

ARCOR® CARTRIDGE SPRAY SYSTEM

July 30, 2020

1. ARCOR Sulzer Cartridge Sprayer

- We now offer a compact, low cost dual cartridge sprayer for use with all ARCOR Coating products.
- We see it as a tool for smaller jobs where a big sprayer is not feasible.
- We use a small electric compressor from Home Depot that puts out 125psi, 5.7 CFM (of course any larger unit or Plant air would work). But this small unit can run the spray unit non-stop. A minimum of 90 psi @ 5cfm is needed for a single sprayer.
- We recommend keeping the cartridges in a hot box (basic insulation board used to make a box with a small electric heater inside will heat to 110-120F; see photos attached) and then microwaving before use for 60-90 sec to get to specified temp for the given product.
- We use a Home Depot microwave (attached). Having 2 or more microwaves is also an option on a project to facilitate constant spray.
- Microwave should have a rotating plate and needs to be large enough to hold a cartridge (the attached details are a guide).
- Changing cartridges takes about 10-15 seconds with someone assisting.
- Temps range from 120F for the S-15 & 1321, to 130F for S-20 and 165F for EE-121;
- Use a temperature gun to determine temperature and note time in microwave so you can duplicate each time.
- It's a low-cost option to do smaller projects. The cost of equipment is minimal vs cost of manpower and time.
- We see it as something that will make sense at jobs requiring a few gallons where setting up a regular plural sprayer is not cost effective or doing by hand is too time consuming.
- Certainly jobs of up to 10 gallons (32-34 cartridges) would make sense. {(1) Cartridge = 1.1-1.2L};
- One can always use additional spray guns as well to do even larger work. At a fraction of the cost of traditional sprayers, they will Pay for themselves very quickly;
- Note there should also be far less waste in this method as any unused material in a cartridge is perfectly fine to use at a future date. Just remove and cap.
- Spray tip static mixers will be \$1.75 each. We recommend (1) per cartridge. For \$1.75 it's not worth trying to change them out each time.
- A standard static mixer is available. They can be used to mix product without spraying. (Manual dual cartridge guns are also available. These are great for touch up. No waste). Typically, for manual applications, a static mixer is not used. Just pump material out of the cartridge (it will be exact ratio) onto a mix board and mix with a paint stick.
- Once heated, the spray static mixer is placed on the cartridge and it is then inserted into the spray unit.
- When the cartridge is empty, press the eject button and remove & throw away. Insert new.
- When done there is nothing to clean, just wipe down the spray gun.

- Few consumables; limited need for brushes, rollers, trays, rags, Acetone.
- No expertise in spraying is needed, unlike using a plural sprayer or an airless sprayer. Really not much to mess up.
- With basic feedback on mils from a wet mil gage, anyone should be able to consistently lay out a specified milage.
- Consult the ARCOR 'How To' Cartridge Spray Videos.

2. What We've Learned Through Field Use

Pros:

- The ARCOR® Cartridge Spray System is quick and efficient compared to hand application.
- The System is inexpensive relative to current application processes, (Plural component sprayers).
- The ARCOR® Cartridge Spray System is incredibly easy to use, and quick to learn even for the most inexperienced applicators.
- The system is very mobile and minimizes mess. Additionally, there are minimal consumables used, the mixing is self-contained so there is little to no cleanup necessary.
- The ARCOR® Cartridge Spray System leaves a smooth glossy surface finish once cured, unlike hand application. Comparable to plural component spray systems.
- Due to the overall simplicity of the system, it is hard to mess up any components on the unit itself, and if something were to break, it is relatively cheap and easy to replace. This eliminates the primary problem of plural component & airless sprayers; an inexperienced user can easily ruin a unit and replacing parts will cost thousands of dollars.

Cons:

- A single unit is not efficient for large scale projects. However, multiple units and users could be used as an alternative to plural component spraying.
- The cartridges can be brittle; dropping them from excessive height can result in cracking.
- The cartridges must be warmed prior to spraying ARCOR® products.
- Overheating (172F++) will soften the seal of the 2 plugs at the back of each cartridge (1 in the Base and 1 in the Activator); this will cause product to squeeze out the back. If a seal starts to leak, allow the cartridge to cool and this will reseal.
- The Atomizer Hose (Air Tube) on the sprayer is what we consider a "high wear" piece. After multiple uses, the hose tends to clog up to a point where it will no longer create a tight seal on the spray tip, especially in smaller confined spaces. However, this piece is inexpensive, costing under \$25 USD, and is easily replaceable. We have found that a new hose is needed every 20-30 cartridges.

3. ARCOR Products We Have Used in the Field

- S-20
- S-26
- S-16
- S-15
- 1321
- EE-11, 11 Prime
- EE-121
- EE-80
- Spraythane
- S-30

4. Where We Have Applied

- Small Tanks up to 1,000 sqft
- Chillers, Condensers on Tubesheet & Heads/Waterboxes
- Duct
- Pipes
- Floors
- Pumps
- Touch-up and repair on large units
- Injections to fill voids

5. What's Included

When you purchase the ARCOR® Cartridge Spray System, you receive:

- The Spray Unit
- An Atomizer Tube
- (1) Set each of Aluminum Plungers in ratios of 1:1, 2:1, 3:1.
- (1) Shoulder Strap
- An Instructional Manual
- ARCOR 'How-To Videos 1, 2, 3

6. What You Need

Other than the unit itself, you'll need;

- Compressed Air to provide (per gun) 90 PSI, and 5 CFM; easily provided through standard shop/plant air, or a small compressor.
- Airline; .3/8" and fittings to attached to gun;
- Static Mixer with Spray Tip; integrated unit; disposable after use; we recommend (1) per cartridge;
- Static Mixer; use for non-spray injection; disposable;
- Each cartridge comes with a reusable cap, which can be replaced on partially used cartridges for storage and later use.
- The cartridges are entirely disposable in general waste after use.

NOTE: ARCOR suggest purchasing/crafting a heating unit or hotbox. We have found through testing and field use that when the cartridges are cold, the attached tip has trouble mixing the product in the static mixer. For this reason, we like to store our cartridges in a smoker/hotbox, and warm them up in a microwave when the ambient temperature is relatively cold.

Please forward any follow up questions to; Tech@ArcorEpoxy.com

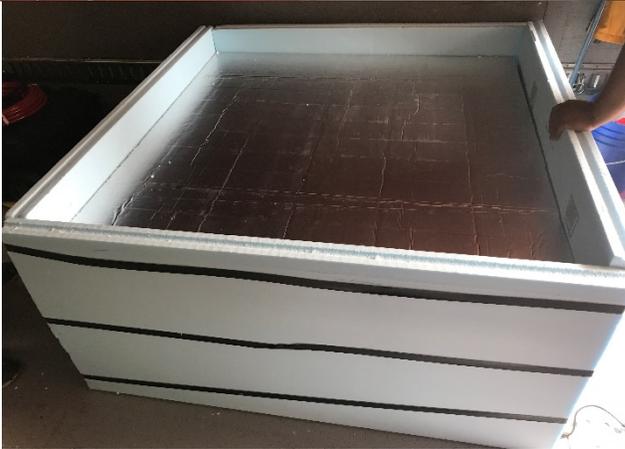


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