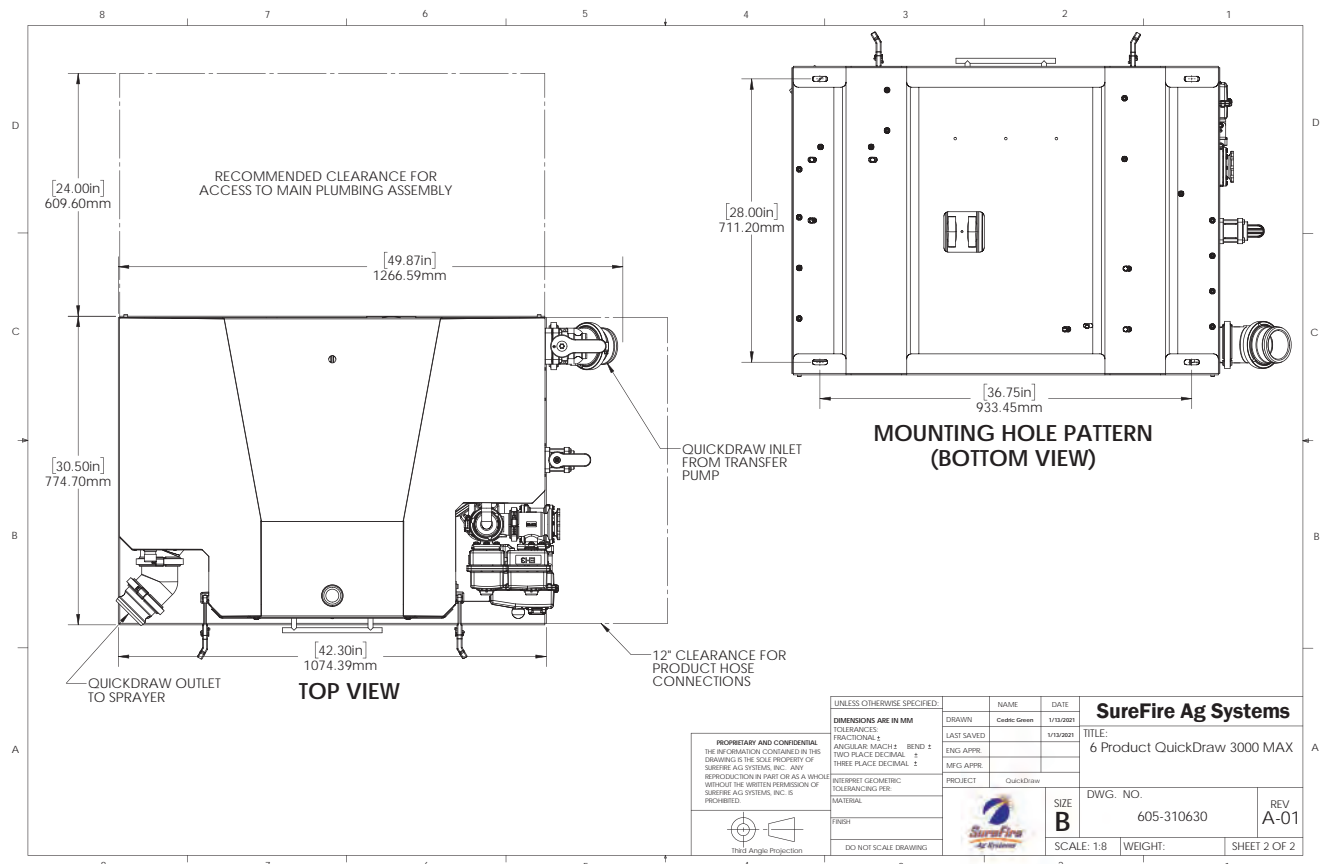
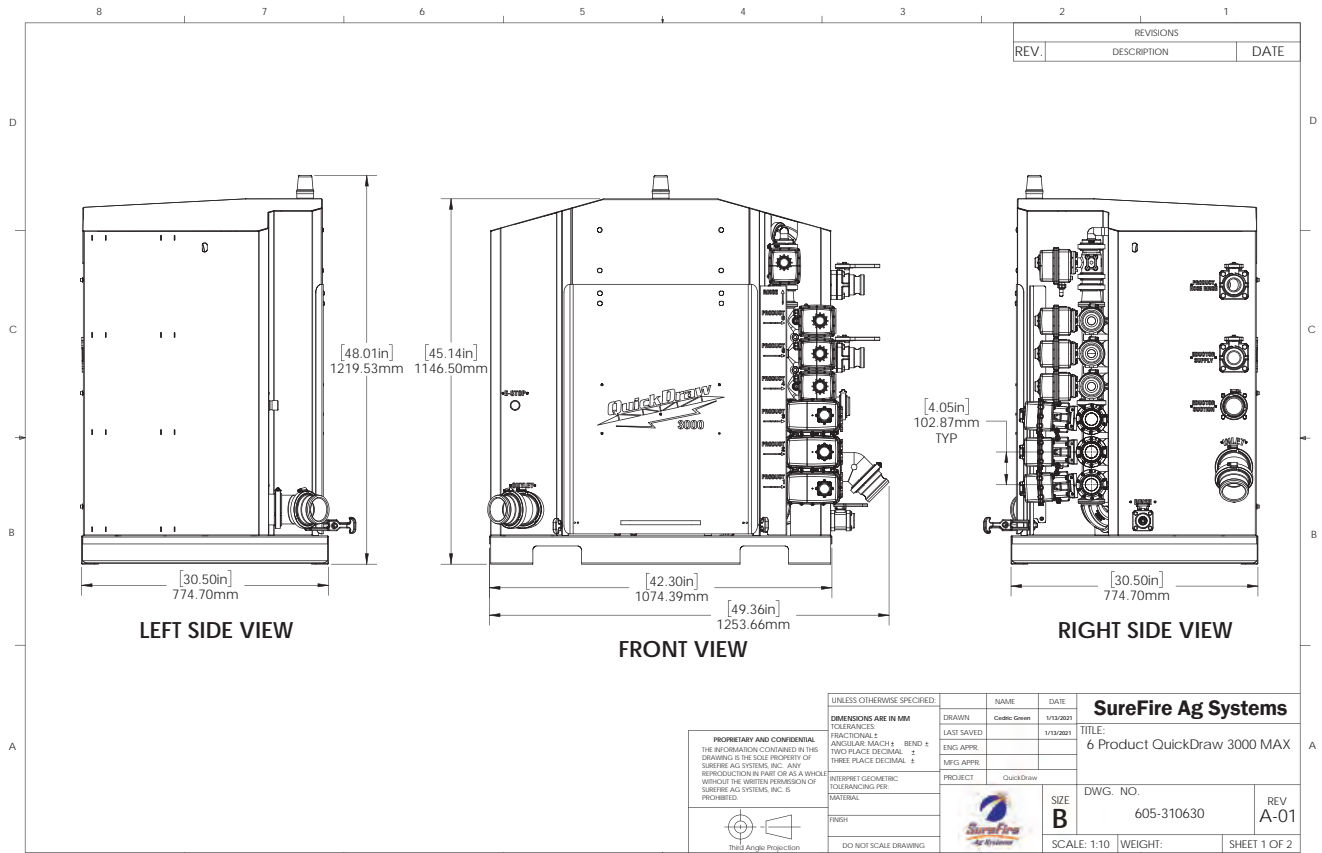
Recipe: Corn Pre 2021 Total Acres: 1000.0 App Rate: 10.0 GPA

