

SPECIALTY APPLICATION

Dreams come true when working with Ohio custom hot rod coater

A custom powder coater's auto-body restoration for a client's one-of-kind hot-rod touches the spirit of its builder, an icon who passed away before seeing its completion.

An emerging trend in the custom car and motorcycle world is exotic finishes. Clients seek out some of the most talented finishing company's in the world when the time comes to coat their car, truck, hot rod, or motorcycle with unique custom finishes that are not only eye-catching, but also durable, long-lasting, and cost-effective.

In the world of powder coating, one company has for the past 7 years worked at developing techniques to meet the demand of custom auto finishing clients by using 100 percent powder coating and related products. Streetwerkz Custom Powder Coating, Columbus, Ohio, has worked diligently with powder coating manufacturers and suppliers on which types

of powder coating products to use and how to achieve show quality finishes on automotive projects.

Streetwerkz started developing techniques and processes within the walls of its own small company, borrowing practices from large automotive manufacturing companies and job shop coating companies, and



Dan Schneider, left, gets thumbs up from son Joshua as he admires the custom hot rod built by Ray Gollahon, a hot-rod icon.

gaining knowledge from training programs, books, and online educational forums. After much trial, error, investment, and perseverance, owners Josh and Michelle Robinson brought their service to market.

As a result, restoring the finish of sheet metal parts thought impossible or unprofitable in the past is now obtainable in an environmentally friendly powder coating. The company powder coats motorcycle tanks, fenders, car parts, even entire cars without sacrificing appearance due to seams, pitting, or dents thought not to be good candidates for the coating because of a lack of filler products and proper processing technology.

Special roadster needs special finishing technique

When long-time Streetwerkz client Dan Schneider heard that the company was powder coating car bodies with conventional paint shop body

work practices, he knew where his one-of-a-kind hot rod was going to be coated.

While the company had up to this point powder-coated several high-profile car bodies—a rock crawler for Ian Johnson of Spike TV's automotive show *Xtreme 4x4*, race cars, even a serial #001 BMW race car—to date, none was as significant as this project. Schneider had commissioned the great Ray Gollahon, founder of Brookville Roadster, to build a custom 1929 Ford roadster pickup, a one-of-a-kind truck with 6

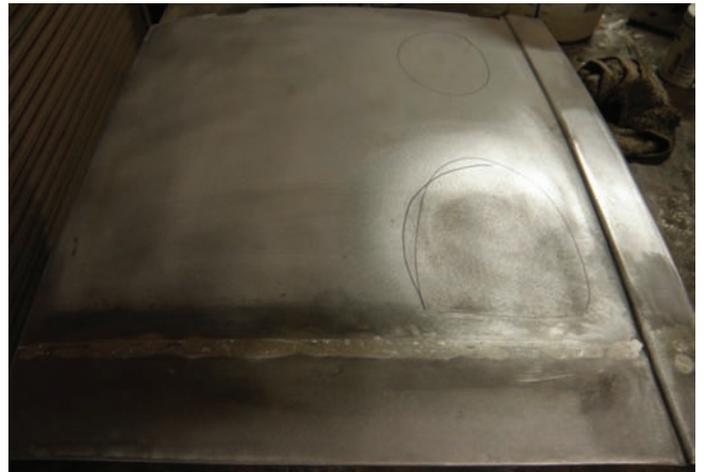
inches of stretch in the body of a shortened bed sitting on a 1932 Ford custom chassis. It actually took building three entire trucks before Gollahon found the proper formula, look, and proportions for the truck. Because of that, the company has said it will never build another custom-bodied vehicle again.

Sadly, about the time the project arrived at Streetwerkz, Gollahon passed away, making the roadster un-repairable if it was ever damaged in an accident. There was now no room for error in this project because

“This is where it’s critical to have a clean shop and then hold your breath until the project comes out of the oven,” the company owner said. “As any powder coater will tell you, waiting for the item to come out of the oven to view the final results can test one’s patience.”



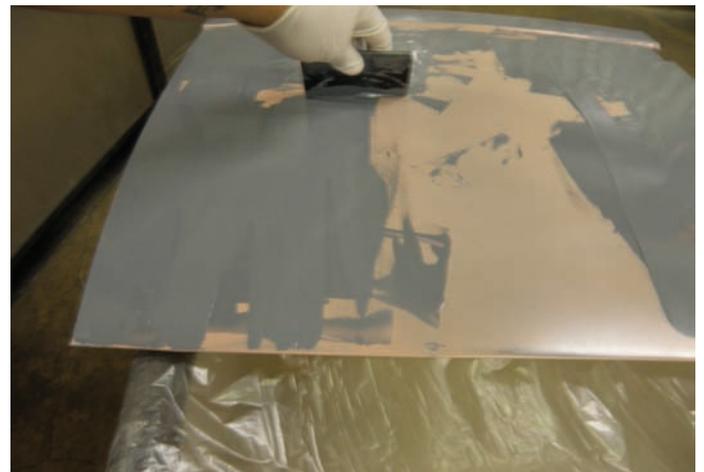
Parts arriving



After blasting



Pretreating



Applying metal filler



Applying primer coat



Block sanding

the hands and mind that created it were gone.

