



Systems for Spray Tendering,
Mixing Chemical Batches
& Blending Fertilizer



Technology for Mixing Chemical & Blending Liquid Fertilizer



Mobile/Tender Trailer Systems



Stationary/Plant Systems











Key Benefits to Your Operation

Sprayer Efficiency

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

Labor Utilization

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

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.

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.

Eliminate Chemical Exposure

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

QuickDraw Cloud

Sort and Report Records
Receive notification of batch
loaded

Create Work Orders

Split Batches Between Fields

Customer Testimonials

Steve Arnold Kansas



"Over the years of adopting new precision technology there are lots of things I've regretted every minute I've owned them, but not the SureFire QuickDraw. It's been worth every penny we invested in it. Speed, record keeping, and not being exposed to chemicals all-day, every-day are what make it worth the money for me."

Aaron Thompson Ilinois



"With our old system we had to get on the trailer.
The operator was wore out by the end of the day.
With QuickDraw, he hooks up and presses the start button and 7 or 8 minutes later he is headed back to the field."

Kyle Stackhouse Indiana



"Several people have asked how we're getting along with the QuickDraw. I tell them it is probably our best investment (yes, investment—it was not cheap) since we bought a tile plow in 2011."

4 Product



6 Product



9 Product



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.

3 - 1" Port Valves, 1 - 1 ½" Port Valve

5 - 1" Port Valves, 1 – 1 ½ Port Valves

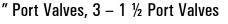
3 - 1'' Port Valves, $3 - 1 \frac{1}{2}$ Port Valves

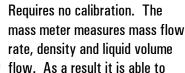
6 - 1" Port Valves, 3 - 1 ½ Port Valves

Available in 2 Configurations

Venturi Suction - Transfer pump is located on the QuickDraw inlet. It pushes water across a venturi to create suction which draws chemical products through the mass meter and into the batch.

Pump Suction - Transfer pump is located on the QuickDraw outlet. Suction from the pump is utilized to draw chemical products through the mass meter and into the batch





Technology

Mass Flow Meter

rate, density and liquid volume flow. As a result it is able to measure any liquid with extreme accuracy, regardless of physical properties, specifically density, viscosity, or conductivity.







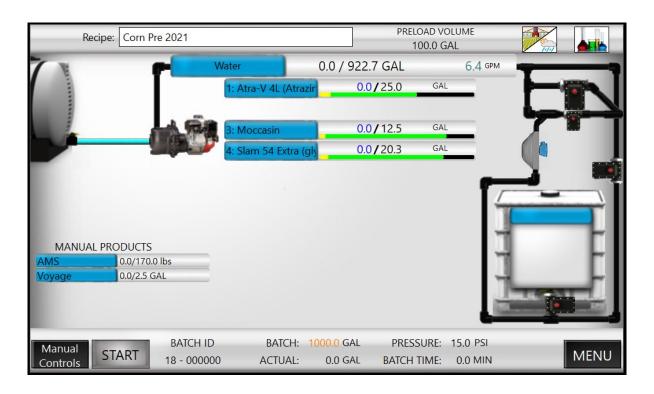
Run Screen

When batch setup is complete, utilize the run screen to start the batch, monitor batch progress, and enter manually measured products when added.

Run Screen

- When
- Tank Level Indicators
- Manual Products Listed

QuickDraw Max Features



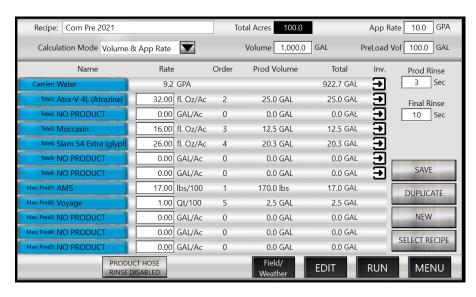
Inventory Management





Batch Setup & Calculation

- Job Screen
 - Recipe
 - Products
 - Applied Rates/Acre
 - Default Batch Size, Application Rate
 & Preload Volume
 - Automated Batch Calculations
 - 4 Calculation Modes







