

QuickDraw

SPRAY TENDER SYSTEM

Sales Guide- 2019





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 measurement of chemicals with refined features and operation. QuickDraw Lite is a manual or semi-automated spray tender system. 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. In semi-automated operation enter the desired chemical amount, press start. When the set point is reached, the product automatically closes.



Venturi and Pump Suction Configuration

QuickDraw spray tender systems are available in two configurations – Venturi Suction and Pump Suction.

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.

Mass Flow Meter Chemical Measurement of Chemicals

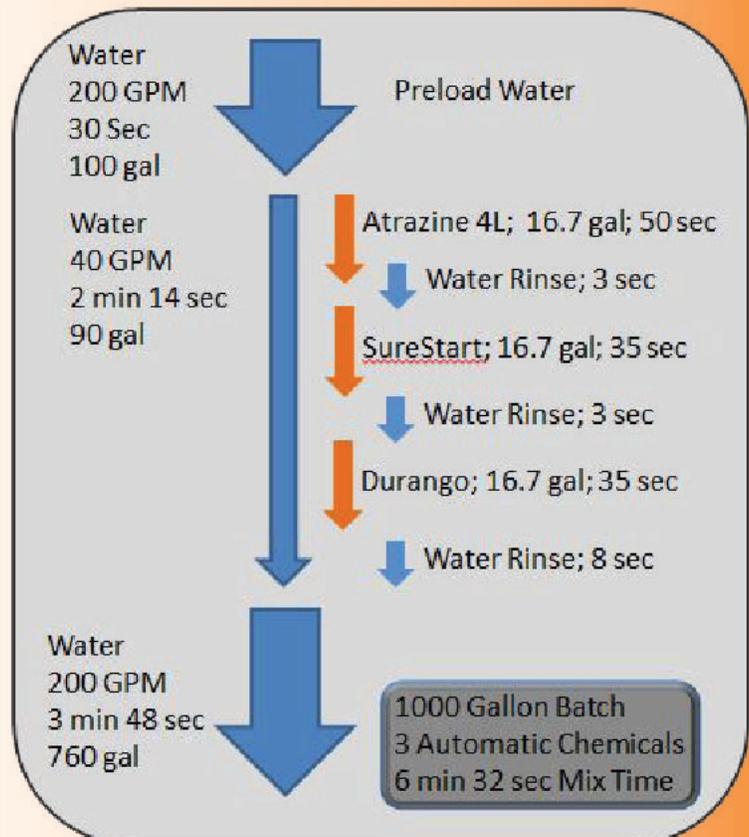
Micro-Motion mass flowmeter requires no calibration. The mass flow meter measures product density, liquid mass and volume. As a result, it is able to measure any liquid with extreme accuracy regardless of the liquid's physical properties, specifically density, viscosity, or conductivity.



Closed System

QuickDraw is a closed system. Operator exposure to chemical is eliminated while mixing sprayer batches. Operators using a QuickDraw system routinely comment that the reduced exposure to chemicals has a huge benefit to them.

Mix and Load a 1000 Gallon Batch in 8 Minutes or Less!





QuickDraw Example Trailer Installations



QuickDraw on drop-deck trailer. Water tanks front and back. Locations for 7 chemical totes. QD swing-down eductor for ground level working.



QuickDraw on drop-deck trailer. Water tanks front and back. Locations for 7 chemical totes. QD swing-down eductor for ground level working.





**QuickDraw mounted on right side of mixing station.
Customized trailer with two-story tote rack.**





QuickDraw on drop-deck. Front and rear water storage. Electric 3" hose reel and locations for 6 chemical totes.





Top: QuickDraw mounted on straight truck. QD swing down inductor.

Bottom: QuickDraw installed in van trailed. Concealed and locked when rear door closed.





QuickDraw installed on sprayer transport trailer.





QuickDraw installed on sprayer transport trailer.





QuickDraw installed on sprayer transport trailer.







**Deck-over tender
trailer behind tanker
truck,**





QuickDraw Example Plant/ Stationary Installations



Farmer with dedicated “spray shed”. Either load directly into sprayer or mix “hot load” to be hauled to the sprayer.





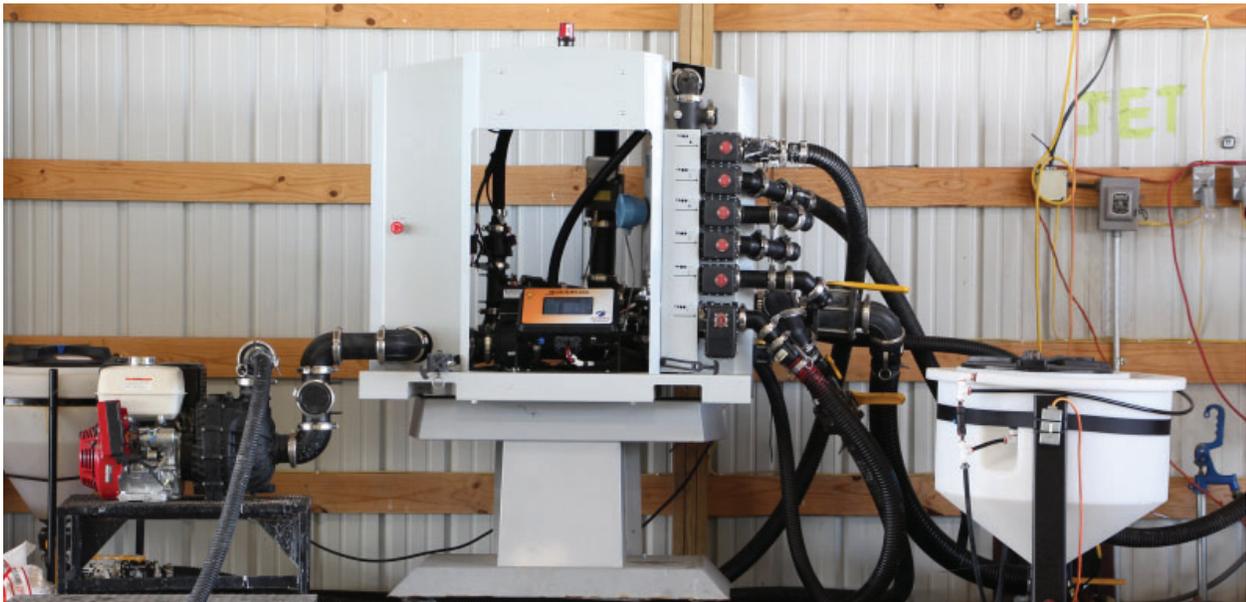
Farmer with dedicated "spray shed". Either load directly in to sprayer or mix "hot load" to be hauled to the sprayer.





QuickDraw in Aerial Application

Sunflower Aero, Atwood, KS - QuickDraw Max installed in drive through hanger. Manages up to 7 airplanes loading through this facility.



Scott Aviation, Fort Morgan, CO - QuickDraw Lite customized for customer's loading process.



