



# Model 610 Automatic Applicator Controller



The Model 610 Automatic Applicator is designed to dispense small deposits of paste brazing and soldering alloys or other viscous materials. Each paste deposit is precisely measured, ensuring controlled filler metal costs without waste.



## Features

- ❑ Precision digital timer and display
- ❑ Program dispensing times by using push buttons
- ❑ Unique teaching function allows fast setup of time cycles
- ❑ Operates under timed or manual mode
- ❑ High flow solenoid valve
- ❑ Vacuum "pullback" with fine adjustment for low viscosity materials
- ❑ Footswitch and syringe stand included
- ❑ Syringe stand holds both 12cc and 30cc cartridges
- ❑ 9-pin, D-shell connector on rear of unit permits control by an external system
- ❑ CE certified

## Requirements/Specifications

- ❑ **Electrical:** 115 or 230 VAC, 50/60 Hz., user selectable
- ❑ **Air Supply:** 1/4" female pipe thread inlet for clean, unlubricated shop air at 50 psi (optional filter/separator available)
- ❑ **Dimensions/Weight:** 3.0"H x 1.75"W x 5.75"D, 5.1 lbs.
- ❑ **Vacuum:** High efficiency, transducer design
- ❑ **Timer Range:** .004 – 99.9 sec.
- ❑ **Repeat Accuracy:** ± 0.01%
- ❑ **Cycle Rate:** >600/minute
- ❑ **Accessory Kit:** (Sold separately) includes:
  - (1) 3-foot plastic air line with cartridge adapter
  - (3) 12cc or 30cc syringe cartridges
  - (3) interchangeable needles with orifice sizes of .030", .046" and .055" (special needle sizes available)



## FUSION INCORPORATED

4658 E. 355<sup>th</sup> St., Willoughby, OH 44094  
 Phone 1-800-626-9501 • (440) 946-3300  
 Fax (440) 942-9083 • e-mail: info@fusion-inc.com  
 Web: www.fusion-inc.com



# Model 710 Automatic Applicator Controller



(Dispenser gun, paste reservoir, & mounting stand sold separately)

The Model 710 Automatic Applicator is designed to control Fusion's line of dispenser guns for paste brazing/soldering alloys. This compact unit features adjustable time and pressure controls to provide paste deposit sizes ranging from small dots to continuous stripes of any length. Each paste deposit is precisely measured, ensuring controlled filler metal costs without waste.



## Features

- Precision digital timer and counter
- Timer programmed with push buttons
- Unique teaching function allows fast setup of gun timer
- Operates in automatic/timed or manual/continuous modes
- Air pressure to paste reservoir shuts down after 30 minutes of inactivity; pressure is restored by actuating the foot switch
- Applicator includes foot switch and power cord (paste reservoir, modular stand, dispenser gun and hoses supplied separately to fit the application)
- 9-pin, D-shell connector on rear of unit permits control by an external system
- CE certified

**Note: 710 unit controls one or more dispenser guns operating simultaneously; independent control of two or more guns requires multiple units.**

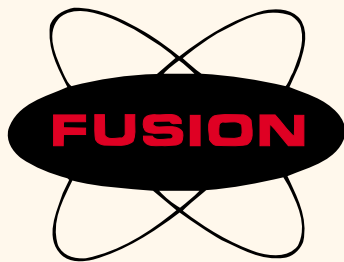
## Requirements/Specifications

- **Electrical:** 115 or 230 VAC, 50/60 Hz., user selectable
- **Air Supply:** ¼" female pipe thread inlet for clean, unlubricated shop air at 60 psi minimum (optional filter/seperator available)
- **Initiation:** Momentary footswitch
- **Memory:** Non-volatile memory to store last timer setting
- **Timer Range:** Programmable .001 – 99.9 seconds
- **Cycle Rate:** >600/minute
- **Tank Pressure Output:** 1 – 100 psi
- **Gun Pressure Output:** Preset to 45 psi
- **Dimensions/Weight:** 3.0"H x 11.75"W x 5.75"D, 6.0 lbs.



## FUSION INCORPORATED

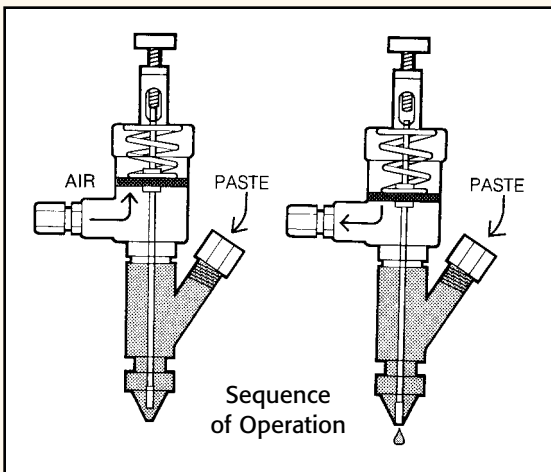
4658 E. 355<sup>th</sup> St., Willoughby, OH 44094  
 Phone 1-800-626-9501 • (440) 946-3300  
 Fax (440) 942-9083 • e-mail: info@fusion-inc.com  
 Web: www.fusion-inc.com



