

ITW Futura Coatings

PLURAL COMPONENT EQUIPMENT REQUIREMENTS



Material Supply System Proportioning Pump Primary Heaters Heated Hose Assembly Spray Guns Recirculating Setup Startup & Shutdown

Typical 1:1 Ratio Setup



<u>Material Supply</u> <u>System</u>

Supplies the proportioning pumps with a positive flow of material.
2:1 ratio pumps are normally used.
Use 3/4" I.D. nylon lined hose rated at 500 psi.
In-line 30-60 mesh filters ("Y" filters)





Proportioning Pump

Uses a single air or hydraulic power source to drive 2 proportioning cylinders simultaneously. Produces fluid pressures of 1600-3500 psi. Typical is 2300 psi +. Produces fluid delivery up to 4 gpm.

Proportioner Pump



Primary Heaters

- Necessary to reduce and maintain material viscosity.
- Usually mounted on the proportioner and connected in-line after the proportioning pumps.
- Must be capable of raising the material to a tip temperature of 130-150°F.
- Heat is controlled by temperature sensing units in the hose.

Heated Hose Assembly

- 3/8"-1/2" diameter, nylon lined up to 310' max.
- 1/4" diameter air or solvent feed hose.
 Heat controlled at the proportioner.
 Insulated with flexible pipe insulation.



Two basic Types *Type 1*: Impingement mixing with mechanical or air purge. *Type 2*: Static mixer and solvent purge.

<u>Spray Gun - Type 1</u> (Air Purge)

- "A" and "B" materials enter under pressure and meet in a mixing chamber or module and are immediately atomized through the tip.
 When spraying stops air purges/cleans
 - the mixing area while shutting off the material flow.
- No solvent purge is necessary for this type of gun.

Spray Gun - Type 1 (Mechanical Purge)

- "A" and "B" materials enter under pressure and meet in a mixing chamber or module and are immediately atomized through the tip. When spraying stops a steel rod mechanically purges/cleans the mixing area while shutting off the material flow.
- No solvent purge is necessary for this type of gun.







Mixing Module & PCD











<u>Spray Gun - Type 2</u>

- Uses a 3/4"- 3"long static mixer to mix the "A" and "B" components at the gun.
- The area where the materials are mixed is purged/cleaned by closing the material valves and opening the solvent valve.
- Solvent is supplied by a 5:1 or greater ratio pump.
- Must be purged quickly to prevent material from setting up in the gun.
- Can be used with standard RAC airless spray tips.



Revers-a-Clean Tip

Solvent Flush Valve

Static Mixer

Solvent In

ISO & Resin In



Agitators/Mixers - 3/4 hp or greater. 55 Gal Drum Band heaters - Size to keep materials at 70-90°F. Spare parts kits. Flush kit. Hose Heat Booster

Recirculating

Systems

Recirculating System

"T" valves at primary heaters.

- 1/2" hose back to the material drums.
- Keep drums sealed.
- Takes about 20 minutes to recirculate and heat the entire drum.
 Recirculation is not a substitute for mixing or agitating.

Recirculating System



Valves on the recirculation system must be closed prior to and during the spray operation

Recirculating Setup



Recirculating Setup

Installation at the Drum





•Graco