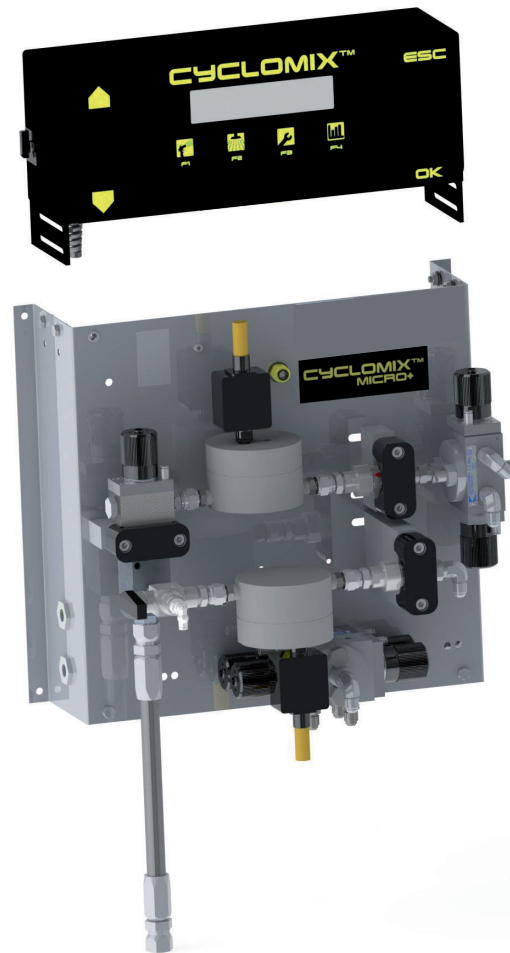


# CYCLOMIX™

# MICRO



## MIXING MACHINE FOR 2 COMPONENT PAINTS

### AVAILABLE KITS

- Solvent Air Chop Kit
- Fluid Management Kits
- Ratio Test Kit
- 2 Color Expansion Kit
- Flush Box Controller Kit
- E-Stat Safety Kits
- 2<sup>nd</sup> Catalyst Kits
- Data Link - Network Systems