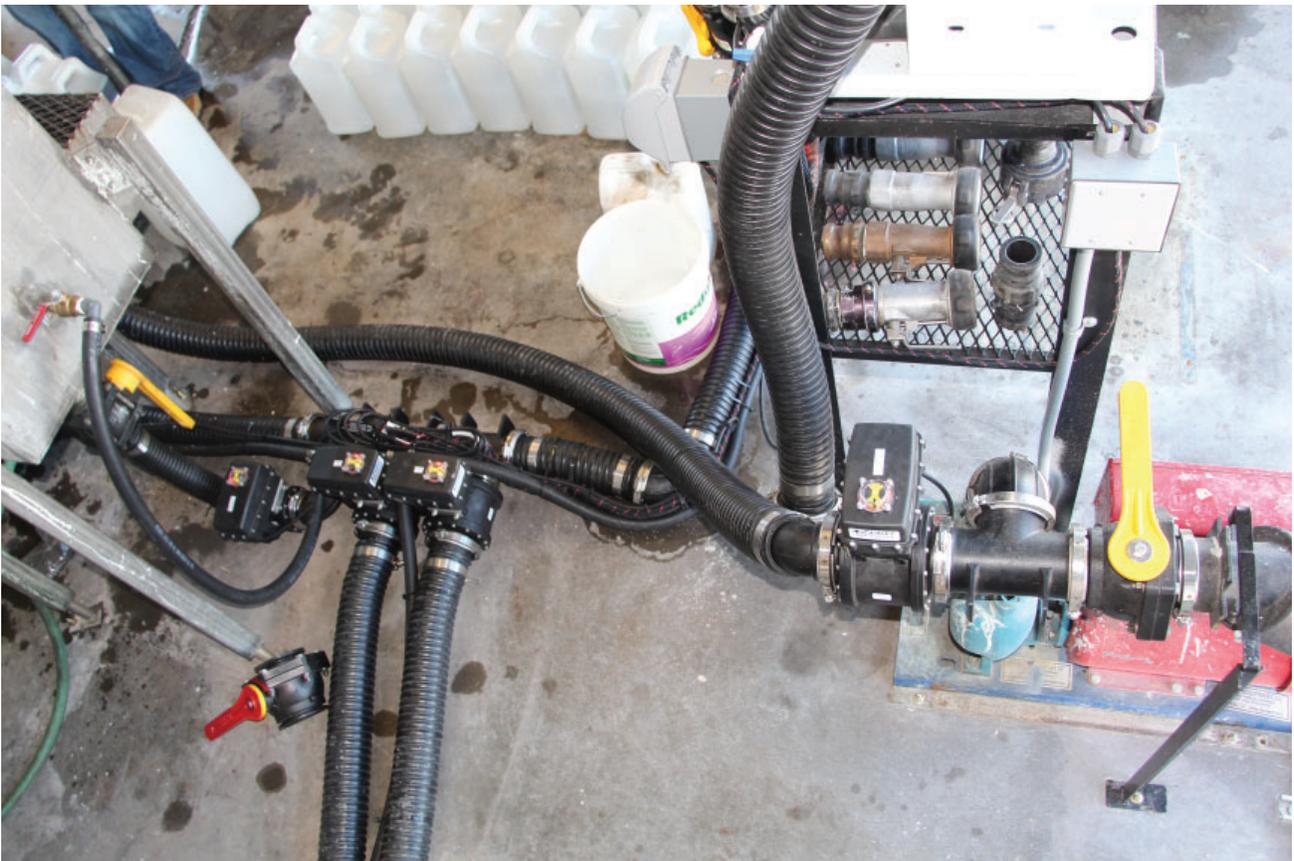


Cone tanks mounted in cage pallets for pouring-up jug product to be metered in bulk by QuickDraw.





Incorporated existing manual inductor and mix vat. Electric valves connected to custom switch box at operator's station select product used and flow direction.



QuickDraw Demonstration Trailer



Inductor Options for Manual Measure Products

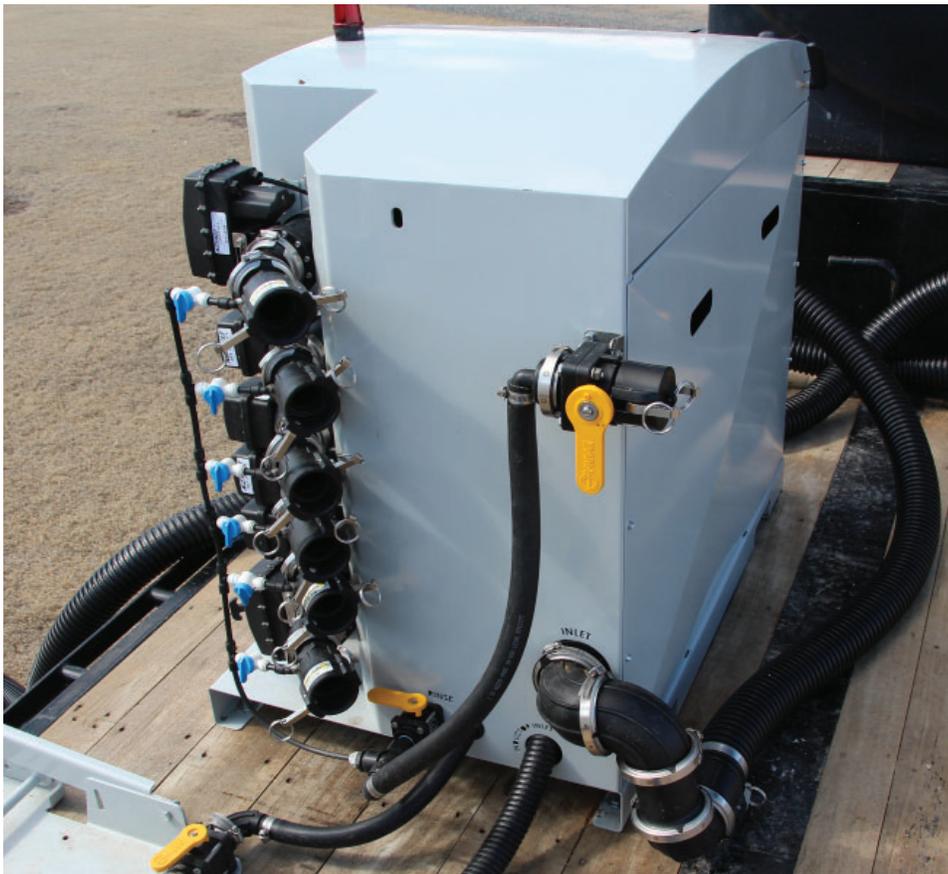




QuickDraw Swing-Down Inductor



Product Hose Rinse Kit

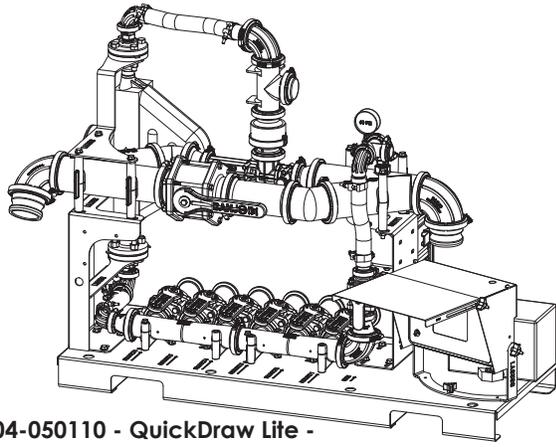


Utilize Product Hose Rinse Kit to provide easy rinse of product/chemical hoses. Disconnect hose from tote, connect to rinse port. Utilize "Product Hose Rinse Cycle" to flush and rinse product in hose.