# Applicator Equipment & Accessories

## Applicator Guns

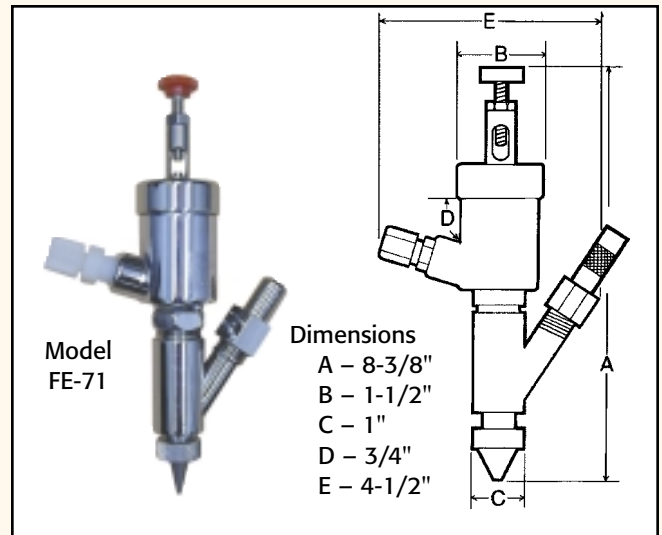
The Model FE-71 Applicator Gun is compatible with Fusion's Model 710 Control Unit, and is machine integration capable. Dispense premeasured deposits or stripes of Fusion Paste Alloy. Exclusive positive displacement principle ensures repeat accuracy for daily, trouble-free production.



**Fig. 1** – Compressed air from control panel is introduced to upper gun body, forcing circular piston and attached piston rod upward against coil spring. Pressurized paste alloy (from reservoir) fills vacant space between piston rod tip and nozzle orifice.

**Fig. 2** – As timer de-energizes, compressed air is exhausted, and coil spring returns piston and rod to closed position. Piston rod tip displaces paste alloy through nozzle orifice and seals opening until next cycle. Precise deposit size is obtained by adjusting control panel timer, paste pressure, and length of piston rod stroke.

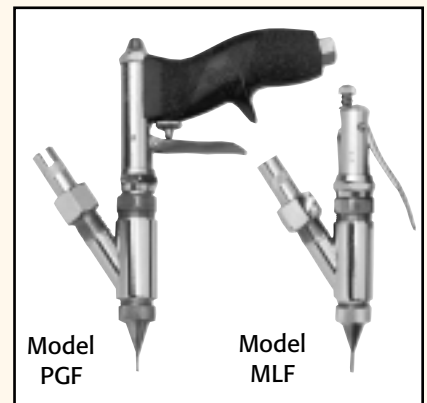
NOTE: Other gun styles available for specialized applications.



## Manual Applicator Guns

### Use with Model 500M Applicator

Fusion hand-held applicator guns offer a flexible approach to jobs where full automation is impractical, yet close control of alloy usage is desired. Typical candidates include part styles with widely varying joint sizes and locations. Operation is similar to Model FE-71, except that piston rod is retracted manually by an actuating lever. Pressurized paste alloy continues to flow as long as lever is depressed, dispensing dots or stripes of varying size at the operator's discretion. Available in hand lever (Model MLF) or molded plastic grip (Model PGF) configurations. Note: Other styles available for specialized applications.



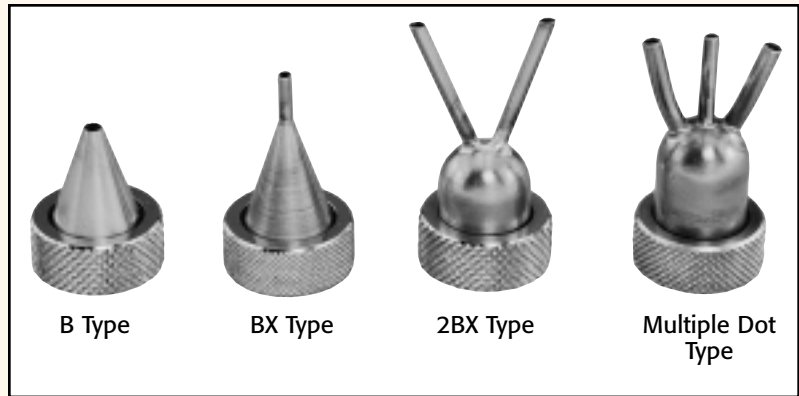
## Gun Service Policy

Fusion's exclusive gun service policy ensures trouble-free performance when dispensing Fusion Paste Alloys. Periodically, applicator guns may be returned to Fusion for inspection and reconditioning at no charge for parts or labor. (If key gun components have been abused, a charge for parts only will be assessed). the acquisition of a spare gun is suggested, to permit rotating factory service without interrupting production.