QuickDraw 3000 iPad App

- Remote Operation Terminal
 - Control all Batching Functions
 - Monitor Batch Progress
 - Execute Hose and Tote Rinse Remotely
 - Manual Operate Any Valve
- Create Recipes and Enter Record Keeping Inputs Offline
 - Wirelessly transmit to QuickDraw
 Controller

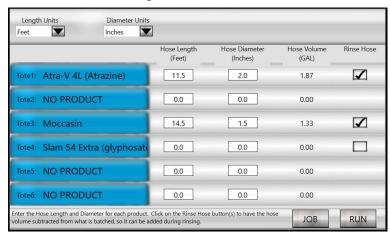


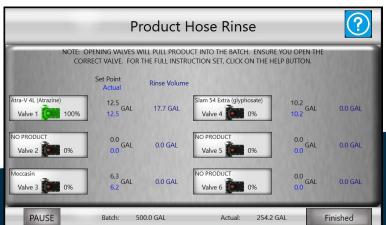




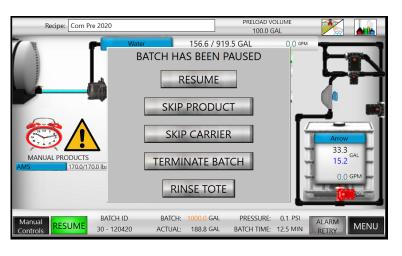
Hose and Tote Rinse Cycle

- Product Hose Rinse Cycle
 - Rinse Hose from Tote to QuickDraw
 - Accurately Utilizes Chemical in Hose as Part of Target Amount



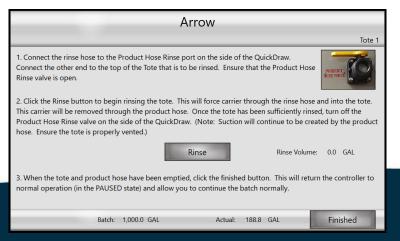


 Mid-Batch Tote Rinse with BulkBlaster











Record Logged of Every Batch Mixed



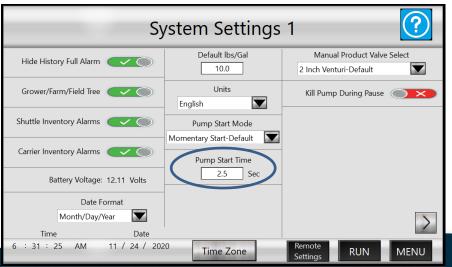
Batch ID: 004-04/17/20 Recipe: Corn pre-plant 04-17-2020 18:07 Grower: Matt Wolters Date/Time: Matt Wolters Wind/Temp: 8.0MPH W 8.0 F Farm: Field: 29-2-33 Status: Completed Operator: Matt Wolters Total: 998.8 Machine: Pull behind sprayer 100.0 Acres:

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()	17.001bs/100	156.01bs
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

Automated Start of Honda iGX Engine

- 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)

