# CYCLOMIX<sup>™</sup>

# 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
- 2nd Catalyst Kits
- Data Link Network Systems



### **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

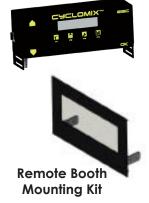
# **CYCLOMIX™ TECHNOLOGY**

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<sup>TM</sup> MICRO dosing system technology is automatically controlled by 2 precision flow-meters. The CYCLOMIX<sup>TM</sup> MICRO allows you to work without supervision, providing the operator total working security, especially with short pot-life materials ( $\geq 15$  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	







# **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



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



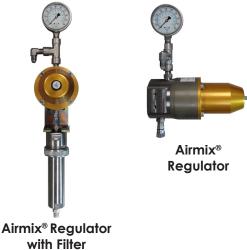


# **FLUID MANAGEMENT KITS**

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.



	With I	Filter	Without	t Filter	PH U with f		PH withou	Unit ut filter
Airmix® - Fluid Management Kits DESCRIPTION	668-660.950	Oh	668-660-951	No	668-660.954	NO	668-660.955	Oh
Airmix® Gold Top Regulator 150-1740 psi (10-120 bar)	Х	2	Х	2	Х	1	Х	1
Airmix® Gold Top PH Regulator 150-1740 psi (10-120 bar)					Х	1	Х	1
Gauge 0-2000 psi (0-138 bar)	Х	2	Х	2	Х	2	Х	2
Flow through filter c/w #6 filter screen	Х	2			Х	2		
Inbound & Outbound #5 JIC (M) fittings	Х	4	Х	4	Х	4	Х	4
Mounting bracket	Х	2	Х	2	Х	2	Х	2
3' hose w/#5 JIC (F) fittings	Х	2	Х	2	Х	2	Х	2

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



# OPTIONS CYCLOMIXT MICRO

# 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 3rd color valve pilot signal to standard 3rd 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	
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

# **2ND CATALYST KITS**

The  $2^{nd}$  Catalyst kit allows the end user to configure the CYCLOMIX<sup>TM</sup> MICRO for a second catalyst based on the color selected. Any 1 or 2 colors can be configured to select the  $2^{nd}$  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	PH Unit	Ohr
DESCRIPTION	PN: 668-660-002	PN: 668-660-003	Qty
Air logic module	X	Х	1
CTM intermediate valve	X		1
CTM intermediate valve PH		X	1
Set of two tie-rods, 2 modules	X	Х	1
1/4" NPT x #5 JIC fitting	X	Х	2
1/4" NPT plugs	X	Х	2
5' 5/32" tubing	X	X	1
Misc. tubing fittings	X	Х	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





# **AVAILABLE CONFIGURATIONS**

# **E-STAT SAFETY KITS**

The E-Stat Safety kits allow the use of a 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<sup>TM</sup> 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		
**NANOGUN (product range)		Х	
<b>Spraymium</b> ™ (product range)	X		
Control box w/palm switch, red indicator	X	X	1
* Atomizing air valve	Х		1
Pressure switch with fitting		X	1
10' 5/32" tubing	X	X	1
"OR" Valve	Х	Х	1
Misc. tubing fittings	X	Х	1



Pressure switch



Atomizing air valve

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

To oder 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



# OPTIONS CYCLOMIXT MICRO

# 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



Atomizing air valve

#### **\*ORDERING OPTIONS:**

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

#### **NOTE:**

Mounted between the CYCLOMIX™ MICRO and atomizing air regulator





# CYCLOMIX™ MICRO – DATA LINK

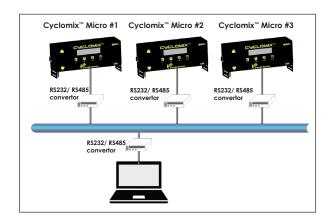
A program can be added to the CYCLOMIX™ MICRO as an option to collect the consumption data from multiple CYCLOMIX™ MICRO's on a network. The program change allows each CYCLOMIX™ MICRO to have an unique address and each CYCLOMIX™ MICRO will now respond to commands over a network to send their individual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

	C1 VOC	DLV. 2 A SO 0 0 0 C C2 VOO 27 0 Raw Data A1 VOC	DLV. 3 B CC D 3 C C3 VO	31	0	COMP 3	B SOLV.	1 B S	0 0LV. 2	0 B SOLV. 3	67	All the same of th		
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VOC 0 227  Table 2  M# 1 2 3 4	2; Micro A1 VOL 37	Raw Data	C C3 VO	C C4 VO	C C5				JEW. Z	D SULV. 3	ITOTA	L SOL	17 h	r
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Table 2 M# 1 2 3	2; Micro A1 VOL 37	Raw Data		0	0	VOC C6	VOC C7	VO	C C8	VOC C9	TOTAL		8	3
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The polled information can be viewed directly in the Consumption Clipboard or viewed as a Microsoft Excel workbook.





www.sames-kremlin.com

#### **SAMES KREMLIN Inc.**

#### North America Headquarters

45001 5 Mile Road | Plymouth, Michigan 48170 Toll: (800)573-5554 | Tel: (734)979-0100 | Fax: (734)927-0064

Canada Branch 931 Progress Avenue, Unit 7 | Scarborough, Ontario M1G 3V5 Toll: (800)450-0655 | Tel: (416)431-5017 | Fax: (416)431-9171