Calculation Mode: Volume & App Rate Volume: 1,000.0 GAL Preload Vol: 50.0 GAL

Name	Rate	Order	Prod Volume	Total	Inv.	Prod Rinse
Carrier Water	9.3 GPA			934.6 GAL		3 Sec
10% Atrazine-V 4L (Atrazine)	1.00 Ql/Ac	2	25.0 GAL	25.0 GAL		Final Rinse
10% NO PRODUCT	0.00 GAL/Ac	0	0.0 GAL	0.0 GAL		10 Sec
10% Stam 54 Extra (glyph)	26.00 fl. Oz/Ac	3	20.3 GAL	20.3 GAL		Carrier Holdback
10% Moxeza	4.00 fl. Oz/Ac	4	3.1 GAL	3.1 GAL		50 GAL
10% NO PRODUCT	0.00 GAL/Ac	0	0.0 GAL	0.0 GAL		SAVE
10% Herb AMS	17.00 lbs/100	1	170.0 lbs	17.0 GAL		DUPLICATE
10% Herb NO PRODUCT	0.00 GAL/Ac	5	0.0 GAL	0.0 GAL		NEW
10% Herb NO PRODUCT	0.00 GAL/Ac	0	0.0 GAL	0.0 GAL		SELECT RECIPE
10% Herb NO PRODUCT	0.00 GAL/Ac	0	0.0 GAL	0.0 GAL		

If all chemical products have not completed when the batch reaches the Carrier Hold Back setpoint, carrier throttling valve closes allowing chemical products to complete. Then the remaining carrier will be added and the batch completed.

# QuickDraw Max Dimensional Drawings



4/6 Product Model Shown. 9 Product is 7" taller. Length and width are the same.



# QuickDraw

SPRAY TENDER SYSTEM  
LITE



**QuickDraw Lite** provides mass flow or oval gear meter measurement of chemicals with refined features and operation. QuickDraw Lite is a manual or semi-automated spray tender system. In semi-automated operation enter the desired chemical amount, press start. When the setpoint is reached, the product valve automatically closes. In manual operation open a product valve, watch the display until the desired chemical amount has been measured into the sprayer and close the product valve.

