

# **2020 Value Priced Metering Systems**™

- Simple Diaphragm Pumping Design
- No Externally Exposed Packings or Seals
- Excellent Durability with Abrasive and Moisture Cure Materials
- Automated, Manual, and Batch Metering Modes









#### **Superior Flow Control and Precision**

The Autoquip 2020 Metering Mix System is designed to provide superior control of single and plural component ratios and flow rates. Our fluid metering system uses sequencial batch metering to accurately dispense and mix resin and hardener on-ratio regardless of the varying flow rates seen in real world paint applications.

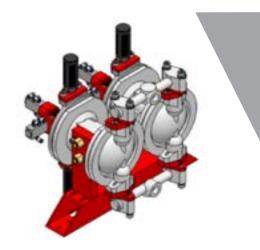
The **mix manifold** is designed to optimize mix quality and keep material separated until entry to the integrator, minimizing internal volume by receiving Resin (Component A) and Hardener (Component B) continuously.

This precise and reliable electronic multi component system can be used for a broad range of solvent borne, waterborne, and acid catalyzed materials. The system is easily set up and operated with a 4" touch screen, with system parameters and usage data easily available.

Optional flow meters offer additional ratio assurance with built-in system safeguards provides process feedback.

Coatings and adhesive applications often start and stop requiring the use of pneumatic reciprocating pumps to move the fluids. Each pump direction change destabilizes the fluid flow requiring additional line regulation and surge stabilizers to smooth the flow.

Autoquip patent pending Collaborative<sup>™</sup> pumping technology employs a parallel pumping technique to maintain constant pressure without additional hardware in the fluid line. Collaborative<sup>™</sup> pump strokes are independent and overlap the pressure stroke to eliminate pulsations normally seen with pneumatic reciprocating pumps.



#### col•lab•o•ra•tive /kə'lab(ə)rədiv/

#### adjective

Produced or conducted by two or more parties working together. "collaborative research"

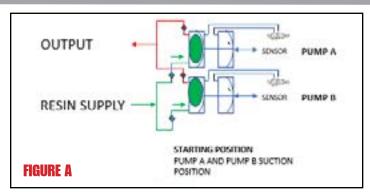
# The Collaborative Pumping Cycle

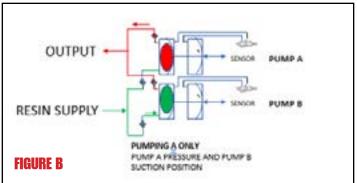
Collaborative pumps overlap to remove unwanted pressure drop. Figure A depicts the starting position where both pump chambers are filled with liquid, (green).

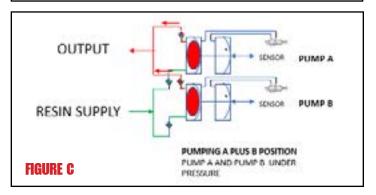
In Figure B, Pump A is displacing fluid generating pressure and flow (red). At a predetermined location, Figure B, Pump B is pressurized overlapping the pumping stroke of Pump A.

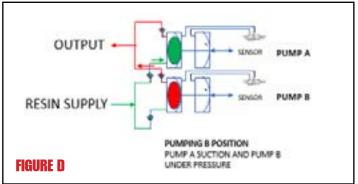
"Pump Collaboration"
Collaboration completes when Pump A retracts (Figure C) refilling the Pump A chamber for the next overlap.

In Figure D, Pump B produces pressure and flow until again a predetermined location and the start of the Pump B plus Pump A "Collaboration".

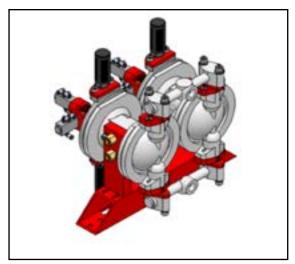




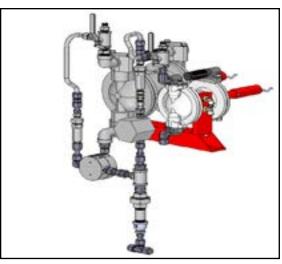




#### **MODELS THAT FIT THE APPLICATION**



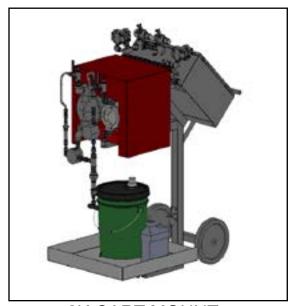
**1K WALL MOUNT** 



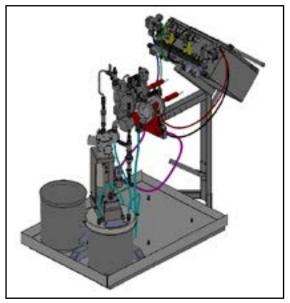
**2K WALL MOUNT** 



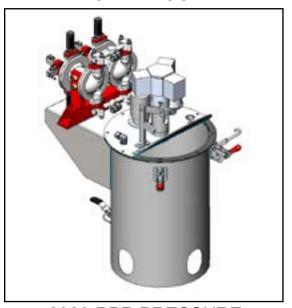
1K CART MOUNT



2K CART MOUNT



**2K AGITATED BATCH** 



2020-PPR PRESSURE POT REPLACEMENT

## 2020™ Single Component 1K Systems



- Collaborative<sup>™</sup> Pump Technology delivers extraordinarily stable single component flow rates.
- The Pump bodies are available in 316 Stainless, Aluminum, and Polypropylene wetted materials
- Pump diaphrams are available in Buna, Santoprene, Kynar, EPDM, PTFE
- Flow rates to 4 gallon per minute.