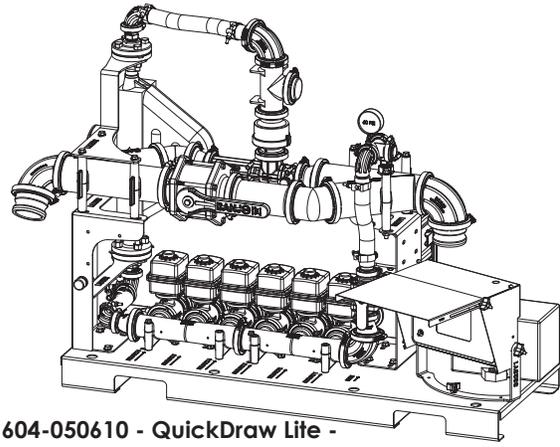


QuickDraw Lite

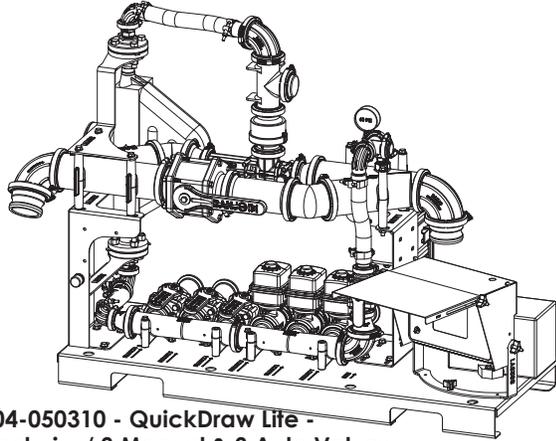




604-050110 - QuickDraw Life - Venturi w/6 Manual Valves



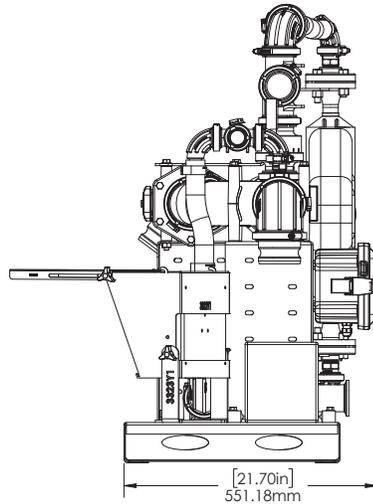
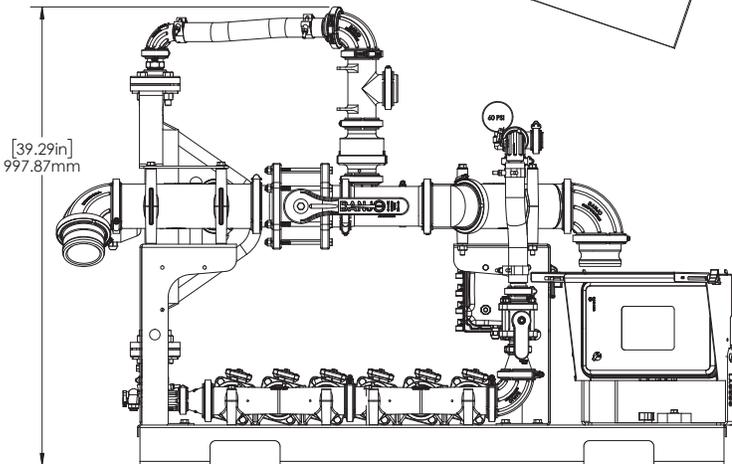
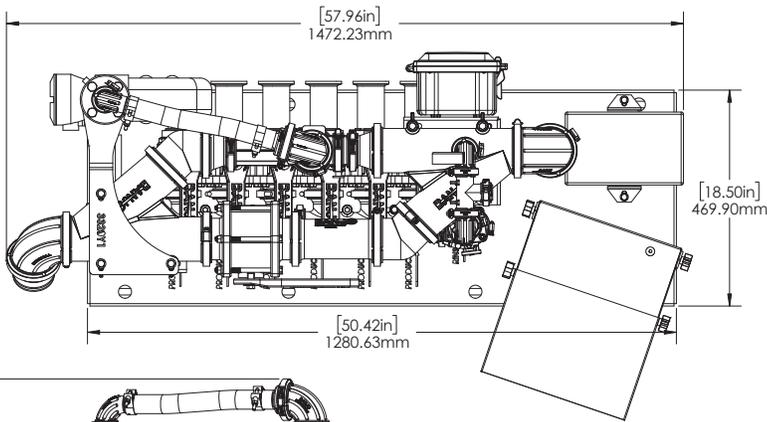
604-050610 - QuickDraw Life - Venturi w/ 6 Auto Valves



604-050310 - QuickDraw Life - Venturi w/ 3 Manual & 3 Auto Valves

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	SureFire Ag Systems	
DIMENSIONS ARE IN MM		DRAWN	Cedric Green	9/4/2016	TITLE: QuickDraw Life - Venturi w/ 3 Manual & 3 Auto Valves
TOLERANCES:		LAST SAVED		1/22/2018	
FRACTIONAL: ±		ENG APPR.			DWG. NO. 604-050310
ANGULAR: MACH ± BEND ±		MFG APPR.			
TWO PLACE DECIMAL ±		PROJECT	QuickDraw Life		SCALE: 1:10
THREE PLACE DECIMAL ±					
INTERPRET GEOMETRIC TOLERANCING PER:				SIZE B	SHEET 3 OF 4
MATERIAL		Assembly Kit			
FINISH		DO NOT SCALE DRAWING			

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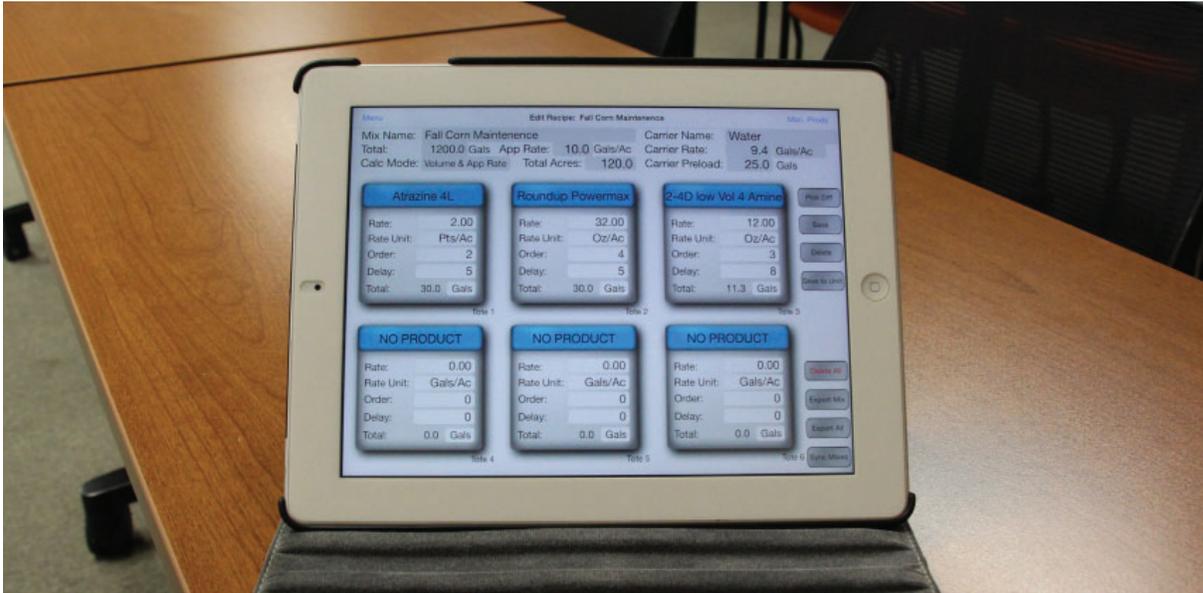


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DIMENSIONS ARE IN MM		DRAWN	Cedric Green	9/4/2016	TITLE: QuickDraw Life - Venturi w/ 3 Manual & 3 Auto Valves
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ANGULAR: MACH ± BEND ±		MFG APPR.			
TWO PLACE DECIMAL ±		PROJECT	QuickDraw Life		SCALE: 1:8
THREE PLACE DECIMAL ±					
INTERPRET GEOMETRIC TOLERANCING PER:				SIZE B	SHEET 4 OF 4
MATERIAL		Assembly Kit			
FINISH		DO NOT SCALE DRAWING			

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QuickDraw iPad App



Create Recipe on iPad

- Library of Products
- Recipe Name
- Batch Size
- Calculation Mode
- Select Products
- Applied Rates/Acre
- Load Order
- Rinse Delay Time



Menu Man. Prods

Edit Recipe: Corn Preplant 2014
 Mix Name: Corn Preplant 2014 Carrier Name: Water
 Total: 1000.0 Gals App Rate: 15.0 Gals/Ac Carrier Rate: 14.3 Gals/Ac
 Calc Mode: Gal & App Rate Total Acres: 66.7 Carrier Preload: 100.0 Gals

