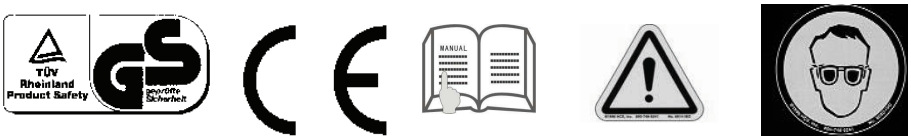
ES Manufacturing, Incorporated
Est. 1973
Engineered Solutions
Makers of fine tools and accessories for the fiberglass and composite industries
2647 24th Street North, Saint Petersburg, Florida USA

Model G830 2.0 HVLP Spray

Contents:

Read this **Instruction Manual** carefully and understand it completely, basic precaution should be strictly followed to prevent the damage to the tool and injury to the operator. Retain this manual for further reference. And you should pay more attention to the Technical Data.



Feed Type: Gravity

Standard Dia of Nozzle: φ2.0mm

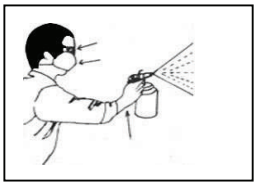
Optional Dia of Nozzle: φ0.5-1.2mm

Recommended air pressure: 4.5 – 6.0 bar (40-60 PSI)

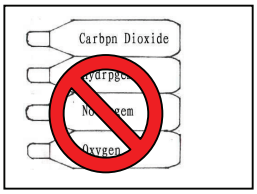
Material Capacity: 120cc (250cc w/optional alum. cup)

Air Consumption: 3.5-6.0cfm

◆ Important Safety Instructions

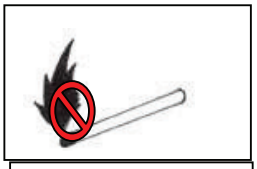


1.For toxic vapors produced by spraying certain materials can create intoxication and serious damage to health. Always wear safety glasses, gloves and respirator to prevent the toxic vapor hazard, solvent and gelcoat coming into contact your eyes or skin. (see fig 1)



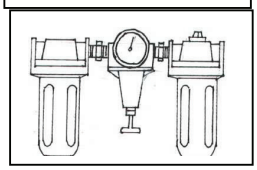
2.Never use oxygen, combustible or any other bottle gas as a power source or would cause explosion and serious personal injury. (see fig 2)

3.Fluid and solvent can be highly flammable or combustible. Use in well-ventilated spray booth and avoid any ignition sources, such as smoking, open flames and decrial hazard. (see fig 3)



4.Disconnect tool from air supply when not in use or maintaining also a shut off valve. As an emergency stop is recommend.

5.Use clean, dry and regulate compressed air rated at 4.5-6.0 bar, (40-60PSI) never exceed maximum permissive operating pressure (see fig 4)



6.Never use homogenate hydrocarbon solvent, which can chemically react with aluminum and zinc parts and chemically compatible with aluminum and zinc parts.

7.Never point gun at you and others at any time.

8.Before operating the tool, make sure all the screws & caps are securely tightened in case of leaking;

9. Before spraying, be sure trigger and related parts operate smoothlyl.

10.Never modify this tool for any applications. Only use parts, nozzles and accessories recommended and accessories recommended by ES Manufacturing, Inc.

♦ Operating Instructions

- This tool applies to operate on clean, dry and compressed air at regulated pressure at 4.5-6.0 bar. Too low or too high pressure will adversely affect the gun and the quality of spray.
- Check and replace any damaged or worn parts on the too. Make sure the trigger and nozzle can operate well.
- Connect the gun to air supply. Be sure fluid cap, container and air hose should be connected tightly with spray gun.
- When spraying, hold the gun perpendicular with spraying area then move it parallel for several times. The trigger should be locked before the stroke ended. Keep the appropriate distance of 6-10 inches between gun and surface area, according the atomization pressure and spraying conditions. See Fig 5.

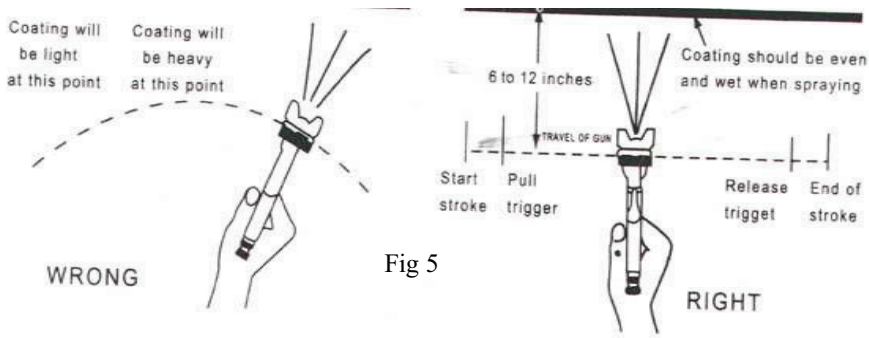


Fig 5

◆ Adjustment

The desired pattern, volume of fluid output and fine atomization can easily be obtained by regulating the Pattern Adjusting Knob, Fluid Adjusting Knob and Air Adjusting Knob.

Adjusting pattern: Turning Pattern Adjusting Knob to the right until tight will make spray pattern round, or turning it left, will make spray pattern ellipse.

Adjusting volume of fluid output: Turn the Fluid Adjusting Knob, clockwise will reduce the volume of fluid output and counter-clockwise will increase fluid output.

Adjusting air volume: Turning the Air Adjusting valve clockwise will reduce the air volume. And counter-clockwise will increase the air volume.

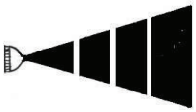
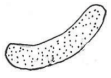
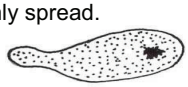
◆ Maintenance

Pour remaining material into a separate container and then clean material passage and air cap. Spray a small amount of acetone to clean passage. Incomplete cleaning will cause adverse material pattern sharp and particles. Clean other sections with attached brush,, and acetone soaked cloth.

◆ Caution

Never use the wire or other hard thing to clean nozzle or fluid needle. This will cause damage to them. Never immerse spray gun completely in acetone or solvent. During reassembly, always clean and dry parts to prevent the sticking of dust.

◆ Troubleshooting

Symptom	Problems	Solution
Fluttering or spitting 	1. Material in container is low. 2. Dry or worn Needle packing set. 3. Fluid nozzle loose or worn	1. Add material into container. 2. Lubricate or replace Needle packing set. 3. Tighten or replace Fluid nozzle.
Pattern is arc. 	1. Worn or loose Fluid nozzle. 2. Material build up on Air cap.	1. Tighten or replace Fluid nozzle. 2. Remove obstructions from holes, but don't use metal objects to clean it.
Pattern is not Evenly spread. 	1. Material build up on Air cap. 2. Fluid nozzle dirty or worn.	1. Clean or replace Air cap. 2. Clean or replace Fluid nozzle.