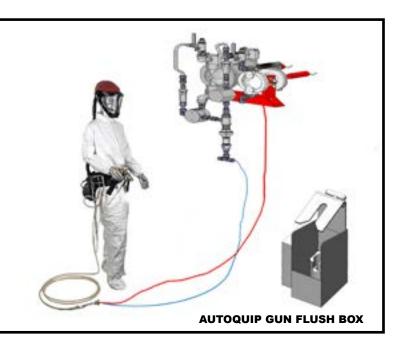


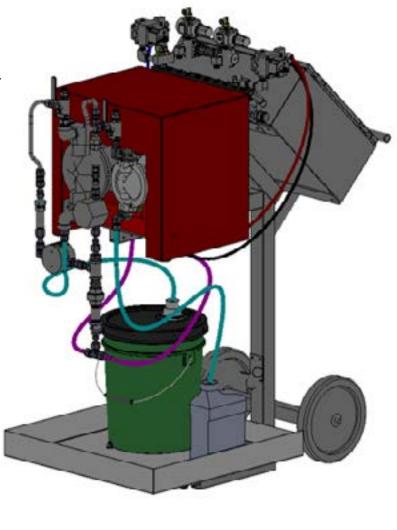
#### Superior ROI

Atomizing coatings with improper process inputs reduces work waste material. Repeatable atomizing air and fluid flow are crucial to the development of smooth and repeatable finish layers. The lower the flow rate less variance is allowed. The Autoquip 2020 System provides a scalable/ repeatable flow stream to the atomizer. The resulting ROI is substantial. Start with at least a 15% transfer efficiency increase over an open loop air piloted fluid regulator system and 10% increase in FPY "First Pass Yield".

### Dual Component 2K Systems

- Collaborative<sup>™</sup> Pump Technology delivers extraordinarily stable dual component flow rates.
- · No exposed seals to fail from aggrosine catalysts.
- The latest in plural component equipment design
- · Built to work on the first day
- Ratios to 20:1 Flow Rates to 4000 cc/minute





#### Working well with manual operators

Autoquip offers Multi-Component Mixing Systems in a wide variety of configurations. Autoquip hand gun systems are especially flexible.

## TRACK IT DOWN "Use Autolog and Autoreport to automate the VOC process"

SYSTEM STATUS

VOLUME DATA

PRODUCTION DATA



AutoReport software uses the data acquired by the AutoLog software package and user information entered into a spreadsheet program to generate full featured environmental reports.

AutoReport is designed to sub-divide by chemical composition each gallon of paint and hardener into V.O.C. and non V.O.C usage totals. AutoReport can be programmed to provide sub and grand totals for all V.O.C producing liquids passing through the Autoquip Multi-Component System along with non- V.O.C.'s totals and subtotals by color, and material type.

#### **Key Benefits:**

- Automated method of collecting and reporting HAPS emissions.
  - Much more accurate.

RESIN, CATALYST AND SOLVENT TOTALS

> AUTOREPORT SOFTWARE

TABULATE AND REPORT DATA



				ELECTRONIC CONTROL	PNEUMATIC CONTROL
PNEUMATIC CONTROL		#	SELECT 1		
ELECTRONIC CONTROL		*			
PUMP 1	PUMP 2				
DISPENSE SIZE	DISPENSE SIZE				
10 CC	10 CC		SELECT 1	*	#
50 CC	50 CC			*	#
100 CC	100 CC			*	#
170 CC	170 CC			*	#
PUMP MATERIAL					
ALUMINUM	ALUMINUM		SELECT 1	*	#
316 STAINLESS	316 STAINLESS			*	#
POLYPROPYLENE	POLYPROPYLENE			*	#
GUN AIR FLOW SWITCH FOR MANUAL APPLICA- TIONS			REQUIRED	*	
SECOND AIR FLOW SWITCH FOR SECOND MANUAL GUN			OPTION	*	
(1) MANUAL GUN REGULATOR KIT			OPTION SELECT 1	*	#
(2) MANUAL GUN(S) REGULATOR KIT				*	#
MANUAL AIR AND FLUID REGULATORS, FLUID AND AIR HOSES					
FLUID FLOW CONTROL			OPTION - SELECT 1		
GUN GOVERNOR					
FEEDBACK SENSORS					
PD FLOW METER	PD FLOW METER		OPTION - SELECT 1	*	
ULTRASONIC FLOW METER	ULTRASONIC FLOW METER			*	
OUTLET PRESSURE SENSOR	OUTLET PRESSURE SENSOR		OPTION - SELECT 1	*	
PURAL COMPONENT MIXING CHAMBER			OPTION FOR 2K-2020	*	#
50 CC RESIN	60 CC INTEGRATOR		SELECT 1	*	#
100 CC RESIN	80 CC INTEGRATOR			*	#
100 CC RESIN	100 CC INTEGRATOR			*	#
170 CC RESIN	120 CC INTEGRATOR			*	#
170 CC RESIN	140 CC INTEGRATOR			*	#
RATIO TEST KIT			OPTION	*	#
WALL MOUNTING BRACKET			OPTION SELECT 1	*	#
ROLLING CART				*	#
ROLLIN G CART WITH MATERIAL TRAY				*	#
SUCTION STORAGE "Y" BRACKET					
PUMP 1 SUCTION LINE "1/2"			SELECT 1	*	#
PUMP 1 SUCTION LINE "5/8"				*	#
PUMP 1 SUCTION LINE "3/4"				*	#
PUMP 2 SUCTION LINE "1/2"			SELECT 1	*	#
PUMP 2 SUCTION LINE "5/8"				*	#
PUMP 2 SUCTION LINE "3/4"				*	#



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