Atrazine 4L Rate: 1.00 Rate Unit: Qts/Ac Order: 1 Delay: 0 Total: 16.7 Gals <small>Toto 1</small>	Durango DMA Rate: 32.00 Rate Unit: Oz/Ac Order: 3 Delay: 3 Total: 16.7 Gals <small>Toto 2</small>	Surestart Rate: 2.00 Rate Unit: Pts/Ac Order: 2 Delay: 3 Total: 16.7 Gals <small>Toto 3</small>	<input type="button" value="Pick Off"/> <input type="button" value="Save"/> <input type="button" value="Delete"/> <input type="button" value="Save to Unit"/>
NO PRODUCT Rate: 0.00 Rate Unit: Gals/Ac Order: 0 Delay: 0 Total: 0.0 Gals <small>Toto 4</small>	NO PRODUCT Rate: 0.00 Rate Unit: Gals/Ac Order: 0 Delay: 0 Total: 0.0 Gals <small>Toto 5</small>	NO PRODUCT Rate: 0.00 Rate Unit: Gals/Ac Order: 0 Delay: 0 Total: 0.0 Gals <small>Toto 6</small>	<input type="button" value="Delete All"/> <input type="button" value="Export Mix"/> <input type="button" value="Export All"/> <input type="button" value="Sync Mixes"/>

Transfer via
Wireless
Connection



Mass Flow Meter

Mass Flow Meter

- No Calibration
- Measures product density
- Accuracy is not impacted by the physical properties of product being measured
- Meter is accurate to 0.5%, QuickDraw as a system achieves accuracy of 1-3%
- Compared to other types of meters
 - Electromagnetic Meters – Won't work with non-Conductive chemicals (2-4D)
 - Mechanical Meters – Require calibration, can vary from default by > 20%



Recipe

Menu

Edit Recipe: Corn Preplant 2014

Man. Prods

Mix Name: Carrier Name:
 Total: Gals App Rate: Gals/Ac Carrier Rate: Gals/Ac
 Calc Mode: Total Acres: Carrier Preload: Gals

Atrazine 4L	Durango DMA	Surestart	<input type="button" value="Pick Diff"/> <input type="button" value="Save"/> <input type="button" value="Delete"/> <input type="button" value="Save to Unit"/>
Rate: <input type="text" value="1.00"/>	Rate: <input type="text" value="32.00"/>	Rate: <input type="text" value="2.00"/>	
Rate Unit: <input type="text" value="Qts/Ac"/>	Rate Unit: <input type="text" value="Oz/Ac"/>	Rate Unit: <input type="text" value="Pts/Ac"/>	
Order: <input type="text" value="1"/>	Order: <input type="text" value="3"/>	Order: <input type="text" value="2"/>	
Delay: <input type="text" value="0"/>	Delay: <input type="text" value="3"/>	Delay: <input type="text" value="3"/>	
Total: <input type="text" value="16.7"/> Gals	Total: <input type="text" value="16.7"/> Gals	Total: <input type="text" value="16.7"/> Gals	
Tote 1	Tote 2	Tote 3	
NO PRODUCT	NO PRODUCT	NO PRODUCT	<input type="button" value="Delete All"/> <input type="button" value="Export Mix"/> <input type="button" value="Export All"/> <input type="button" value="Sync Mixes"/>
Rate: <input type="text" value="0.00"/>	Rate: <input type="text" value="0.00"/>	Rate: <input type="text" value="0.00"/>	
Rate Unit: <input type="text" value="Gals/Ac"/>	Rate Unit: <input type="text" value="Gals/Ac"/>	Rate Unit: <input type="text" value="Gals/Ac"/>	
Order: <input type="text" value="0"/>	Order: <input type="text" value="0"/>	Order: <input type="text" value="0"/>	
Delay: <input type="text" value="0"/>	Delay: <input type="text" value="0"/>	Delay: <input type="text" value="0"/>	
Total: <input type="text" value="0.0"/> Gals	Total: <input type="text" value="0.0"/> Gals	Total: <input type="text" value="0.0"/> Gals	
Tote 4	Tote 5	Tote 6	

Historical Record

- Utilize QuickDraw iPad App
- PDF Summary
- CSV Data File
- E-mail History

Mix ID: 013-121713	Mix Name: Corn Post Plant																					
Farm: Johnson	Date/Time: 2013-12-17 13:23																					
Field: 8	Wind/Temp: S 9.0 MPH 45.0 F																					
<table border="1"> <thead> <tr> <th>PRODUCT (EPA ID)</th> <th>RATE</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td>Water</td> <td>9.1 GAL/Acre</td> <td>135.7 GAL</td> </tr> <tr> <td>Atrazine 90DF (19713-76)</td> <td>0.50 GAL/Acre</td> <td>7.6 GAL</td> </tr> <tr> <td>Parallel (66222-87)</td> <td>1.50 Pints/Acre</td> <td>2.8 GAL</td> </tr> <tr> <td>Durango DMA (62719-556)</td> <td>28.00 OZ/Acre</td> <td>3.3 GAL</td> </tr> <tr> <td>Status (7969-242)</td> <td>4.00 OZ/Acre</td> <td>0.5 GAL</td> </tr> <tr> <td>Batch Status: Completed</td> <td>Mix Total: 149.9 GAL</td> <td>Acres: 15.0</td> </tr> </tbody> </table>		PRODUCT (EPA ID)	RATE	TOTAL	Water	9.1 GAL/Acre	135.7 GAL	Atrazine 90DF (19713-76)	0.50 GAL/Acre	7.6 GAL	Parallel (66222-87)	1.50 Pints/Acre	2.8 GAL	Durango DMA (62719-556)	28.00 OZ/Acre	3.3 GAL	Status (7969-242)	4.00 OZ/Acre	0.5 GAL	Batch Status: Completed	Mix Total: 149.9 GAL	Acres: 15.0
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Status (7969-242)	4.00 OZ/Acre	0.5 GAL																				
Batch Status: Completed	Mix Total: 149.9 GAL	Acres: 15.0																				

QuickDraw Max - Run Screen

FARM: Johnson FIELD: 16-14S-12E RECIPE: Corn Preplant 2014

Water: 932.9 GAL, 0.0 GPM
PRELOAD VOLUME: 100.0 GAL

Atrazine 4L: 16.7 GAL, 0.0 GPM
Durango DMA: 16.7 GAL, 0.0 GPM
Surestart: 16.7 GAL, 0.0 GPM
NO PRODUCT: 0.0 GAL, 0.0 GPM

BATCH ID: 003 - 010101 BATCH: 1000.0 GAL PRESSURE: 0.7 PSI
ACTUAL: 0.1 GAL BATCH TIME: 0.0 MIN

MANUAL PRODUCTS: 1

MANUAL CONTROLS START MENU SCREEN

QuickDraw Max - Job Screen

PRELOAD VOLUME: 100.0 GAL

FARM: Johnson FIELD: 16-14S-12E RECIPE: Corn Preplant 2014

TEMP: 82.0 °F WIND DIR & SPD: SW 8.0 MPH

PRODUCT NAME	RATE	ORDER	PRE RINSE	PROD VOLUME	TOTAL
Carrier: Water	14.0 GPA			932.9 GALLONS	
Tote #1: Atrazine 4L	1.00 QT/AC	2	0 SEC	16.7 GAL	16.7 GALLONS
Tote #2: Durango DMA	32.00 OZ/AC	4	3 SEC	16.7 GAL	16.7 GALLONS
Tote #3: Surestart	2.00 PT/AC	3	3 SEC	16.7 GAL	16.7 GALLONS
Tote #4: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Tote #5: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Tote #6: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Man Add #1: AMS	17.00 lbs/100	1	0 SEC	170.0 LBS	17.0 GALLONS
Man Add #2: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Man Add #3: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Man Add #4: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Man Add #5: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS

