Quik-Coating FAQ

Q. Can you do both vertical and horizontal piping?
A. Yes! We are using a spinning static mixer that also serves as a spreader. The material is released into the pipe wall and smoothed by the brush.

Q. Why not just line pipe with the CIPP process and forget coating?
A. When there are multiple connections, the CIPP process becomes cumbersome since you must reinstate each connection. Further, when there is a diameter change, as an example pipe that transitions from 2" to 3" in the wall, stretchy liner isn't available for that transition size. The AIPPR process was developed for the drain, waste, and vent (DWV) piping that meet the criteria mentioned above.

Q. How do you know how thick to apply the resin?
A. We've set predetermined thicknesses for different pipe diameters. These thicknesses assume a partially deteriorated
pipe. If the pipe if beyond a partially deteriorated condition, you will need to bring back structure to the pipe. Devices such as the LightRay LR3 can perform this spot repair in a short amount of time, and you can resume application of the resin.

Q. How is it applied?
A. The process closely resembles painting as the resin is applied in layers. These layers should be applied 0.5mm per layer as that thickness keeps the resin from dripping or running. Depending on the thickness called for, you would keep applying layers until reaching a desired thickness.

Q. How do I know I've applied enough resin to meet the required thickness?
A. Weighing the containers before and after the job completed will determine the amount of resin you applied. If what you planned is more than you've applied, you may have to apply additional coats of resin until complete.

Q. How long do I need to wait between coats of resin?
A. The resin sets in 10 to 30 seconds and dries in 5 minutes so waiting 5 minutes between coats is essential. Coating 40' pipe may take 4 to 5 minutes to apply one coat, and another 5 to dry. The coating process would require 10 minutes per coat, so the operator could expect to apply 6 coats in an hour given these specifications. Many different factors can affect the timing parameters. Please contact your sales representative for application specific guidance.

Q. What kind of preparation does the pipe need before I can start coating?
A. Cleaning the pipe is the most important part of this process. There are several tools that are up to the job including our Picote high-speed cable machine with chain knockers, wire brushes, sanders, and other tools. Jetters may help wash away debris. Drying is essential to applying the coating. If you leave debris behind, particularly loose material, your coating won't adhere to the pipe properly.

Q. Won't one coat be good enough if we are just trying to protect from corrosion?
A. If you coat the pipe with one coat, there is no guarantee that you've covered every square inch of pipe with material. Several layers ensure a completely coated pipe and ensures that you've stopped further corrosion. If the corrosion returns, you haven't solved the problem.

Q. Is this a repair or a new pipe you are building?
A. This is a repair to the existing pipe. We are relying on our added material to the existing pipe to make it whole again.

If the host pipe is beyond this rebuilding level, this process isn't the answer for the pipe, If there is a large void or gap, a recommendation would be use a spot repair system, such as the LightRay LR3, to repair the section then use the spray coating on the entire length.

Q. Why can't I use a spray on polyurea like they use for truck beds?
A. The polyurea used for bed liners is a different formulation that adds a flexibility to the material not suited for DWV applications. Our formulation is harder which increases the ability to resist deterioration in the pipe. We also use a light color that allows the applicator to see it go in place and not just match the color of the host pipe.

Q. Does the material flake off over time?
A. If you've cleaned the pipe well enough, the material will stick. Leaving dust, debris, grease, and tuberculation will shorten the life of the rehabilitated pipe. It's very similar to painting a house. If you start painting over the surface of the house without preparation, you will find the paint flaking off in a relatively short time. Cleaning the surface, applying a scratch coat, then finishing with subsequent coats of paint ensures a long life from the job. The same applies here.

Q. Should I coat all the stacks in a high rise building first, then coat the individual units inside, or should I take another approach?
A. There are two schools of thought here. One process is to shut the building units tied into a particular stack and complete that stack while everyone is offline. This will require larger delivery hoses, longer high-speed cable and camera equipment, and additional people to manage the extra lengths of the various equipment. Giving yourself a 4-hour window should allow you to complete a 100' stack including preparation, drying, and coating.