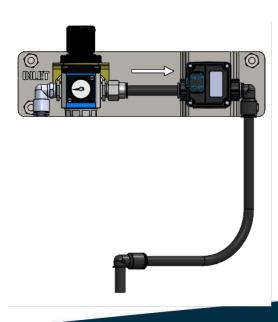




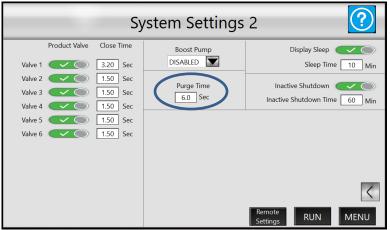


Automated Air Purge

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







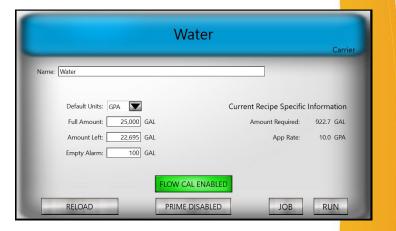


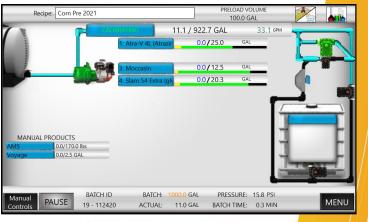


Carrier Flow Meter Auto Calibration Process

Cycles Carrier Through Carrier
 Meter (3" Mag Meter) and Mass
 Meter. Utilizes Mass Meter
 Flow Reading to Set Calibration
 Value for Carrier Flow Meter.



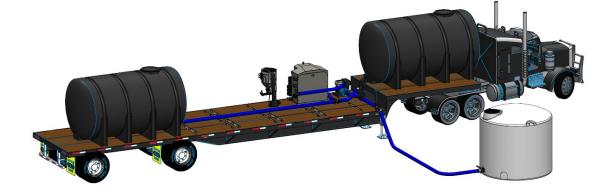






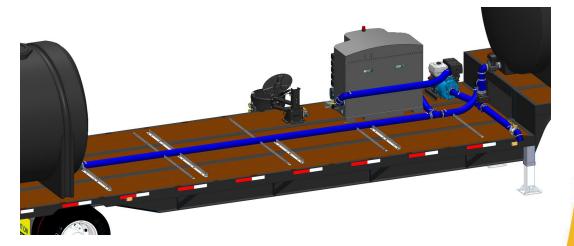
Carrier Refill

- Utilize QuickDraw to Measure and Fill
 Trailer Tanks from Ground Source Tank
- Treat water with AMS or Water
 Conditioner While Filling Trailed



Tender Trailer Carrier Refill:

Plumbing kits so that QuickDraw (using trailer transfer pump) can pull from ground storage tank and fill the set into tank(s) on the trailer. Carrier Refill can be combined with Carrier Blending by upgrade electric valves to blending control (CAN) valves.



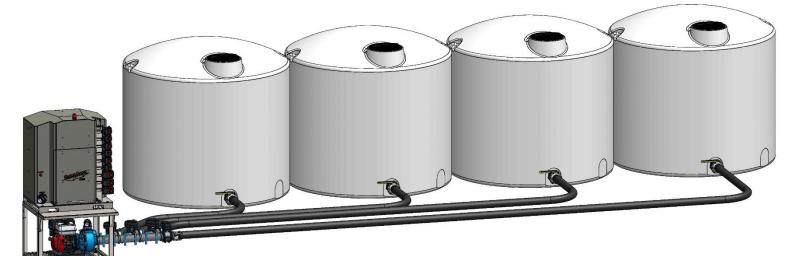


Carrier Blending:

QuickDraw (Based on Recipe) mixes the desired amount of up to 4 different carrier products. This could be multiple carrier products and chemical/micronutrients or only carrier in the case of mixing fertilizer blends.



Carrier Blending



4 High Volume Products







• Up to four 3" or 4" Carrier Blending Valves are connected to QuickDraw Model with 4, 6 or 9 low volume blending valves.

• 4, 6 or 9 Low Volume Products



Stationary Plant or Mobile Trailer



Field Use Example

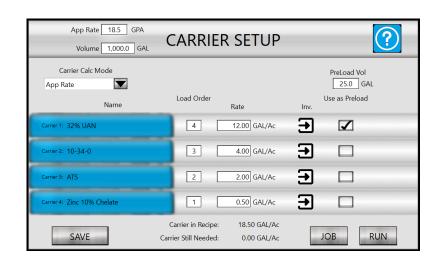
Use QuickDraw spray tender trailer to blend fertilizer applied with planter. Have bulk semi-loads of fertilizer delivered direct to farm. Use totes of micro nutrients, biologicals and other treatments. Create recipes for each field based on soil test and agronomic goals. Eliminate the logistical challenges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







