

## **GEMINI 1:1 ADHESIVE SYSTEM**

### **NOTE:** OPERATOR RESPONSIBILITY

IT IS THE OPERATOR'S RESPONSIBILITY TO INSURE THAT THIS DISPENSING SYSTEM IS OPERATED SAFELY. LOCAL CODES AND OPERATING INSTRUCTIONS MUST BE FOLLOWED. EQUIPMENT OPERATOR'S SHOULD READ AND UNDERSTAND THE LOCAL CODES AND OPERATING INSTRUCTIONS BEFORE OPERATING THIS DISPENSING SYSTEM.

**AIR:** 100-120 PSI 12 CFM 3/8 minimum I.D. hose

**LUBRICATION:** Fill both material pump oil reservoirs half full with Dibutyl Phthalate

**MATERIAL TRANSFER:** (3 options)

1. **GRAVITY:** Open both valves below the material buckets to open the flow into the proportioning pumps.
2. **TRANSFER PUMPS:** Mount transfer pumps on the pails of adhesive. Increase the air regulator slowly to load the pump and transfer hose. Operating pressure will vary depending upon the temperature and viscosity of the adhesive. Normal pressures will be 40-70 PSI.
3. **RAMS WITH TRANSFER PUMPS:** Rams are supplied with drum units and some 5 gallon pail systems. Follow the ram/drum loading instructions provided. Normal ram air pressure can range from 30-80 PSI. The transfer pumps are mounted on the ram plates. These pumps can be run at the same pressures as stated above. 40-70 PSI.

**PRIMING:** This unit has been fluid pressure checked at the factory. After connecting all hoses, a small amount of the material pumped through the hoses will be contaminated with oil.

1. Remove the RTM2 nozzle from the dispensing valve/gun assembly. **All priming and daily flow testing is done with the nozzle removed.**
2. Connect the air supply.
3. Open the dispensing valve.
4. Slowly turn on the transfer pumps or valves.
5. Slowly turn on the main regulator on the main air motor--high enough only to operate the proportioning system.
6. Purge material through both hoses and dispensing valve until there is a solid flow of material.

## **GS MANUFACTURING**

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### **INITIAL DISPENSING OF ADHESIVE:**

1. ALWAYS MAKE SURE THE FACE OF THE RTM2 NOZZLE IS CLEAN BEFORE ATTACHING THE MIXING NOZZLE AND RETAINING NUT.
2. Attach the mixing nozzle and retaining nut.
3. Increase the air pressure on the proportioning system until the desired flow is obtained. The LW202R inserts can be changed in the RTM2 nozzle to further increase or decrease the flow of adhesive.
- 4a. **Purgeless nozzles must have the mixing nozzle removed before the material starts to gel.**
  - b. **Nozzles with air/solvent purge must be flushed before the material starts to gel.**

### **SHUT DOWN:**

1. Disconnect the air supply--DO NOT RELIEVE THE MATERIAL PRESSURE IN THE HOSES OR DISPENSING VALVE/GUN.
2. Remove the mixing nozzle and wipe the face of the RTM2 nozzle clean.

### **START UP:**

1. Connect air supply.
2. Open the dispensing valve to check for the flow of both materials.
3. Wipe off the face of the RTM2 nozzle and attach the mixing nozzle.

## **GEMINI 1:1 SPRAY SYSTEM**

### **NOTE: OPERATOR RESPONSIBILITY**

It is the operator's responsibility to insure that the Gemini is operated safely. Local codes and operating instructions must be followed. Equipment operators should read and understand the local codes and operating instructions before operating this spray system.

**AIR: 100-120 PI 20 CFM - 1/2" Supply Hose (minimum)**

**ELECTRICAL:** 240V 8.3 AMP Per Heater - 120V 16.6 AMP Per Heater (2000w)

**HOSES:** 120V 3 AMP Per Hose

**GUNS:** Refer to Gun Operation Manual

**PRIMING:** This unit has been fluid pressure checked at the factory. After connecting all hoses, a small amount of the material pumped through the unit will be contaminated with oil.

1. Remove the material hoses from the gun.
2. With the pickup hoses in the material, turn the air regulator on to approximately 20 PI or until the pumping starts to stroke. Purge both sides simultaneously until there is a solid flow of material. (If one side does not prime, open the by-pass valve under the material filter and continue to prime until material flows out the by-pass assembly.
  - 2A. Use transfer pumps (if supplied) to load the proportioning system.
3. Reattach the hoses to the gun.

### **SPRAYING:**

1. Turn on heaters and heated hose to the chemical suppliers recommended temperatures.
2. Adjust pump pressure and temperature controls to achieve a proper mix/fan of material.
3. Refer to gun operators manual.

**SHUT-DOWN:** REFER TO GUN OPERATORS MANUAL.

### **START-UP:**

1. Connect air supply.
2. Refer to gun operators manual.

### **MAINTENANCE:**

1. Fill oil cups on the fluid pumps 1/3 - 1/2 full of Dibutyl Phthalate. DO NOT USE ANY OIL UNLESS RECOMMENDED BY YOUR CHEMICAL SUPPLIER.
2. Clean material filter screens weekly. (Relieve fluid pressure before opening filters).

**SPECIAL NOTE:** The gun is basically an air pistol. The most important requirement for ease of operation is keeping the gun and nozzle parts CLEAN! Always make sure there is oil in the cups to lubricate the throat packings on the pumps. Consult your chemical supplier for shelf life of your material, as the unit might necessitate purging if not used.

**DUE TO THE MOISTURE SENSITIVITY OF URETHANE RESIN, IT IS IMPORTANT TO USE THIS MACHINE. CONTINUOUS USE (EVERY DAY) WILL CREATE LESS PROBLEMS THAT SPORADIC USE. IF YOU DO NOT USE THE UNIT DAILY, EVERY 2-3 DAYS CYCLE THE PUMPING SYSTEM TO RUN FRESH MATERIAL INTO THE PUMPS AND HOSES.**

## **FLUID REGULATORS**

Fluid regulators can be added to 1:1 dispensing units to control the speed of the proportioning pumps. (When using transfer pumps to feed the proportioner the system will run faster in the upward direction--fluid regulators will control the output delivery of material at a constant flow rate.)

The air regulator on the air motor that powers the proportioner is still used to control the pumping unit--the regulators will stabilize the speed of the proportioner.

If both materials being pumped are in the same viscosity range, then the regulators should be set approximately at the same outlet pressures. The regulators do not control the ratio--only the speed of delivery.

**Transfer Pump Pressure** - As high as required to move the material needed for the outbound flow rate. Start @ 30-40 PSI and increase if necessary.

**Main Air Motor Pressure** - When using fluid regulators, run 80-100 PSI

**Fluid Regulators** - 100-600 PSI