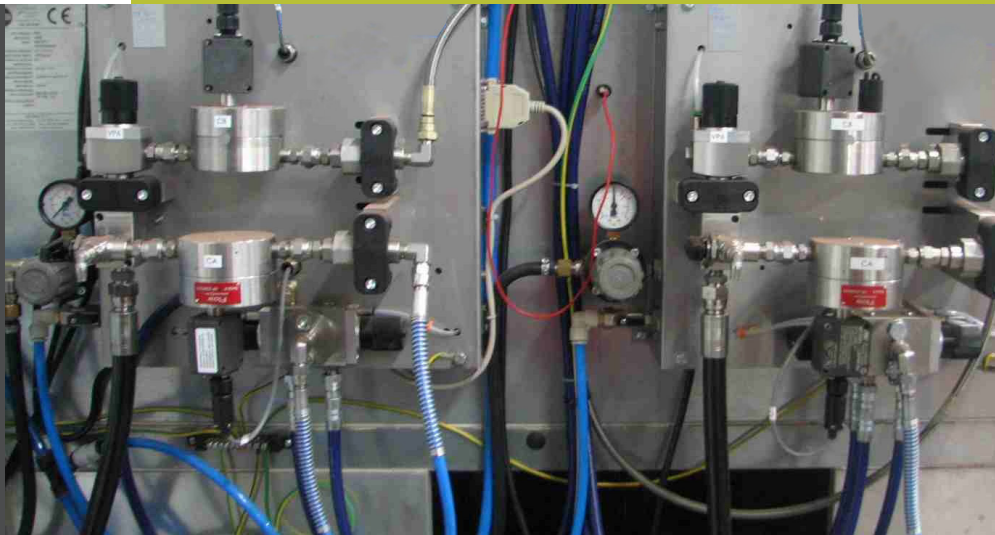
**Bond | Protect | Beautify**

**SAMES**  **KREMLIN**

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# AVAILABLE CONFIGURATIONS

## CYCLOMIX™ MICRO



### TECHNICAL DATA

Power supply	230V / 115V - 10W
Air supply pressure (minimum)	58 psi / (4 bar)
Fluid pressure	29 - 2537 psi / (2 - 175 bar)
Weight	55 lbs. / (25 kg)
Fluid passages	Stainless steel and HDPE
Mixing ratio	Single component and 0.6:1 to 20:1
Mixing accuracy depending on the material	± 1%
Mixed fluid output	3.4 - 67.6 oz/mn / (100 - 2,000 cc/mn)
Fluid viscosity (cps)	30 - 5,000 cps
Height	6.8" (17.3 cm) - Control cabinet - 15.7" (40 cm) - Mixing plate
Width	14.4" (36.6 cm) - Control cabinet - 16" (40.7 cm) - Mixing plate
Depth	4.3" (11.1 cm) - Control cabinet - 11.8" (30 cm) - Mixing plate

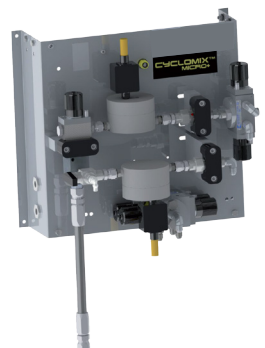
## CYCLOMIX™ TECHNOLOGY

The CYCLOMIX™ MICRO allows the user to dose, mix and continuously deliver two-component paints or adhesives.

The mixing process works by catalyst injection into a constant flow of base material. The catalyst is injected in the center of the stream at a very high frequency. The CYCLOMIX™ MICRO does not require an additional pre-mix chamber. The static mixer insures perfect mixing, even if both components have significantly different viscosities.

The CYCLOMIX™ MICRO dosing system technology is automatically controlled by 2 precision flow-meters. The CYCLOMIX™ MICRO allows you to work without supervision, providing the operator total working security, especially with short pot-life materials (≥ 15 mn).

DESCRIPTION	USA PN:	Canadian PN (CSA Approved)
CYCLOMIX™ MICRO PH, 1+1 Catalyst Flush	997-108-000	668-661-951
CYCLOMIX™ MICRO PH, 3+1 Catalyst Flush	997-108-100	668-661-953
CYCLOMIX™ MICRO, 1+1	155-660-900	668-661-900
CYCLOMIX™ MICRO, 1+1, Catalyst Flush	155-660-911	668-661-911
CYCLOMIX™ MICRO, 3+1	155-660-930	668-661-930
CYCLOMIX™ MICRO, 3+1, Catalyst Flush	155-660-933	668-661-933
REMOTE MOUNTING ACCESSORY		
Remote Booth Mounting Kit	155-660-340	



Remote Booth  
Mounting Kit

### SOLVENT AIR CHOP KIT

The Solvent Air Chop kit allows for:

- Faster color changes
- Reduced solvent usage - up to 50%
- Reduced VOC's
- Better flushing reduces chance of color contamination between color changes

Each time the flush is enabled the solvent air chop cycle starts.



#### SOLVENT AIR CHOP CYCLE:

- Solvent push (2-30 sec)                      Air (0-5 sec)                      Solvent (0-5 sec)
- Air & Solvent is repeated until CYCLOMIX™ MICRO's flush volume is reached

PN: 668-660-510 Consists of:

DESCRIPTION	Qty
Solvent Air Chop control box	1
RS5 valve (PH)	1
Check valve 1/4" NPT	1
Tee 1/4" NPT fitting (SS)	1
10' 5/32" tubing	1
Misc. fittings	1
Supply air line safety valve - (prevents material from backing up into air line)	1

### RATIO TEST KIT

The Ratio Test kit with flow control allows the operator to do quick ratio tests without adjusting pressures or disassembling static mixers.

3-way valve assembly permanently mounts to the mixing block outlet.

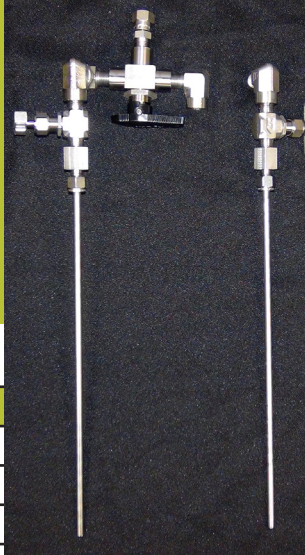
The base flow valve assembly replaces the tubing fitting and plastic tubing on the existing 3-way valve of the manifold.

PN: 668-660-900 Consists of:

DESCRIPTION	QTY
Tube, 1/4" OD SS 304	2
Fitting, 1/4 NPT(F) X 1/4 tube comp	2
Valve, needle, SS 316 1/4 NPT (M)	2
Elbow, M/F street, SS 316, 1/4 NPT	4
Valve, SS 316, 3-WAY, 1/4 NPT (F) 2500 PSI	1
Fitting, SS 316, swivel 1/4" NPT (M) X #5JIC (F)	1
Fitting, 1/4" NPT (M) X #5JIC (M) HEX, SS 316	1

#### OPTIONAL EQUIPMENT

Graduated cylinder 250 cc - P/N #82-2788-01	1
Graduated cylinder 500 cc - P/N #055-729-532	1

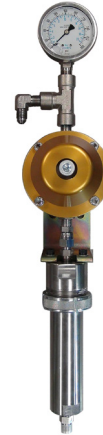


## FLUID MANAGEMENT KITS

The Fluid Management kits control inbound fluid pressure for both catalyst and base materials. Fluid regulators make it easy to adjust pressure for precise ratio control.

Airmix® or Low Pressure (LP) regulator kits are available with or without filters.

**NOTE:** PH kits available in Airmix® only.



Airmix® Regulator with Filter



Airmix® Regulator

Airmix® - Fluid Management Kits	With Filter		Without Filter		PH Unit with filter		PH Unit without filter	
	PN: 668-660-950	Qty	PN: 668-660-951	Qty	PN: 668-660-954	Qty	PN: 668-660-955	Qty
<b>DESCRIPTION</b>								
Airmix® Gold Top Regulator 150-1740 psi (10-120 bar)	X	2	X	2	X	1	X	1
Airmix® Gold Top PH Regulator 150-1740 psi (10-120 bar)					X	1	X	1
Gauge 0-2000 psi (0-138 bar)	X	2	X	2	X	2	X	2
Flow through filter c/w #6 filter screen	X	2			X	2		
Inbound & Outbound #5 JIC (M) fittings	X	4	X	4	X	4	X	4
Mounting bracket	X	2	X	2	X	2	X	2
3' hose w/#5 JIC (F) fittings	X	2	X	2	X	2	X	2

Low Pressure - Fluid Management Kits	With Filter		Without Filter	
	PN: 668-660-952	Qty	PN: 668-660-953	Qty
<b>DESCRIPTION</b>				
Low Pressure Fluid Regulator 30-200 psi	x	2	x	2
Gauge 0-300 psi (20 bar)	x	2	x	2
Flow through filter c/w #6 filter screen	x	2		
Inbound & Outbound #5 JIC (M) fittings	x	4	x	4
Mounting bracket	x	2	x	2
3' hose w/#5 JIC (F) fittings	x	2	x	2

### 2 COLOR EXPANSION KIT

The 2 Color Expansion kit allows for the addition of 2 colors to the CYCLOMIX™ MICRO 3 color machine.

The addition of the 2 colors is based on the CYCLOMIX™ MICRO's 3<sup>rd</sup> color being selected and the small pneumatic panel directs the 3<sup>rd</sup> color valve pilot signal to standard 3<sup>rd</sup> valve or the 4<sup>th</sup> and 5<sup>th</sup> valves dependent upon the selection.



**PN: 668-660-960** Consists of:

DESCRIPTION	Qty
Rotary switch control box for 3, 4 or 5 color selection	1
CTM intermediate valve	1
Set of two tie-rods, 3 module	1
1/4" NPT x #5 JIC elbow fitting	2
1/4" NPT plugs	2
10' 5/32" tubing	1

**NOTE 1:** The recipe including the ratio must be the same for color 3, 4 & 5

**NOTE 2:** Colors 3, 4 & 5 will report under the same A3 consumption file

### 2<sup>ND</sup> CATALYST KITS

The 2<sup>nd</sup> Catalyst kit allows the end user to configure the CYCLOMIX™ MICRO for a second catalyst based on the color selected. Any 1 or 2 colors can be configured to select the 2<sup>nd</sup> catalyst valve.