Blend Setup & Operation



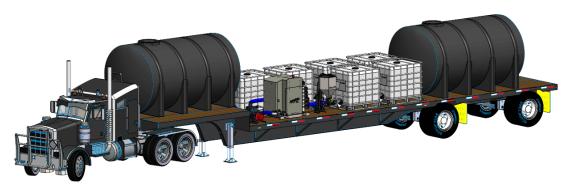
App Rate 18.5 GPA Volume 1,000.0 GAL	CARRIER SETUP	?
Carrier Calc Mode		PreLoad Vol 25.0 GAL
Name	Load Order Rate	Use as Preload Inv.
Carrier 1: 32% UAN	4 648.6 GAL	→ ✓
Carrier 2: 10-34-0	3 216.2 GAL	∃ □
Carrier 3: ATS	2 108.1 GAL	∃ □
Carrier 4: Zinc 10% Chelate	1 27.1 GAL	∃ □
SAVE Ca	Carrier in Recipe: 1000.0 GAL rrier Still Needed: 0.0 GAL	JOB RUN

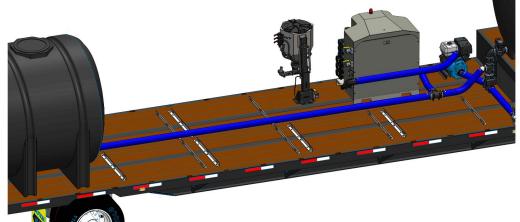
Run Screen





Carrier Blending on a Mobile Trailer

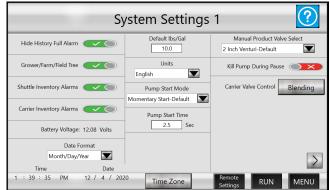




Set to 'Blending', when controlling valves with recipe specifying specific volumes to be pulled from each tank.

Set to 'Manual' when using the same carrier product in both tanks. In this mode the user manual controls (via valve icons on QuickDraw run screen) carrier valves during the batch.

Setup





Operation

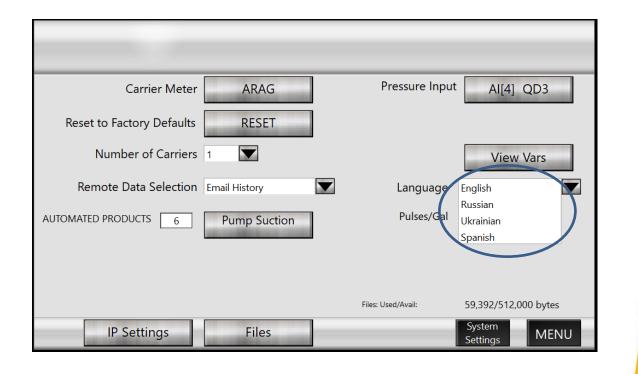






Multiple Languages

- 3 Languages Currently Available
 - Spanish
 - Ukrainian
 - Russian
- In Development
 - Portuguese



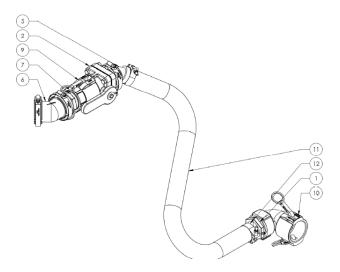
Connection Kits

Plumbing kits
 from QuickDraw
 product control
 valves to chemical
 totes



Parts List and Exploded View 606-01-400325 (1-1/2" Hose)