Another approach is to work your way from the top unit down, completing a couple of baths and a kitchen, for example, including the portion of the stack that serves that unit down one floor stopping at the next unit down. An 8-hour day would give you an opportunity to clean, dry and coat the entire apartment. As you move down, you would plug the stack from above for the hour or so while completing that portion of the next unit. This may give a little more flexibility if you have the rest of the building to coat.

Q. Do I need to replace brushes after a run?
A. No. We use a two-chemical process including a commercial brush cleaner followed by a rinse. If any residue remains, a wire brush cleans the rest. Brushes should last through several coats of resin.

Q. How about hoses? Do you dispose of them?
A. The hoses should last indefinitely. Just keep air out of the A side.

Q. How heavy is the equipment?
A. The coating machine is under 75lbs loaded with cubes of resin.

Q. How many people are needed to complete a job?
A. One person can complete the work. If you have a lot of work in a single area, two people can more than double production. If one person opens, cleans, and sets up drying operations of the pipe to be coated while the other gets all the coating equipment ready to go, they can complete many more feet of pipe than a single worker.

Q. Can I coat steam lines? How hot can this material stand?
A. This resin can sustain temperatures of 266F and intermittent temperatures of 425F. This is a perfect product for

hospitals where they discharge high pressure steam into the DWV piping system. Temperatures above those will show a softening and deformation of the pipe and ultimately destruction of the material.

Q. Do you get excess material in the tie-ins as your process passes?
A. As a person develops a feel for the process and can see what they are doing, the operator can feather flow before the tie-in, and pick up flow after the tie-in, minimizing any resin building up in the intersection. It is easier to coat the smaller diameter pipe at the tie in first then the larger diameter next. If both are the same, either feathering as you approach the intersection or placing a plug inserted up to the intersection can keep excess material from running up the tie-in.

Q. What if I lose my brush in the pipe and it hardens in place?
A. If you use our stop collars at the end of the flex shaft, in the rare event of losing the brush, the stop collar will catch and stop it allowing you to pull it out.

Q. What if I overcoat the pipe and it's too thick? Can I get it off?
A. the resin dries in 5 minutes it takes 24 hours before it fully hardens. Removal right away is easy, but as time marches on, the resin becomes harder and harder until it resists removal.

Q. Why does the resin part B change color as it ages? Will it hurt the finished product?
A. Part B has an oxidation component that darkens over time. It has no effect on the finished product but will appear to be darker both in the liquid form and hardened form. The finished coating will vary from bright white to a rose color depending on how long the part B has been on the shelf. The physical properties and durability remain the same.

Q. How soon can I run water down the drain after it has been coated?
A. As soon as the resin is cured, approximately 5 minutes after application, the drain may be used as you would normally use it. While it hardens fully in 24 hours and becomes difficult to remove, normal drainage operations can occur after the 5-minute window.

Q. You are showing the unit with a single brush, but I'm used to using dual brushes. Can I use two, one to mix and apply the resin and the second to smooth it?
A. Absolutely. This is a matter of preference. If you prefer to have an extremely smooth finish, particularly in cast iron, you may want to choose this option.

Q. What kind of resin are you using? I'm used to epoxy, won't that do the same thing?
A. During our material testing process we discovered a couple of things. While epoxy is the resin of choice for CIPP there is a small amount of shrinkage. This shrinkage allows moisture to track between the host pipe and the liner. While this is an acceptable condition for CIPP lining, it isn't good for this process because we are trying to rebuild the host pipe to a fully structural pipe. In doing so we picked a resin that expands slightly upon curing, thus making a watertight bond between the host pipe and the coating material. This bond prevents tracking and combines with the original pipe to form a new stronger composite of pipe and resin.

Q. Any resin handling issues I should be concerned with?
A. Yes. The A side reacts with air and will crystalize. Preventing air from entering the hoses is the best practice to prevent crystallization. A hardener in the B side tends to settle in as few as 6 hours. If the resin has not been used in the past 6 hours, shake the container to work the hardener back into the mix. If the hoses have not been used, circulating the material into another container will resuspend the hardener.