CALCULATION MODE: Volume & App Rate TOTAL ACRES: 66.7 TOTAL VOLUME: 1000.0 GAL APPLICATION RATE: 15.0 GPA

Edit Recipe Run

QuickDraw Max - Calculation Mode: Volume and App Rate

PRELOAD VOLUME: 100.0 GAL

FARM: Johnson

FIELD: 16-14S-12E

RECIPE: Corn Preplant 2014

TEMP: 82.0 °F

WIND DIR & SPD: SW 8.0 MPH

PRODUCT NAME	RATE	ORDER	PRE RINSE	PROD VOLUME	TOTAL
Carrier: Water	14.0 GPA				653.0 GALLONS
Tote #1: Atrazine 4L	1.00 QT/AC	2	0 SEC	11.7 GAL	11.7 GALLONS
Tote #2: Durango DMA	32.00 OZ/AC	4	3 SEC	11.7 GAL	11.7 GALLONS
Tote #3: Surestart	2.00 PT/AC	3	3 SEC	11.7 GAL	11.7 GALLONS
Tote #4: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Tote #5: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Tote #6: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Man Add #1: AMS	17.00 lbs/100	1	0 SEC	119.0 LBS	11.9 GALLONS
Man Add #2: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Man Add #3: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Man Add #4: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Man Add #5: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS

CALCULATION MODE: Volume & App Rate

TOTAL ACRES: 46.7

TOTAL VOLUME: 700.0 GAL

APPLICATION RATE: 15.0 GPA

Buttons: Edit Recipe, Run

QuickDraw Max - Calculation Mode: Area and App Rate

PRELOAD VOLUME: 100.0 GAL

FARM: Johnson

FIELD: 16-14S-12E

RECIPE: Corn Preplant 2014

TEMP: 82.0 °F

WIND DIR & SPD: SW 8.0 MPH

PRODUCT NAME	RATE	ORDER	PRE RINSE	PROD VOLUME	TOTAL
Carrier: Water	14.0 GPA				587.8 GALLONS
Tote #1: Atrazine 4L	1.00 QT/AC	2	0 SEC	10.5 GAL	10.5 GALLONS
Tote #2: Durango DMA	32.00 OZ/AC	4	3 SEC	10.5 GAL	10.5 GALLONS
Tote #3: Surestart	2.00 PT/AC	3	3 SEC	10.5 GAL	10.5 GALLONS
Tote #4: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Tote #5: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Tote #6: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Man Add #1: AMS	17.00 lbs/100	1	0 SEC	107.1 LBS	10.7 GALLONS
Man Add #2: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Man Add #3: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Man Add #4: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS
Man Add #5: NO PRODUCT	0.00 GPA	0	0 SEC	0.0 GAL	0.0 GALLONS