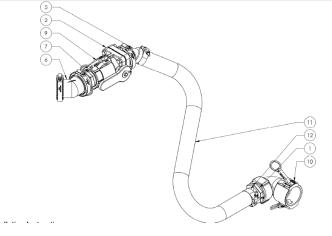
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	101-200150	2" MPT x 1-1/2" HB	1
2	102-200VSFCF	200 Series Manifold x 2" Male Quick Coupler Standard Port Poly Valve	1
3	105-150G-H	1-1/2" EPDM Manifold Gasket for 200 Series Manifold fittings	4
4	105-200150BRB	2" Manifold x 1-1/2" HB	1
5	105-200150BRB45	2" Manifold x 1-1/2" HB - 45 Degree	1
6	105-200CPG45	2" Manifold Coupling - 45 Degree	1
7	105-200MPT	2" Manifold x 2" MPT	1
8	105-FC200	2" Manifold Clamp	4
9	106-200D	2" Female Coupler x 2" FPT	1
10	106-200D90	2" Female Coupler x 2" FPT - 90 Degree	1
11	280-150-ENF	1-1/2" Enforcer Fertilizer Solution Hose	15ft
12	350-TC181	Pressure Seal HD Clamp, Size 238	2





Parts List and Exploded View 606-01-400350 (2" Hose)

ITEM NO.	PART NUMBER	DESCRIPTION	
1	101-200200	2" MPT x 2" HB	1
2	102-200VSFCF	200 Series Manifold x 2" Male Quick Coupler Standard Port Poly ∀alve	1
3	105-150G-H	1-1/2" EPDM Manifold Gasket for 200 Series Manifold fittings	4
4	105-200BRB	2" Manifold x 2" HB	1
5	105-200BRB45	2" Manifold x 2" HB - 45 Degree	1
6	105-200CPG45	2" Manifold Coupling - 45 Degree	1
7	105-200MPT	2" Manifold x 2" MPT	1
8	105-FC200	2" Manifold Clamp	4
9	106-200D	2" Female Coupler x 2" FPT	1
10	106-200D90	2" Female Coupler x 2" FPT - 90 Degree	1
11	280-200-ENF	2" Enforcer Fertilizer Solution Hose	15ft
12	350-TC231	Pressure Seal HD Clamp, Size 288 (fits 2" Enforcer and Wire Braided)	2



- Stainless Steel Eductors
 - With or withoutChemBlade Original
 - Auxiliary Jug Rinse

Swing Down





Stand Mount



With 3" Bypass for use without QuickDraw Without 3" Bypass for use with QuickDraw

- ChemCaddy
 - Swing DownLinkage fortrailermounted
 - StandMounted









- BulkBlaster
 - Complete ToteRinse







- Engine/Pump Harness
 - Pump Start for iGX Honda Engines
 - Engine Harness is Installed at SureFire
 - 605-04-200150 QuickDraw Harness
 - Uses 12-pin Extensions from QD to Pump
 - Kit for GX Honda Engines (& other Engines)
 - 606-04-200100
 - Pump Stop
 - Electric Starter Power Supply
 - Push Button Start





	Me	Meter		Configuration	
Models	Gear Meter	Mass Meter	Venturi	Pump Suction	Carrier Flow Meter
6 Manual Valves	X	X	Χ	X	Χ
3 Automatic/3 Manual Valves	X	X	Х	X	X
6 Automatic Valves	Χ	X	Х	Χ	Х

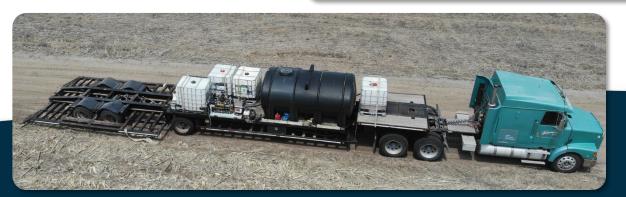


QuickDraw Lite

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. 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. When the set point is reached, the product automatically closes.











ChemBlade Enclosed System (ES)

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.









CHEM-BLADE ORIGINAL





Basic Spray