With the kit properly installed there is no additional involvement from the operator to select the correct catalyst. Operate the CYCLOMIX™ MICRO as normal.



DESCRIPTION	Standard Unit		Qty
	PN: 668-660-002	PH Unit PN: 668-660-003	
Air logic module	X	X	1
CTM intermediate valve	X		1
CTM intermediate valve PH		X	1
Set of two tie-rods, 2 modules	X	X	1
1/4" NPT x #5 JIC fitting	X	X	2
1/4" NPT plugs	X	X	2
5' 5/32" tubing	X	X	1
Misc. tubing fittings	X	X	1

**NOTE 1:** Kit must be used with the 3 color and catalyst flush option

**NOTE 2:** Catalyst 1 & 2 will report under the same B consumption file

**WARNING:** Both catalysts must be compatible - check with material suppliers



## E-STAT SAFETY KITS

The E-Stat Safety kits allow the use of an electrostatic hand gun to be used with the CYCLOMIX™ MICRO. This kit safely disables the high-voltage during the flush and prime cycle.

The controller is a simple pneumatic circuit that disables the atomization air flow/pressure or the “High Voltage” enable contact electrical circuit to prevent the operation of the Electrostatics while solvent is present. It works in conjunction with any CYCLOMIX™ MICRO solvent valve pilot signal.

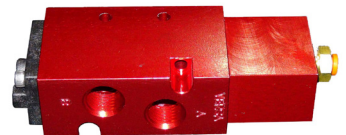


**WARNING:** Used with SAMES KREMLIN guns only

DESCRIPTION	PN: 668-660-520	PN: 668-660-521	Qty
KMX (product range)	X		
MIV (product range)	X		
<b>**NANOGUN</b> (product range)		X	
Spraymium™ (product range)	X		
Control box w/palm switch, red indicator	X	X	1
* Atomizing air valve	X		1
Pressure switch with fitting		X	1
10' 5/32" tubing	X	X	1
“OR” Valve	X	X	1
Misc. tubing fittings	X	X	1



Pressure switch



Atomizing air valve

**\*ORDERING OPTIONS:**  
**Atomization Air Valve**  
**PN: 65-2419-00 comes standard w/o fittings -**

To order the valve with fittings refer to table

ATOMIZING AIR VALVE ASSEMBLIES	PN:
Valve, With 1/4 NPS Fittings	65-2419-01
Valve, With 3/8 NPS Fittings	65-2419-02
Valve, With 5/16 OD Tube Fittings	65-2419-03
Valve, With 3/8 OD Tube Fittings	65-2419-04

## FLUSH BOX CONTROLLER KIT

The Flush Box Controller kit allows:

- Operator freedom to perform other tasks during prime and flushing cycle
- Allows material savings by optimizing prime function
- Pot life management
- Safer environment for the operator

The Flush Box Controller kit is a pneumatically operated timed circuit to trigger the gun in the flush box in conjunction with a CYCLOMIX™ MICRO operation. The timer is activated by any color or solvent valve air signal.



**NOTE:** Flush Box Kits are ordered separately.

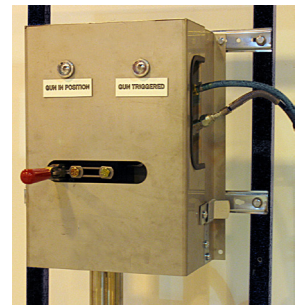
**PN: 668-660-500** Consists of:

DESCRIPTION	Qty
Flush box control	1
* Atomizing air valve	1
Shuttle valve assembly	1
25' 5/32" tubing	1

**Flush Box Kits assemblies are ordered separately;**

DESCRIPTION	PN:
Flush box, equipped for M22	668-721-200
*** Flush box, equipped for KMX	668-721-300
** Flush box, equipped for <b>NANOGUN</b>	668-721-600
*** Flush box, equipped for Spraymium™	668-721-400
Flush box, equipped for Xcite™	668-721-500

