

Operation/Technical Requirements

1500mil Pneumonic Cartridge Dispenser



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Chemical Temperature

Polyurea must be warm, you will achieve better chemical properties and the material will lay and texture better when the proper temperature is achieved. It is best to store the cartridges at 70 °F (21°C). The ideal cartridge temperature for spraying is between 85 °F to 90 °F (29 °C to 32 °C). It is best to heat the cartridges for at least 24 hours to guarantee that the material is the correct temperature through the entire cartridge. Before installing the static mixer, you must shake each cartridge for at least 10-15 seconds to bring all the raw materials back into suspension. We offer a cartridge warmer that holds 24 cartridges that will heat and maintain the correct temperature of 85 °F to 90 °F. **Place cartridges in warmer for at least 8 hours before spraying, but not more than 72 hours.**

Air Requirements

- You must have good **dry\clean** air for proper operation of the gun.
- The minimum air volume to operate the gun is 11 CFM at 120 psi; a 5 HP air compressor is usually large enough.
- The air from the compressor to the gun should be set at minimum 110 psi.
- It is best to set the regulator on the handle of the gun to 85-120 psi to start.

Preparing and Spraying the Cartridges

SHAKE EACH CARTRIDGE FOR AT LEAST 20 SECONDS BEFORE SPRAYING!



To keep from cross contaminating the chemicals, keep the cartridge pointed up once the cap is removed, until you are ready to pull the trigger.

Make sure the static mixer is screwed on tight and be sure not to cross thread the nut.

Connect the air line to the gun and be sure the plungers are retracted all the way back by depressing the button on the handle.

Holding the gun pointing up, place the cartridge all the way flat in the carriage of the gun and attached the air hose to the atomizer on the end of the static mixer.

Pointing the gun away from you, drop the front of the gun below 9:00 o'clock and pull the trigger to start the flow of the material in a stream. **Do not spray into the truck yet**, start by spraying off target (i.e. into a box).

Let material from both sides of the cartridge flow through the static mixer, once you see that the stream is nice and even it should be solid black.

Now open the control valve for the air atomizer to **1/4 of the way open** to get a good spray pattern. Now you can start spraying into the truck.

If you want a finer spray pattern (especially during the texture coat) open the valve more to allow more air to flow through the atomizer and stand further away from the truck.

The typical spray distance from the substrate (for the base coat) is 3 to 4 feet and will vary from application to application. **Do not trigger the gun off and on while spraying.** If you let go of the trigger the material will set up in the static mixer and cause the gun to stop spraying. This can also cause failure in the cartridge which can lead to the cartridge cracking, leaking, or bursting. If the cartridge stops spraying and you didn't trigger the gun, you must immediately point the gun down, release the trigger, retract the plungers, disconnect the air line from the static mixer and remove the cartridge from the gun. Unscrew the static mixer from the cartridge and let good material flow out of both sides of the nose of the cartridge. **Once you see good material flow out of the cartridge you can now turn the cartridge right side up. You must do all of this while the cartridge is pointed down.** If not, you will cause cross contamination of the material and the cartridge will clog and no longer be able to be used.

Do not let the cartridge run dry while spraying the truck. Point the gun off target and let go of the trigger before the cartridge runs dry, or let the cartridge run dry off target.

Causes for the cartridge to stop spraying before it is empty:

1. The material in the cartridge is too cold and is setting up in the mixer.
2. The air compressor is too small and can't keep up with the required psi causing the material to set up in the mixer.
3. The regulator on the gun handle is set too low causing the material to set up in the mixer.
4. The cartridges weren't shaken enough before spraying.
5. The trigger was released (even for a moment).

Static Mixers

There are three different styles of static mixers available:

1. The most popular mixer is the 3/8 x 24 elements (standard mixer). This mixer is the best for spraying truck liners and other applications where you need to lay the material down heavy.
2. The 1/4 x 24 elements (white tip mixer) will lay the material down half the volume of the standard mixer and will also produce a finer texture.
3. The 1/4 x 24 elements (black tip mixer) will lay the material down half the volume of the standard mixer but gives a super fine spray. This mixer is popular when you want to lay down thin coats, easily control your spray, and produce less waste of the product.

For more info on static mixers go to armadillo liners.com and click on "Equipment"

Positioning of the aerator on the end of the static mixer

Be sure the static mixer tip is protruding about 1/16 inch out of the atomizer:

