



Bridgeport Glass Armor

Plural Component Equipment Recommendations

GA330, GA345, GA350, GA365, GA390, GA396

PRIOR TO PURCHASING PLURAL COMPONENT EQUIPMENT, DETERMINE IF THE EQUIPMENT WILL BE USED IN A HAZARDOUS AND/OR NON-HAZARDOUS ENVIRONMENT. DO NOT INSTALL OR USE EQUIPMENT IN A HAZARDOUS ENVIRONMENT THAT IS APPROVED FOR USE ONLY IN NON-HAZARDOUS ENVIRONMENTS OR AREAS. SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY.

NOTE: TO AVOID EQUIPMENT CROSS CONTAMINATION; THE PART A IS THE EPOXY / RESIN / BASE; THE PART B IS THE AMINE / CATALYST / ACTIVATOR.

NOTE: PRODUCTS UNDER CONTINUAL TESTING AND EQUIPMENT RECOMMENDATIONS MAY CHANGE. PLEASE CONTACT TNEMEC TECHNICAL SERVICE DEPARTMENT FOR THE MOST CURRENT RECOMMENDATIONS.

WIWA DUOMIX 333 MECHANICAL PROPORTIONING PUMP

- **Feed Pumps**

Consist of two 5:1 or larger pumps with 3 gpm output. Air pressure regulator, air gauge, fluid shut-off valve and air supply shut-off valve. Air hose 1/2" diameter and fluid hose 3/4" diameter. Pumps mount to 25 gallon insulated heated tanks capable of maintaining the material at 110°-120° F. The Part A & B requires a one-half horsepower mixer attached to the heated tanks.

- **Proportioning Pump**

Fixed ratio proportioning pump equipped with recirculation lines and controls to the feed containers, and providing 4500-5000 (dynamic) psi with 3 gpm output, air inlet 3/4" diameter, air pressure regulator, air gauge, air supply shut-off and fluid gauges. High-pressure fluid sensors with automatic shut down and two pressure relief valves set at 5500 psi. Two 3/4" diameter wye filters attached to the lower fluid section with 30 mesh filters. The fluid inlet hose is 3/4" diameter. The fluid outlet hoses are 3/8"-1/2" diameter. Mechanical stroke counter mounted on unit.

- **Heating System**

Heating system must be capable of heating the material to provide 110°F - 120°F at the spray tip during the application. System should include insulated heated 25 gallon material tanks with agitators, heat gauges, primary heaters with heat gauges, recirculation lines from the mix manifold to the material tanks and heated insulated hoses with heat gauge. Heated fluid hoses 1/2" diameter Part A (epoxy/resin/base), 3/8" diameter Part B (amine/catalyst/activator), x 100'-200' in length. Material must be at least 110°-120° F before being run through the proportioning pump. **Failure to heat the material prior to proportioning may cause cavitations of the pumps resulting in off-ratio material.**

- **Spray Gun, Static Mixers and Tips**

Set up consists of one remote mix manifold with solvent purge. Two 3/8" diameter 12 fold SST stainless steel static mixers (do not use plastic static mixers) attached to the mix manifold, one 50' long x 3/8" diameter paint line attached to the static mixers. One 1/4" diameter 12 fold SST stainless steel static mixer (do not use plastic static mixers) attached to the 50' long x 3/8" diameter paint line. One 6' -10' x 1/4" diameter whip line attached to the 1/4" diameter static mixer. Attach a WIWA 500F airless spray gun with a swivel to the end of the 1/4" diameter whip line. Install a heavy duty reversible spray tip 0.021"-0.029" orifice size without diffuser bar, to the spray gun. *Note:* Static mixers, whip line and gun should be flushed clean every 25-30 minutes or as needed. Replace or disassemble and clean static mixer as needed. A second set of static mixers, whip line and gun is recommended to decrease down time.