**\*\*\*NOTE:** Electrostatic Flush Box Kits come with E-Stat Safety Kits



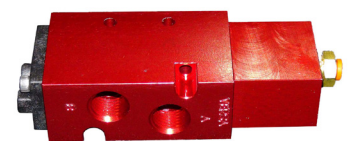
ATOMIZING AIR VALVE ASSEMBLIES	PN:
Valve, With 1/4 NPS Fittings	65-2419-01
Valve, With 3/8 NPS Fittings	65-2419-02
Valve, With 5/16 OD Tube Fittings	65-2419-03
Valve, With 3/8 OD Tube Fittings	65-2419-04

**\*ORDERING OPTIONS:**

Atomization Air Valve PN: 65-2419-00 comes standard w/o fittings - To order the valve with fittings refer to table

**NOTE:**

Mounted between the CYCLOMIX™ MICRO and atomizing air regulator



Atomizing air valve

# REPORTING

## CYCLOMIX™ MICRO

### CYCLOMIX™ MICRO – DATA LINK

A program can be added to the CYCLOMIX™ MICRO as an option to collect the consumption data from multiple CYCLOMIX™ MICRO's on a network. The program change allows each CYCLOMIX™ MICRO to have an unique address and each CYCLOMIX™ MICRO will now respond to commands over a network to send their individual consumption information to a main PC operating the Consumption Data Link software.

The Consumption Data Link software will allow the end user to view each CYCLOMIX™ MICRO's consumption data by CYCLOMIX™ MICRO, by component and by color, tabulate the information, summarize the information, reset each CYCLOMIX™ MICRO's consumption totals, and export the information to a text (\*.txt or \*.csv) file. The text file with its information then can be opened or imported into other spreadsheet or database programs.

NOTE: Contact your local SAMES KREMLIN representative for more information.

#### MICRO DATA LINK CONSUMPTION CLIPBOARD

Table 1; Running Component Totals

COLOR 1	COLOR 2	COLOR 3	COLOR 4	COLOR 5	COLOR 6	COLOR 7	COLOR 8	COLOR 9	TOTAL VOL
321	321	0	0	0	0	0	0	0	673
A SOLV. 1	A SOLV. 2	A SOLV. 3	B COMP 1	B COMP 2	B COMP 3	B SOLV. 1	B SOLV. 2	B SOLV. 3	TOTAL SOL
0	0	0	31	0	0	0	0	0	0
VOC C1	VOC C2	VOC C3	VOC C4	VOC C5	VOC C6	VOC C7	VOC C8	VOC C9	TOTAL VOC
227	227	0	0	0	0	0	0	0	454

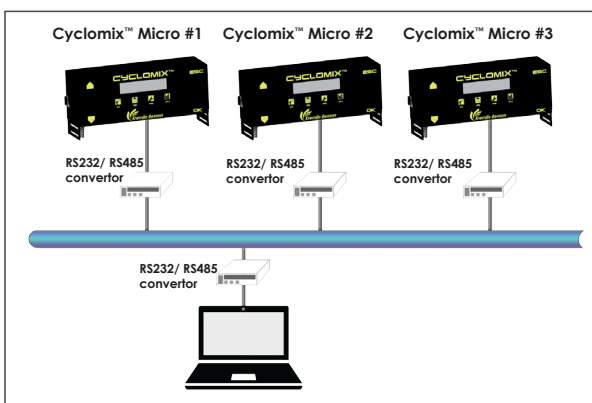
17 hr

Table 2; Micro Raw Data

Number of Micro's : 25 Selected 25 Polled

M#	A1 VOL	A1 VOC	A2 VOL	A2 VOC	A3 VOL	A3 VOC	AS VOL	B VOL	BS VOL	VOC TOT
1	37	26					0	3	0	
2	123	87					0	12	0	
3	173	122					0	17	0	
4	148	105					0	14	0	
5	161	114					0	16	0	
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0
10	0	0					0	0	0	
11	0	0					0	0	0	
12	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0
16	0	0					0	0	0	
17	0	0					0	0	0	
18	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0

The polled information can be viewed directly in the Consumption Clipboard or viewed as a Microsoft Excel workbook.



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