QuickDraw Lite	Meter		Configuration		Optional
	Gear Meter	Mass Meter	Venturi	Pump Suction	Carrier Flow Meter
Models					
6 Manual Valves	X	X	X	X	X
3 Automatic/3 Manual Valves	X	X	X	X	X
6 Automatic Valves	X	X	X	X	X

### Mass Flow or Oval Gear Meter Chemical Measurement



# CHEM-BLADE<sup>®</sup> ES ENCLOSED SYSTEM

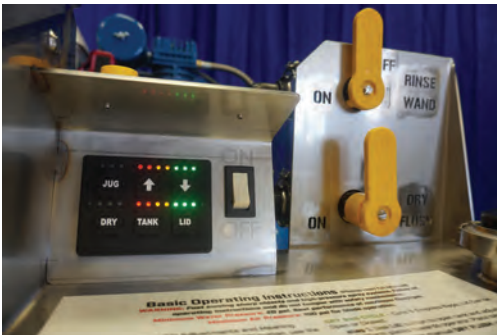


Empties and rinses chemical jugs with zero exposure to the operator.

1. Load Full Jug
2. Press Button
3. 15 Seconds later remove clean jug

The concept is simple, but the result is profound. Using traditional methods for opening, dumping and rinsing it is IMPOSSIBLE to not splatter chemical and rinsate. With ChemBlade ES, you put a full jug in and 15 seconds later the lid opens and you remove an empty fully cleaned jug – inside and out!

ChemBlade ES can be used as a stand alone mixing system or integrated with QuickDraw Max or Lite.



Easy to use operation controls. Large buttons and bright LED indicator lights



ChemBlade knife actuates via air cylinder to cut and empty chemical jug. Rinse head provides 1 gallon/second to ensure jug is completely rinsed.



Eliminate exposure to chemicals. Any other method of emptying and rinsing jugs results in splatter of chemical and rinsate. ChemBlade ES is the only exposure free method available.




# QuickDraw 3000 - Instructional Videos

Scan the QR Code at the right with your phone camera or click on the QR Code to go to the SureFire Ag YouTube Channel to see this entire group of videos on the operation of the QuickDraw 3000, or scan on the list for a single video.






Click on any QR Code or scan with camera to see video.





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1 **QD3000 - Operation and Navigation**  
SureFire Ag Systems


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2 **QD3000 - Creating a New Recipe**  
SureFire Ag Systems
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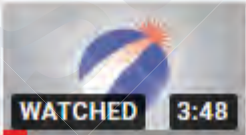
3 **QD3000 - Setting Up Job Preparing to Load a Batch**  
SureFire Ag Systems


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4 **QD3000 - Product Hose Rinse Cycle**  
SureFire Ag Systems
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5 **QD3000 - Update Software**  
SureFire Ag Systems


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6 **QD3000 Run Screen and Batch Operation**  
SureFire Ag Systems
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7 **QD3000 Connecting to iPad App**  
SureFire Ag Systems


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8 **QD3000 Creating Recipe on iPad App  
and Transferring to QD Controller**  
SureFire Ag Systems

- 9  **QD3000 Editing an Existing Recipe**  
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SureFire Ag Systems 

# Tender and Mixing Systems For Mixing Chemical Batches and Blending Fertilizer



## QuickDraw Max

is a fully automated spray tender system. Start by creating a recipe – the applied application rates/acre for each chemical in the batch. Recipes are saved and used every time you load that mix of chemicals. Enter the application rate/acre being sprayed and the size of load needed, in total gallons or total acres to spray. QuickDraw calculates the correct amount of each chemical in the batch. Press start, QuickDraw automatically measures and loads each chemical as well as the correct amount of carrier and stops the pump when the batch is complete.

## QuickDraw Lite

provides mass flow or oval gear meter measurement of chemicals with refined features and operation. QuickDraw Lite is a manual or semi-automated spray tender system. In semi-automated operation enter the desired chemical amount, press start. When the setpoint is reached, the product valve automatically closes. In manual operation open a product valve, watch the display until the desired chemical amount has been measured into the sprayer and close the product valve.

## The Chem-Blade ES Enclosed System

allows operators to handle their chemicals efficiently, safely and extremely fast! Simply set the jug inside, close the lid and click a button. The ES encloses the cutting and rinsing process, isolating the operator from potentially hazardous products. The Chem-Blade ES takes the tedious work out of handling heavy bags by quickly processing hazardous or non-toxic products safely in an enclosed or open chamber.

## Key Benefits to Your Operation

### Sprayer Efficiency

When your sprayer is sitting at the field edge filling it is covering Zero Acres/Hour. Minimizing fill time is critical to cover more acres per day.

### Accuracy

Mass Meter flow measurement technology, the most accurate available, combined with automated batch calculations ensure you get the correct amount of each chemical in every batch.

### Eliminate Chemical Exposure

It's that simple, QuickDraw and ChemBladeES eliminate chemical exposure. Keep yourself and your employees safe!

### Labor Utilization

It's critical that every batch is mixed correctly. QuickDraw is the tool that enables your employees to get it right every time.

### Record Keeping

QuickDraw records a record of every batch loaded. Date, time, grower, farm, field, machine, operator, as well as measured totals of each product in the batch are recorded.

### QuickDraw Cloud

Sort and Report Records  
Receive notification of batch loaded  
Create Work Orders  
Split Batches Between Fields