Before a project is accepted at Streetwerkz, the company and its client review and list their goals. Everything is finalized in writing to prevent confusion or mistakes. This way, both the company and the client understand each others responsibilities in the project. With goals spelled out, colors picked, and the work order and inventory list completed, the company started the roadster.

For this project, Schneider wanted a traditional style hot rod color scheme, choosing satin black, gloss black, sparkle silver, and bead blast aluminum powders.

Surface preparation.

Streetwerkz removed all

foreign contamination from the substrate by media blasting. It's Streetwerkz belief that removing 100 percent of foreign contamination and creating a slight tooth is the best way to achieve proper coating adhesion. In this case, all of the primer applied to the body needed removing.

With initial blasting complete, the Streetwerkz crew applied metal finishing processes developed in-house for use in powder-coat finishing practices. The company found that to accomplish a good finish, it had to incorporate a hybrid point of view when preparing vehicles for powder coating. By using century-old technology and practices, coupled with today's technology and practices, the company has found the secret to making this process successful. Once sheet metal work was finished, the roadster body was ready for the final blasting process.

Once the body was blasted to surface standard white metal SSPC-SP5/NACE #1, the parts were ready for chemical pretreatment in a five-stage process. After washing away dust fines, the parts were alkaline-cleaned, iron-phosphatized, and seal-rinsed for protection and coating adhesion.

Coating application.

After parts were cleaned and pretreated, they received a primer that was cured, then block-sanded, which is similar



Color sanding

Applying powder coating



Custom hot rod owner's dream comes true

After 70 hours of work, only a few hundred dollars in materials (compared with a few thousand in wet paint for a similar quality finish), the 1929 Ford roadster pickup was ready for re-assembly and upholstery—and countless hours on the road.

For Schneider, it was time to enjoy the freedom that comes with owning a custom hot rod, especially one built by Gollahon, a hot-rod icon. “Knowing that the metal treatment and finish will keep my dream truck from rusting for decades is important to me,” Schneider said. “I want the legacy of Ray’s work to live on, and I want to pass this on to my son one day. It’s comforting to know that by powder coating my vehicle both of these things will happen. My only regret in this is that Ray didn’t get to see this truck completed. I think he would have been happy with the way it turned out.”

So, what’s next for the Streetwerkz crew? “We’ve recently started a new project, a 1967 Pontiac GTO,” Robinson said. “We’re going to apply a seven-stage candy blue powder coat finish to the body. While it will be a huge challenge, we welcome the opportunity to complete this project.”

And make more dreams come true.

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Editor's note

For further reading on the topics discussed in this article, see *Powder Coating* magazine’s Web site at [www.pcoating.com]. Click on Article Index and search by subject category. Have a question? Click on Problem Solving to submit one.

Article submitted by

Powder coating shop: **Streetwerkz Custom Powder Coating, Columbus, Ohio.** 614/291-0951. www.streetwerkz.com

to what an auto-body shop would do to prepare cars for conventional paint. When the initial block sanding was complete, Streetwerkz applied high-temperature filler to raise any low spots that powder couldn’t raise. For this project, the company “spotted in” powder between sanding sessions to make sure the surface had the proper shape throughout the entire panel. With steel rulers and customized contour gauges to check the surface, the company eliminated panel inconsistencies from right to left.

The condition of the substrate shape was important. “The panels have to be metal-worked into shape to very tight tolerances,” Josh Robinson said. “Even though we may apply several light coats of powder to level off the surface, we make sure to keep mil thickness as low as possible to help prevent coating failure.”

Another technique that was used was the application of multiple colors for sanding. This allowed the person doing the sanding to “read” the panel to know when more sanding was needed or when sanding needed to be stopped in a specific area.

After primer sanding was done, a high-temperature caulking was done much the same way automotive manufacturers do to seal seams in car bodies. Commonly referred to as *seam sealer*, although not a standard automotive product, it helps eliminate moisture in panels that have been lapped on top of one another.

After hours of sanding, the roadster body took its final shape and was ready for its first color coat. Robinson said he likes to apply a thin 1.0-2.0 mil coat of powder in the final color to help eliminate the possibility of bleed through. “We learned the hard way that color sanding is the best practice and won’t make that mistake again as it was a costly one,” he said, recalling an experience with a white BMW project.

The client had driven all the way from North Carolina to pick up his vehicle. “Deadline approaching, we applied what we thought was the one and only coat we would need of color. Boy, were we wrong. We ended up having to put our client up in a hotel overnight so we could color-sand and reshoot the vehicle. My guys and I worked all night and into the next morning to finish the job to get our client on the road ASAP. After we pulled an additional 9-hour shift sanding, preparing the vehicle, and applying the final color coat, you could hear a pin drop a mile away as we waited for the body to cure in the oven. While the client was happy, and the project turned out great, I couldn’t help but feel as though we failed by missing the deadline and having to explain to a client that we had to fix a problem.”

Determined to learn from their mistakes and not to repeat them, the company now color-sands every project and applies a second color coat. “We don’t want to trouble our clients,” Robinson said. “We want them to leave our shop and enjoy their projects, which is why we take additional steps to ensure their happiness.”

With the first color coat applied and block-sanded, the company was ready for the final color coat. “This is where it’s critical to have a clean shop and then hold your breath until the project comes out of the oven,” Robinson said. “As any powder coater will tell you, waiting for the item to come out of the oven to view the final results can test one’s patience.



Applying final color coat