CALCULATION MODE: Area & App Rate

TOTAL ACRES: 42.0

TOTAL VOLUME: 630.0 GAL

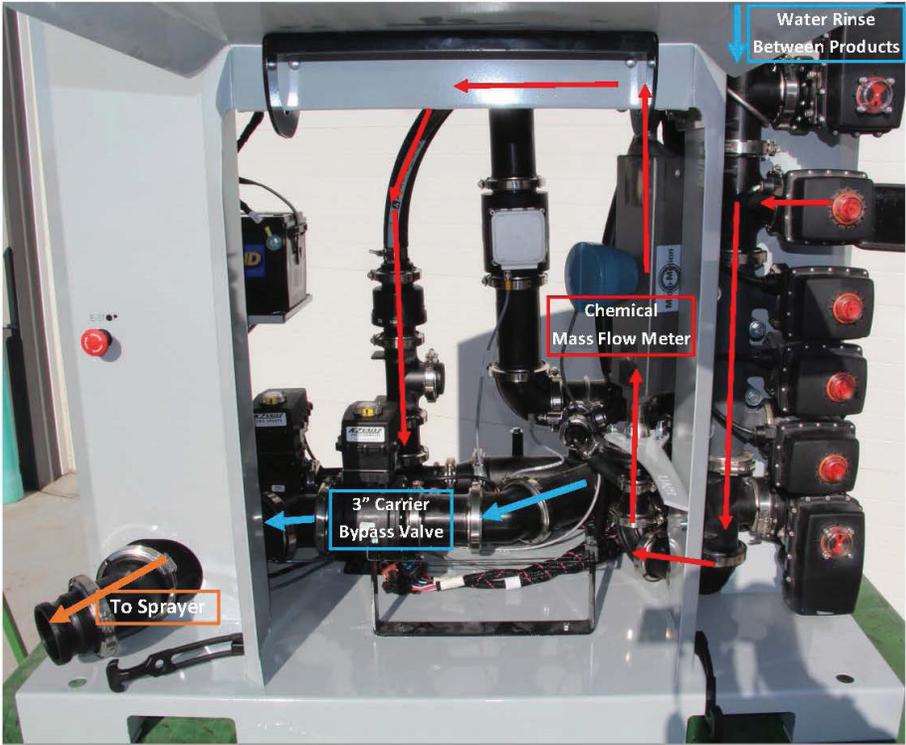
APPLICATION RATE: 15.0 GPA

Buttons: Edit Recipe, Run

QuickDraw Max - Product Flow

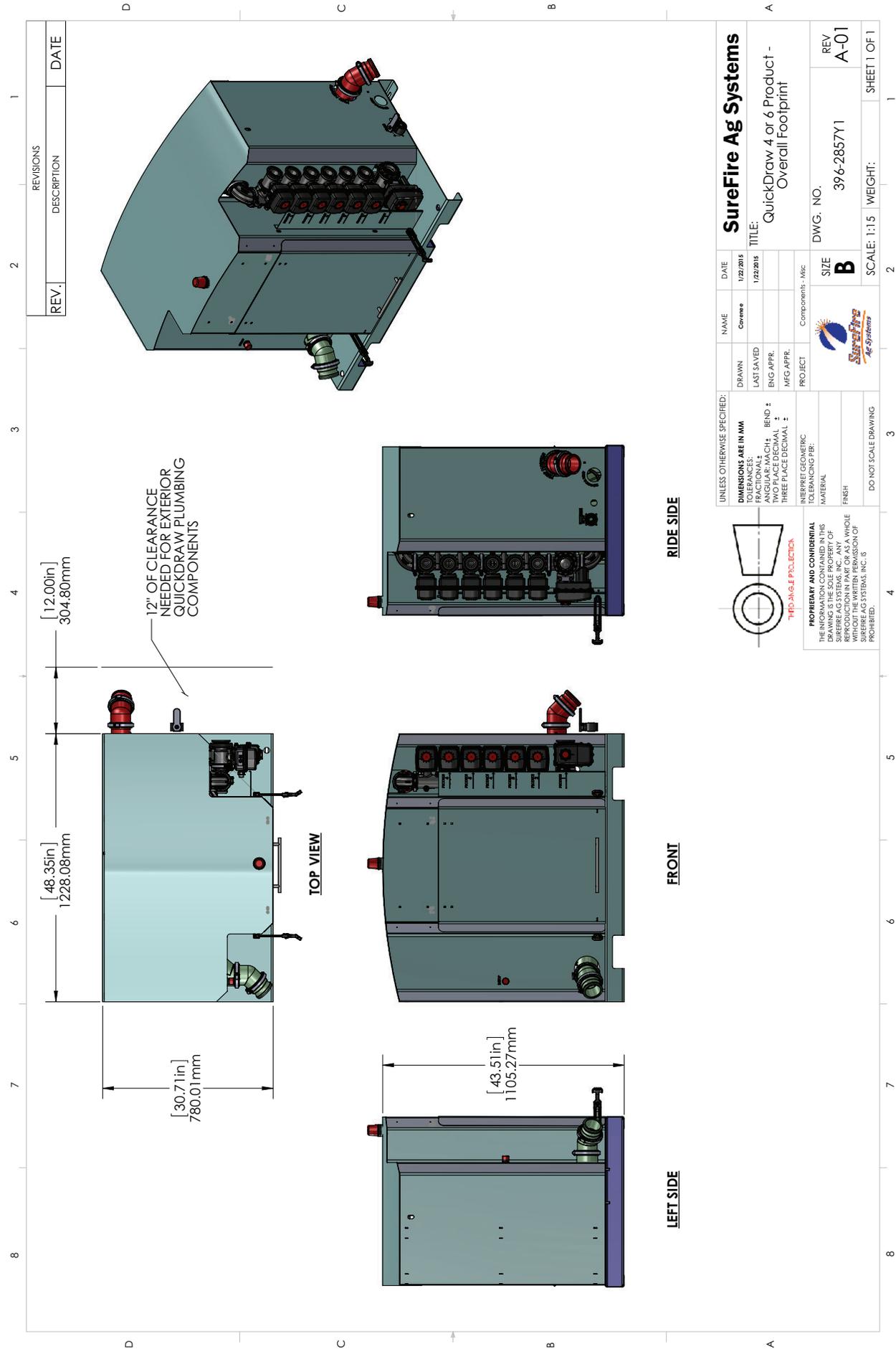


Rear View



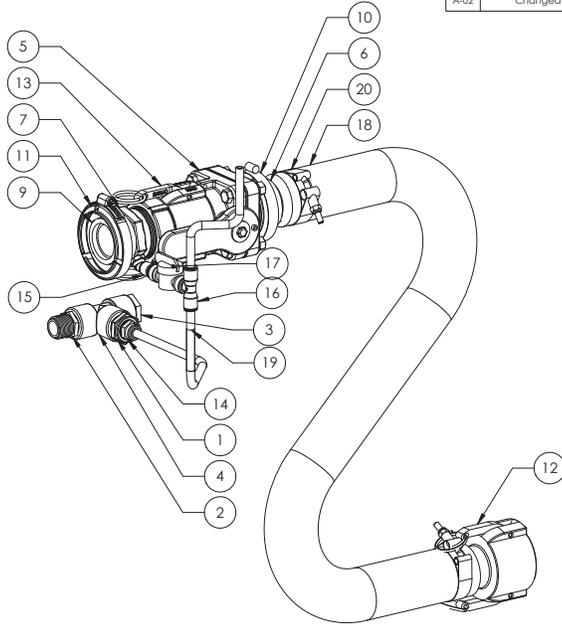
Front View

QuickDraw Max - Dimensioned Drawing



QuickDraw Connection Kits

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	100-075050RB	3/4" MPT x 1/2" FPT Reducer Bushing	1
2	100-075NIP-SH	3/4" Short Poly Nipple	1
3	100-075PLUG	3/4" Pipe Plug	1
4	100-075TEE	3/4" Poly Tee	1
5	102-200VSFCF	200 Series Manifold x 2" Male Quick Coupler Std Port Valve	1
6	105-200BRB	2" Manifold x 2" HB	1
7	105-220MPT-025	2" Full Port Manifold x 2" MPT with 1/4" Tapped Hole	1
8	105-150G	1 1/2" EPDM Gasket	1
9	105-200G-H	(FOR FC220s) 2" EPDM Manifold Gasket for 220 Series Manifold Fittings	1
10	105-FC200	2" Manifold Clamp	1
11	105-FC220	2" Full Port Manifold Clamp	1
12	106-200C	2" Female Coupler x 2" HB	1
13	106-200D	2" Female Coupler x 2" FPT	1
14	113-06-038050	QC to MPT - 3/8" QC x 1/2" MPT	1
15	113-16-038025-45	3/8" QC x 1/4" MPT (Nickel Plated Brass) - 45 Degree	1
16	113-21-038038038	3/8" QC x 3/8" QC x 3/8" Stem TEE	1
17	113-50-038038	Valve - 3/8" QC x 3/8" QC	1
18	280-200-ENF-0002	2" Enforcer Fertilizer Solution Hose	1
19	281-038	3/8" OD Tube - 24"	1
20	350-TC231	T-Bolt Hose Clamp - 2.31 - 2.62" Diameter (fits 2" Enforcer)	2



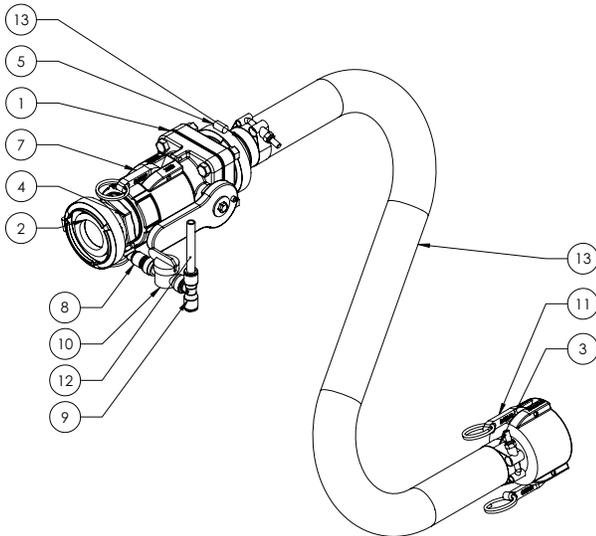
REVISIONS		
REV.	DESCRIPTION	DATE
A-01	Original Drawing	6/18/2015
A-02	Changed to 2" Enforcer Hose	2/26/2016

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	SureFire Ag Systems	
DIMENSIONS ARE IN MM		DRAWN	Cedric Green		6/18/2015
TOLERANCES:		LAST SAVED			4/4/2014
FRACTIONAL: ±		ENG APPR.			
ANGULAR: MACH ±		MFG APPR.			
BEND ±		PROJECT	Spray Tender		
TWO PLACE DECIMAL ±		INTERPRET GEOMETRIC TOLERANCING PER:			
THREE PLACE DECIMAL ±		MATERIAL			
FINISH		SIZE	B	DWG. NO. 606-01-400150	
DO NOT SCALE DRAWING		SCALE: 1:4	WEIGHT:	REV A-02	

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Third Angle Projection

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	102-200VSFCF	200 Series Manifold x 2" Male Quick Coupler Std Port Valve	1
2	105-150G	1 1/2" EPDM Gasket	2
3	350-TC181	T-Bolt Hose Clamp - 1.81 - 2.06" Diameter (fits 1 1/2" Enforcer or AG200)	2
4	105-200MPT-025	2" Manifold x 2" MPT (Tapped)	1
5	105-FC200	2" Manifold Clamp	2
6	105-200150BRB	2" Manifold X 1-1/2" Barb	1
7	106-200D	2" Female Coupler x 2" FPT	1
8	113-16-038025-45	3/8" QC x 1/4" MPT (Nickel Plated Brass) - 45 Degree	1
9	113-21-038038038	3/8" QC x 3/8" QC x 3/8" Stem TEE	1
10	113-50-038038	Valve - 3/8" QC x 3/8" QC	1
11	106-200150C	2" Female Coupler x 1-1/2" HB	1
12	281-02-038	Bulk 3/8" OD Poly Tubing - 6" Lengths	1
13	280-150-ENF-0002	1-1/2" Enforcer Fertilizer Solution Hose	1



REVISIONS		
REV.	DESCRIPTION	DATE
A-01	Original Drawing	9/2/2016

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	SureFire Ag Systems	
DIMENSIONS ARE IN MM		DRAWN	Cedric Green		09/2/2016
TOLERANCES:		LAST SAVED			9/2/2016
FRACTIONAL: ±		ENG APPR.			
ANGULAR: MACH ±		MFG APPR.			
BEND ±		PROJECT	Spray Tender		
TWO PLACE DECIMAL ±		INTERPRET GEOMETRIC TOLERANCING PER:			
THREE PLACE DECIMAL ±		MATERIAL	Steel		
FINISH		SIZE	B	DWG. NO. 606-01-400200	
DO NOT SCALE DRAWING		SCALE: 1:4	WEIGHT:	REV A-01	