See Reverse Side

# Gun Nozzles

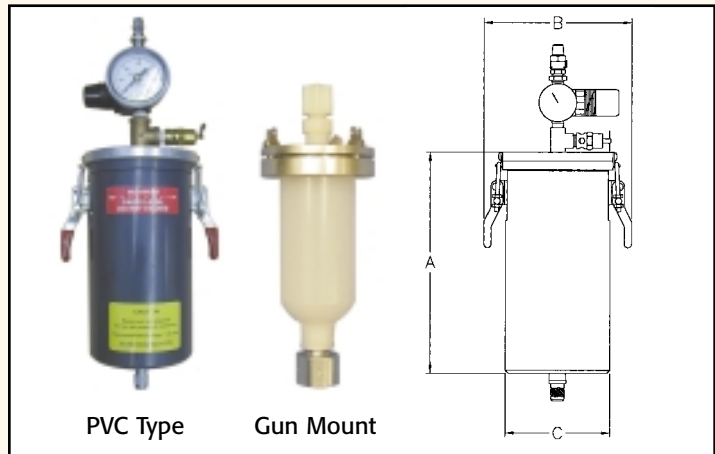
To further control the size and location of paste alloy deposits, Fusion offers a wide range of applicator gun nozzles. Machined from high-grade stainless steel, the nozzles attach quickly to all manual or automatic applicator guns by means of a screw-on collar. Variations include single or multiple-dot styles, blunt nose or extension for hard-to-reach joints. Standard orifice is .055" (No. 54 drill size). Optional sizes range from .041" to .136" inside diameter.



# Paste Reservoirs

Designed for use with Fusion 710 and 500M Applicators, these quick-loading reservoirs are sized to meet paste alloy needs for an entire production shift. All units (except gun mounted cartridge) are machined from high impact PVC to withstand continuous exposure to paste alloy fluxes and solvents. Quick-disconnect air inlet, pressure gauge, pressure pop-off valve, paste hose adapter, and mounting bracket are included.

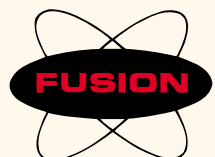
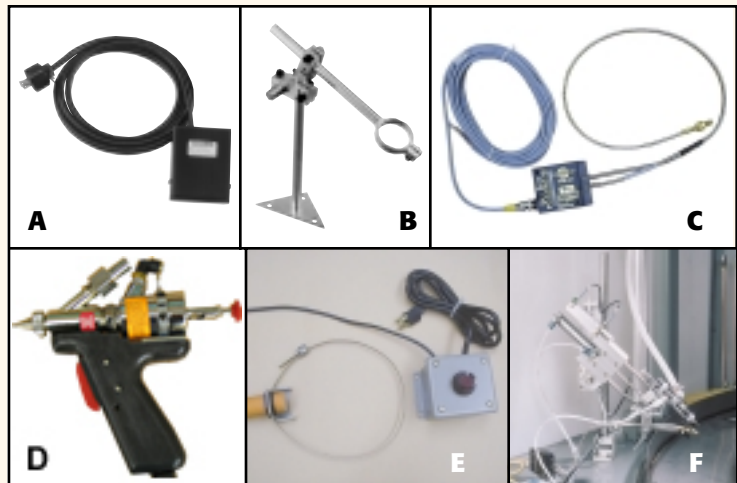
For best results, 1/2 pint or larger reservoirs should be installed within 18" of the applicator gun. Convenient gun mounted cartridge may be attached directly to the gun body for testing, short runs, or quick changeover to a new paste alloy.



Reservoir Size	Approx. Paste Alloy Capacity (by Weight)	Dimensions in Inches		
		A	B	C (Dia.)
1/4 PINT (gun mount)	10 oz.	—	—	—
1/2 PINT (PVC)	25 oz.	5-3/4	5-3/4	4
1 PINT (PVC)	50 oz.	8	5-3/4	4
1 QUART (PVC)	100 oz.	9-1/2	6-3/8	4-1/2
1/2 GAL. (PVC)	200 oz.	13-1/4	6-3/8	4-1/2
1 GAL. (PVC)	400 oz.	14-3/4	10-1/2	6-5/8

# Options/Accessories

- A. **Foot Switch** for actuation of applicator guns. Light duty switch supplied complete with six foot cord and connector.
- B. **Gun Mounting Stand**. Includes triangular bracket and two swivels for adjusting gun in all three planes. Rod includes split-ring clamp for quick attachment of applicator gun.
- C. **Proximity Switch Gun Actuator**. Easily adapts to gun stand (item B) for mounting on or near applicator gun to sense part in place.
- D. **Pistol Grip Attachment** with limit switch trigger, for actuation of Fusion Applicator Guns. Permits complete gun mobility while making repeatable paste alloy deposits.
- E. **Low Paste Level Indicator**. Be forewarned when paste levels are running low. Proximity sensor mounted to reservoir actuates a visual signal. Can be retrofitted to existing Fusion applicators.
- F. **Modular Stand & Slide Mechanism**. For mounting applicator gun on existing brazing/soldering equipment. Pneumatic cylinder positions gun near part, then retracts after paste is applied. Consult factory for quotations.



## FUSION INCORPORATED

4658 E. 355th St., Willoughby, Ohio 44094  
 Phone 1-800-626-9501 • (440) 946-3300 • FAX (440) 942-9083  
 Web: www.fusion-inc.com • e-mail: sales@fusion-inc.com