

CerMark Technical Publication – Recommended Spray Apparatus

Several different types of spray apparatus can be used to apply CerMark Laser Marking Materials. The LMM-6000 and LMM-6038 metal marking products are first reduced or thinned with ethanol, acetone or MEK. Thinning ratio is approximately 1 part LMM to 1 part ethanol by volume. This should give you a spray viscosity of approximately 15 - 30 seconds on a #3 Zahn cup. (Slightly thicker than water like consistency)

The CerMark glass marking materials are ready to spray as supplied. If thinning is necessary, water is recommended.

Do-it-yourself Aerosol Can

Available at most Ace Hardware stores, Home Depot or auto parts stores, a do-it-yourself aerosol can kit is the easiest way to get started spraying the CerMark products. This kit, manufactured by Preval, consists of a pressurized gas cylinder that attaches to a glass reservoir jar. The marking material is first poured into the glass jar, and then the cylinder is threaded onto the jar. The cylinder pressurizes the jar, and the material can be sprayed from the nozzle on top, just like an aerosol can. The Preval Sprayer retails for approximately \$5 to \$10 dollars at these locations. Pressurized cylinder refills are also available, retailing from about \$2 to \$5 dollars. Additional information is available at <http://www.prevalspraygun.com>.



Hobbyist/Artist's Airbrushes

A Paasche or Badger hobby airbrush is a very good choice for spraying small samples or tags. These airbrushes will spray a very precise pattern with minimal overspray, anywhere from a 1 to 4 inch circular pattern from about 4 to 8 inches from the substrate. Recommended tip diameter is about 1.0 mm or greater.

The Paasche double action model VL or VLS brush can be purchased at most hobby stores for around \$50 to \$75 dollars. This airbrush can use a variety of nozzles and aircaps. The VLA-5 aircap and a VLT-5 tip to spray the CerMark Products. This is one of the larger tips available for the airbrush. Application of the CerMark material is generally done using about 20-30 psi line pressure. This airbrush can be seen at <http://www.paascheairbrush.com/>.

Hobbyist/Artist's Airbrushes (continued)

The Badger model 250 series brush is an inexpensive single action, external mix, bottom feed air brush. This brush is very good for jobs requiring large overall coverage with medium to heavy viscosity materials and is an excellent brush for spraying the CerMark products. The tip size on this brush is large, so the CerMark material will spray nicely through it. This brush operates at 20-50 psi line pressure, and the tip adjusts to provide a spray pattern from $\frac{3}{4}$ inches to 2 inches in diameter. This inexpensive airbrush can be purchased for around \$20 to \$40 dollars, and it can be seen at <http://www.badger-airbrush.com/>

If your shop does not have compressed air, a small air compressor designed for airbrushes that plugs into 110V household power can also be purchased for about \$50 - \$100 dollars. This type of compressor should produce about 0.5 cfm of airflow with a 1/8 horsepower motor in order to provide sufficient air to the airbrush. An example of this equipment can be seen at <http://www.grizzly.com/products/Mini-Air-Compressor/H3272>.

Badger Model 250 Airbrush

Description

Any job requiring a simple, yet effective spray is easily completed by the Model 250 Series. These guns are basic enough for children, ages 8 and up, to use with minimal supervision, yet efficient enough for adult use. The Model 250 is a bottom feed, single action, external mix airbrush.



Grizzly H3272 Mini Air Compressor

Description

This 1/8 HP Mini Air Compressor is the perfect companion to any air brush set. Portable design features automatic shut-off at 38 PSI, moisture trap, air brush holder and coiled air hose. CFM at



maximum PSI is 0.48. 10"L X 5-1/2"W X 6-3/4"T. Weight is 7 lbs.

HVLP Spray Gun

To spray a larger samples or areas, a Binks or similar type HVLP spray gun can be used. A model M1G HVLP gun, similar to what is used in auto refinishing is recommended. This gun sprays a much larger pattern, about a 4 to 8 inch pattern from a distance of 8 to 12 inches from the substrate. It is ideal for spraying tiles and glass with the Cermark LMC marking materials. It allows for a very even, consistent application over larger areas. It also can be used with a variety of nozzles and tips; we recommend using a 91P air tip and a 91 fluid nozzle. This gun is used at about 20- 30 psi line pressure, and uses about 4 - 8 cfm of air, so the appropriate compressed air source must be available. This equipment can be seen at <http://www.binks.com/>.

Binks M1-G Spray Gun

Features:

- For limited air supply – needs only 10 CFM at 18 PSI inlet
- Long lasting, self-adjusting fluid packing cartridge for simple replacement
- Waterborne compatible
- Light weight, superbly balanced with smooth trigger action

Includes:

- 1.4 fluid tip
- 1-Liter aluminum cup
- Fluid filter
- Gun bracket

Specifications:

- 18 psi air inlet pressure delivers
- 10 psi air cap pressure and
- 10 cfm air volume required