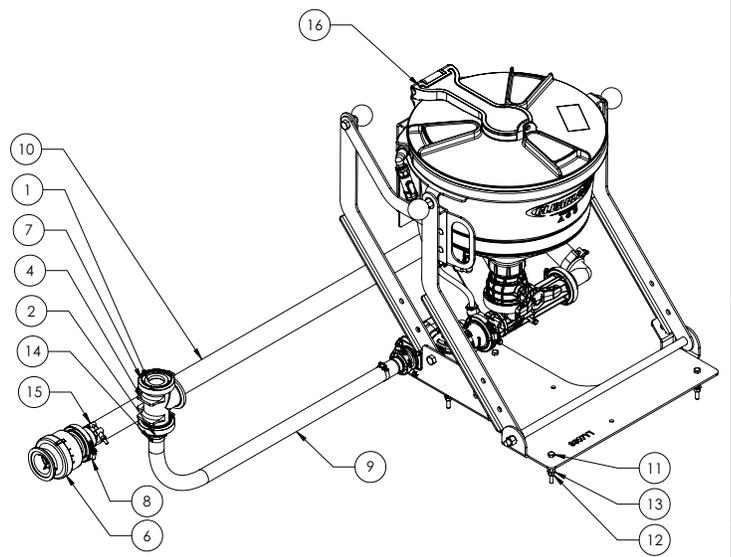
PROPRIETARY AND CONFIDENTIAL
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Third Angle Projection

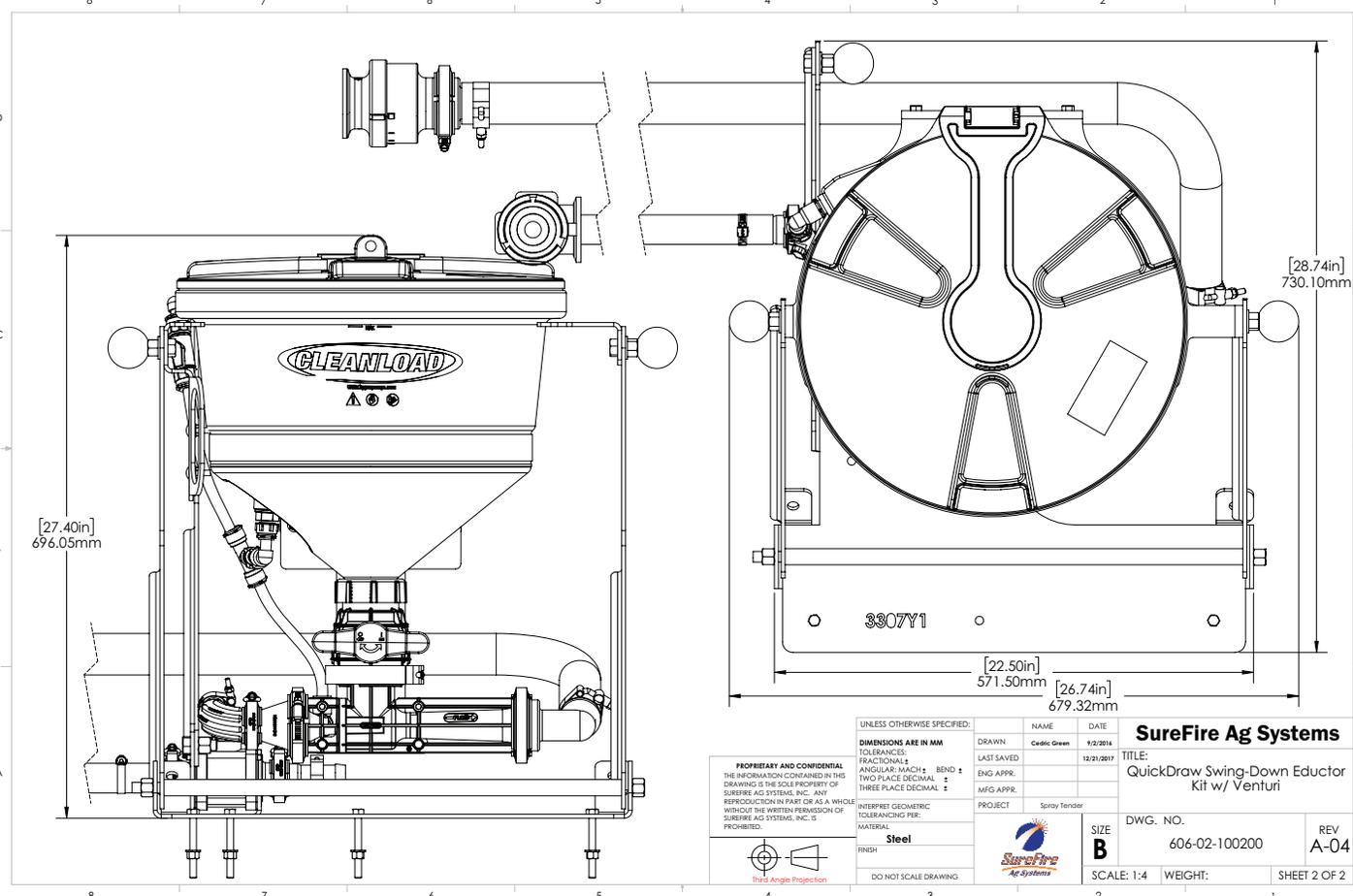
QuickDraw Swing Down Inductor Kit

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	105-150G	1 1/2" EPDM Gasket	2
2	105-200100BRB	2" Flange x 1" Hose Barb	1
3	105-200G-H	(FOR FC220s) 2" EPDM Manifold Gasket for 220 Series Manifold Fittings	1
4	105-200TEE	2" Flanged Tee Fitting	1
5	105-220150BRB	2" Full Port Manifold x 1 1/2" HB	1
6	105-220CV	2" Manifold Check Valve	1
7	105-FC200	2" Manifold Clamp	2
8	105-FC220	2" Full Port Manifold Clamp	1
9	280-100-AG200-Eductor	1" AG200 Hose	15
10	280-150-ENF-Swing Eductor	1-1/2" Enforcer Fertilizer Solution Hose	15
11	300-050300-5	5/16" x 3" G5	4
12	321-05	5/16" Nylock Nut	4
13	330-05	5/16" Flat Washer	4
14	350-1608	1" Hose Clamp	2
15	350-TC181	T-Bolt Hose Clamp - 1.81 - 2.06" Diameter (fits 1 1/2" Enforcer or AG200)	2
16	476-3313Y1	QuickDraw Venturi Eductor BOM	1

REVISIONS		
REV.	DESCRIPTION	DATE
A-01	Original Drawing	9/2/2016
A-02	Added Dimension Sheet	3/8/2017
A-03	Added Dimension Sheet	3/8/2017
A-04	Changed QuickDraw Cabinet Rinse Plumbing	12/21/2017



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	<p>INTERPRET GEOMETRIC TOLERANCING PER: MATERIAL: Steel</p>	<p>PROJECT: Spray Tender</p>	
	<p>FINISH: DO NOT SCALE DRAWING</p>	<p>SIZE B</p>	



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	<p>INTERPRET GEOMETRIC TOLERANCING PER: MATERIAL: Steel</p>	<p>PROJECT: Spray Tender</p>	
	<p>FINISH: DO NOT SCALE DRAWING</p>	<p>SIZE B</p>	

QuickDraw Advantage for Bob Jones Farms

Prepared by
Smith Implement



Sprayer Information

Spraying Speed (mph)	13
Boom width (ft)	120
Field efficiency (%)	85%
Sprayer tank size (gallons)	1,000
Application rate (GPA)	10
Optimal spraying hours per day	8
Total acres sprayed per year	25,000
Custom Application Rate (\$/acre)	\$5.50
Sprayer trade depreciation (\$/hour)	\$125
Sprayer operator labor cost (\$/hour)	\$25
QuickDraw model & investment price	6 product - \$29,950

