



Once thought to be strictly an environmental solution to meet VOC regulations, more and more collision centers have switched to waterborne paint technology for its color-matching and overall performance. As an example, more collision centers use the ENVIROBASE® High Performance system in National Rule regions than in all compliance-regulated areas within the United States and Canada combined.

The coating technologies and features of today's waterborne systems vary greatly from paint supplier to paint supplier. Some employ true latex technology, such as PPG's, while others are polyurethane water dilutable or one-component, polyurethane based. Some require conventional mixing systems—others require no mechanical mixing at all. No matter the technology, color-matching accuracy, ease of use and

cycle time performance remain the top reasons for choosing one waterborne system over another. This article explores these key measures of performance for the *Envirobase* High Performance system—contributing factors that have made it North America's number one waterborne choice of today's high-production collision centers. Readers are offered a look at what makes this PPG system superior to competitive brands.

THE TONER SYSTEM

The *Envirobase* High Performance system is comprised of more than 90 toners including the latest translucent pigments best for matching the newest, highly chromatic factory colors. To ensure color consistency from repair to repair, the toners incorporate anti-settle technology. Requiring only a "shake 'n pour," they do not require a mechanical mixing machine, thus eliminating mismatches due to improper agitation. In comparison, the toner systems of major competitors still rely on outdated mechanical mixing and complex agitation requirements that can increase the chances for improper mixes.



COLOR DATABASE

PPG's unparalleled global color database is comprised of more than 3.5 million formulas including a vast number of variants. Moreover, the database is updated daily via the internet to keep customers abreast of the latest matches.

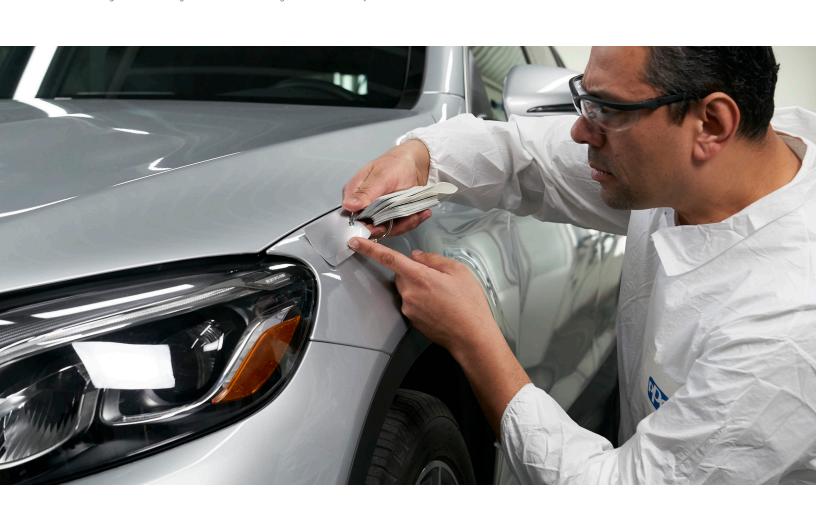
CHROMATIC VARIANT CHIP DECK

This best-in-class PPG color tool is comprised of some 6,000 OEM prime and variant color chips—all arranged chromatically for added convenience in quickly identifying a chip that matches the vehicle. The chips are also sprayed with actual waterborne paint to further ensure "what you see is what you get" accuracy. PPG color decks for wheel and trim as well as engine bay colors are also available.



Watch this video as Pro Collision's Jeff Smith explains the advantages of switching to the *Envirobase* High Performance system.

Jeff Smith of Pro Collision, who had previously used two of their former paint supplier's three waterborne systems, attests to the PPG variant deck's color-matching prowess. "One major advantage of *Envirobase* is the color match. The color deck itself is 'dead-on.' If the color is in the deck, there's no need to do a sprayout." Eliminating sprayouts is a tremendous time saver for Pro Collision



APPLICATION FEATURES

Envirobase High Performance basecoat achieves an accurate match in 2-3 coats with a final control coat. Just 2-3 minutes flash time is required between coats with proper air flow. The greater opacity of finely dispersed pigments allows hiding in thinner films with excellent metallic orientation. A spectral grey sealer system assists in matching highly translucent colors.

Since *Envirobase* High Performance basecoat is applied using traditional application techniques, experienced painters switching from a solvent-based system find the transition easy to learn and master. This goes for novice painters as well. This "ease of use" feature is especially apparent when performing blend repairs. To illustrate, here's a step-by-step comparison of the *Envirobase* High Performance blend repair process compared to a major competitor that we'll call "Brand X."

BLEND PROCESS COMPARISON*

*Data compiled from published tech sheets

Envirobase Blending Process:

1 gun cup

- Apply 2-3 wet coats of mixed color
- Flash for 2-4 minutes between coats with air dryer
- Apply two control coats at lighter pressure for proper orientation of the metallics
- Flash for only 10-15 minutes, ready for clearcoat

Brand X "Reverse Blending"

1st gun cup:

 Apply wet bed of blender to the entire blend panel, using a closed coat method

2nd cup:

- Reduced-strength color is applied, carrying the furthest distance into the blend
- Apply 2nd coat staying inside the 1st coat
- Apply 3rd coat staying within the previous coat

3rd gun cup

- Panel paint with full strength color, using a 1.5 medium wet coat application
- Flash to dry clearcoating

It's readily apparent that, when compared to the *Envirobase* blend process, "reverse blending" is more complicated and requires a skilled painter to master.

REPAIRABILITY

As renown painter Charley Hutton emphasized, "the repairability of the *Envirobase* system has been unmatched." The reasoning is that should any dirt specks appear during basecoat application, the painter just needs to de-nib by sanding them off "on the fly" with 800-1200 grit paper. De-nibbing during color application is not possible with some

other waterborne versions—the painter must start over. That's because other basecoats can peel due to higher film build. So, repairing a defect can become a 2-hour (or even an overnight) process. Easy re-do's is another reason why Pro Collision's Jeff Smith is pleased with his switch to the *Envirobase* High Performance system.

Those moving from a *solvent-based* system can further appreciate the repairability of *Envirobase* High Performance basecoat. As Hutton explains, when repairing a defect, such as a chip, solvent in the basecoat can cause swelling to appear on the blended edge surface. Since there's no solvent in the waterborne basecoat, it won't burn back into the thin-feathered edge for a smooth transition.



CYCLE TIME PERFORMANCE

Some waterborne system suppliers point to 1.5-coat coverage of their basecoat as a measure of throughput superiority. However, to get a true picture of cycle performance requires evaluating the entire refinish process—from sealer to final clearcoat. That's where the *Envirobase* High Performance system really excels. Aided by an accelerated sealer and fast clears that bake in as little as 15 minutes, a paint technician can complete a spot repair in about an hour.

SERVICE AND SUPPORT

Don't count out service and support when evaluating whether or not the *Envirobase* High Performance waterborne system is the right choice for your collision center. PPG is known nationwide for its knowledgeable sales force and distributors, expert technical support and extensive training resources, including the industry-leading MVP Business Solutions program.