- **Mix Manifold**

Two 3/8" x 12 fold SST stainless steel static mixers	One 50'x 3/8" diameter paint line	One 1/4" x 12 fold SST stainless steel static mixer	One 6'-10' x 1/4" diameter whip line	WIWA 500F spray gun
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- **Solvent Purge Pump**

Set up consists of one (1) 30:1 or larger pump equipped with air pressure gauge, air pressure regulator and solvent resistant 1/4" diameter line to the mix manifold, mounted on a five (5) gallon pail cover. Material must be flushed out with Tnemec N0-4 thinner after 1 minute of releasing gun trigger. **Failure to flush material after 1 minute will result in clogging of the static mixer, whip line and spray gun.**

GRACO EXTREME MIX 360 ELECTRONIC PROPORTIONING PUMP

- **Feed Pumps**

Consist of two 5:1 or larger pumps with 3 gpm output. Air pressure regulator, air gauge, fluid shut-off valve and air supply shut-off valve. Air hose 1/2" diameter and fluid hose 3/4" diameter. Pumps normally mount to 25 gallon insulated heated tanks capable of maintaining the material at 110°-120° F. The Part A & B requires a one-half horsepower mixer attached to the heated tanks.

- **Proportioning Pump**

Graco Extreme Mix 360 (68:1) must be modified with recirculation lines and controls to the feed containers. Two 3/4" diameter wye filters attached to lower fluid sections with 30 mesh filters. The pump should be equipped with "Position Spray/Recirculation Selector Push/Pull Valve (as supplied by SprayQuip Houston TX). High pressure fluid gauges attached to the metering valve manifold.

- **Heating System**

Heating system must be capable of heating the material to provide 110°F - 120°F at the spray tip during the application. System should include insulated heated 25 gallon material tanks with agitators and heat gauges, a 4000 watt Viscon HP primary fluid heater with heat gauge for each side, and a heated insulated hose bundle to maintain the material temperature at 110° F -120°F. Recirculation lines from the mix manifold to the material tanks. Heated fluid hoses, 1/2" diameter Part A (epoxy/resin/base), 3/8" diameter Part B (amine/catalyst/activator), x 100'-200' in length. Material must be at least 110°-120° F before being run through the proportioning pump. **Failure to heat the material prior to proportioning may cause cavitations of the pumps resulting in off-ratio material.**

- **Spray Gun, Static Mixers and Tips**

Set up consists of one remote mix manifold with solvent purge. One 50' long x 3/8" diameter integration line attached to the mix manifold. **Note: Integration line must be used. Do not attach static mixers directly to the mix manifold.** Two 3/8" diameter 12 fold SST stainless steel static mixers (do not use plastic static mixers) attached to the 50' long x 3/8" diameter integration line, one 6'-10' x 1/4" diameter paint line attached to the 3/8" static mixers, one 1/4" diameter 12 fold SST stainless steel static mixer (do not use plastic static mixers) attached to the 6'-10' x 1/4" diameter paint line, and one 6'-10' long x 1/4" diameter whip line attached to the 1/4" static mixer. Attach a Graco XTR-7 airless spray gun with a swivel to the end of the 1/4" diameter whip line. Install a Graco HD RAC with choice of 0.021"-0.029" tips without diffuser bar to the spray gun. **Note:** Static mixers, whip lines and gun should be flushed clean every 25-30 minutes or as needed. Replace or disassemble and clean static mixer as needed. A second set of static mixers, whip line and gun is recommended to decrease down time.

- **Mix Manifold**

One 50' x 3/8" diameter integration line	Two 3/8" diameter 12 fold SST stainless steel static mixers	One 6'-10' x 1/4" diameter line	One 1/4" 12 fold SST stainless steel static	One 6'-10' x 1/4" diameter whip line	Graco XTR-7 spray gun
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- **Solvent Purge Pump**

Set up consists of one (1) 30:1 or larger pump equipped with air pressure gauge, air pressure regulator and solvent resistant 1/4" diameter line to the mix manifold, mounted on a five (5) gallon pail cover. Material must be flushed out with Tnemec N0-4 Thinner after 1 minute of releasing gun trigger. **Failure to flush material after 1 minute will result in clogging of the static mixer, whip line and spray gun.**