QuickDraw Advantage every day

	Current	with QuickDraw
Time to tender sprayer (minutes)	25	10
Acres sprayed per day in optimal conditions	770	1014
Full sprayer loads per day in optimal conditions	7	10
Total time tendering sprayer per day (minutes)	175	100

QuickDraw Advantage by reducing sprayer hours

	Current	with QuickDraw
Total Spray and Fill Time per year (hours)	260	197
Annual Time Savings (hours)		63
Annual Trade Depreciation	\$ 32,464	\$ 24,651
Annual Reduction in Trade Depreciation		\$ 7,813
Annual Labor Cost	\$ 6,493	\$ 4,930
Annual Labor Cost Reduction		\$ 1,563
Annual Cost Savings		\$ 9,375
Payback time for QuickDraw investment (years)		3.2
Return on QuickDraw investment over 5 years		17.1%

QuickDraw Advantage by spraying more acres

	Current	with QuickDraw
Total Spray and Fill Time per year on current acres (hours)	260	197
Annual Time Savings (hours)		63
% of time savings applied to spraying more acres		50%
Additional Acres sprayed due to time savings		3993
Additional Revenue (or cost reduction if spraying your own acres that were previously custom sprayed)		21,962
Payback time for QuickDraw investment (years)		1.4
Return on QuickDraw investment over 5 years		67.8%



DO YOU NEED THE PRODUCTIVITY OF A



Reducing fill time from 20 minutes to 10 minutes is the same as increasing boom size from 120' to 175'

The QuickDraw™ Automated Spray Tender mixes and loads 1200 gallon sprayer batches in 10 minutes or less.

- Additional Features**
- Increased accuracy of measurement
 - Reduced exposure to chemicals
 - Data record of precisely what is loaded in every batch you spray.

Harvest without a GRAIN CART...

Is like spraying without a **QuickDraw**



QuickDraw User Achieves EXTREME Sprayer Productivity 850 Acres - 17 Loads Mixed - 20 GPA - 15 Hours

Sterling Heritage Farms - July 24, 2018 - Double Crop Liberty Soybeans
Case 3330 - 90' Boom - 1000 Gallon Tank
Avg. Pumping Time/Load: 6.9 Minutes -- Avg. Stopped Time/Load: 11.8 Minutes



Steve Arnold, Johnson, KS



"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, Illinois



"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."

Mass Meter Chemical Measurement
Eliminate Chemical Exposure
Record of Every Load Mixed



www.surefireag.com

2019 QuickDraw Pricing

SureFire Ag Systems

Effective January 1, 2019

QuickDraw Max

		Retail
605-100410	QuickDraw Max Venturi 4 Product	\$ 27,560
605-100610	QuickDraw Max Venturi 6 Product	\$ 30,390
605-100620	QuickDraw Max Venturi 6 Product - 2, 2" Full Port Valves	\$ 31,390
605-200410	QuickDraw Max Pump Suction 4 Product	\$ 27,560
605-200610	QuickDraw Max Pump Suction 6 Product	\$ 30,390
605-200620	QuickDraw Max Pump Suction 6 Product - 2, 2" Full Port Valves	\$ 31,390

QuickDraw Lite

604-050110	QuickDraw Lite Venturi - 6 Manual Valves	\$ 15,990
604-050310	QuickDraw Lite Venturi - 3 Automatic & 3 Manual Valves	\$ 18,575
604-050610	QuickDraw Lite Venturi - 6 Automatic Valves	\$ 20,605
604-050100	QuickDraw Lite - Pump Suction - 6 Manual Valves	\$ 15,990
604-050300	QuickDraw Lite - Pump Suction - 3 Automatic & 3 Manual Valves	\$ 18,575
604-050600	QuickDraw Lite - Pump Suction - 6 Automatic Valves	\$ 20,605

Connection Kits

606-01-400200	1.5" Connection Kit - With Rinse Manifold (Less 1.5")	\$ 181
606-01-400250	2" Connection Kit - With Rinse Manifold (Less 2" Hose)	\$ 196

Accessories

290-05-SP-3350-G13H	John Blue, 13 HP Honda, 3" Cast Iron Wet Seal Transfer Pump	\$ 2,385
606-02-100200	Swing Down Eductor Kit with Venturi (15 Gallon)	\$ 1,895
606-02-100400	Chem-Blade Eductor Kit (30 Gallon) -without bypass	\$ 1,908
606-02-100500	Chem-Blade Eductor Kit (30 Gallon) - with bypass	\$ 2,275
606-05-200100	Auxillary 15" Display	\$ 4,260
208-05-2414Y1	Pump Stop Harness (Gas Engine or Electric Motor)	\$ 134
208-05-2431Y1	Pump Start Harness (Electric Motors Driven Only)	\$ 57
208-05-2430Y1	QuickDraw electric Start Gas Engine 12 Volt Supply Harness	\$ 120
208-05-3944Y1	QuickDraw Gas Engine Push Button Start	\$ 134
606-03-200100	QuickDraw Carrier Tank Refil Kit (Fill Carrier Tank with QD Transfer Pump, less 3" Hose)	\$ 1,319
606-01-400300	QuickDraw Product Hose Rinse Kit	\$ 113
606-06-100200	QuickDraw Plant/Stationary Installation Stand	\$ 864
606-06-100300	IBC Shuttle Tie Down Kit - 2 Tie Down Brackets	\$ 87
606-06-100100	QuickDraw 5" Lift Kit (Raises QD 5" for Low Trailers)	\$ 332
604-200300	QuickDraw Lite - Pump Stop Kit	\$ 375
604-200100	QuickDraw Lite - 3" Carrier Flow Meter Kit	\$ 2,219

Power Accessories

206-02-2208Y1	2 Pin - 20' 480 MP Extension Cable-8 AWG	\$ 81
206-02-2209Y1	2 Pin - 30' 480 MP Extension Cable-6 AWG	\$ 130
206-02-2210Y1	2 Pin - 40' 480 MP Extension Cable-6 AWG	\$ 187
208-05-4022Y1	Optima Battery - Red Top Dry Cell	\$ 385
208-02-2191Y1	Power Supply - 25Amp Fused 110VAC to 12VDC with 480 MP Tower Connector	\$ 226

Extended Harness for Mounting User Interface Outside QuickDraw Max (Special Order 4-6 Week Lead Time)

208-05-3273Y1	10' Extended Harness Up Charge	\$ 1,150
208-05-3228Y1	25' Extended Harness Up Charge	\$ 1,150

Remote Connectivity (QuickDraw Max Only)

606-05-300100	QuickDraw Remote Conectivity Gateway (1 Time Hardware Purchase)	\$ 1,650
606-05-300200	1 Year Connection Service Subscription (Annual Data Subscription)	\$ 500

QuickDraw Upgrade Kits

606-07-100100	QuickDraw Max - 4 Product to 6 Product Standard Upgrade (2 add. 1" Valves)	\$ 3,000
606-07-100300	QuickDraw Max - 4 Product to 6 Product 2, 2" Full Port Valves	\$ 3,800
606-07-100400	QuickDraw Max - 6 Product Standard to 6 Product 2, 2" Full Port Valves	\$ 1,000
604-300100	QuickDraw Lite - 3 Automatic Valve Upgrade Kit (From All Manual Valves)	\$ 3,000
604-300200	QuickDraw Lite - 6 Automatic Valve Upgrade Kit (From All Manual Valves)	\$ 5,000
604-300300	QuickDraw Lite - 3 Automatic Valve Upgrade Kit (From 3 Auto & 3 Man Valves)	\$ 2,000
	Upgrade QuickDraw Lite to QuickDraw Max	