Using Less Is Not Always Best

(In fact, it could be considered waste)

Monitoring paint material costs can be tricky; not only are there a lot of variables, but contrary to popular belief the most profitable painter is not always the one that is using less material. I was reviewing some paint costs and comparing usages to a small MSO when I found an issue between sealer and basecoat. As I was comparing the shops I found one shop was very low in sealer use but really high in basecoat usage. When I brought this up to the painter he said his "experience tells [him] when [he] needs to seal something." While I value experience, it's important to continue learning about the trade to stay consistent with process changes. With an increased use of transparent coatings by manufacturers, the painting process has shifted away from this painter's process.

In the current *BASF Fundamental Refinishing Concepts,* sealer requirements are mentioned in a couple of areas. The first is in reference to warranty requirements when applying basecoat over OEM e-coating or when refinishing aftermarket parts.

Refinishing New OEM or Aftermarket E-coated Parts

A primer sealer or surfacer is required on properly prepared, e-coated OEM or aftermarket parts prior to basecoat to meet OEM specifications and Glasurit or R-M warranty requirements.

As you can see, applying sealer is necessary not only to meet Glasurit and R-M warranty requirements, but to meet OEM specifications too.

The second instance is in reference to ground coats and the one most often overlooked. The statement below describes how the painting process has changed as manufacturers are creating more dynamic colors.

Use of Ground Coats

The use of a colored ground coat under the primary color is becoming increasingly necessary for proper automotive refinish repair due to the increased use of transparent coatings by automotive manufacturers. More transparent coatings provide the high chroma and depth wanted by color designers and the modern consumer.

There are two main areas where ground coats are a vital part of the refinish repair process. The first is with three-stage color formulations, also referred to as "tri-coats." These are colors that are styled with an opaque ground coat, followed by a transparent mid-coat, usually mostly containing mica, then completed with a high-gloss clearcoat. The ground coat is an integral part of the color styling and has a direct effect on the color as the mid-coat is very translucent. In these cases, the use of a step panel is recommended to determine the proper amount of mid-coat, to be applied for proper color-match.

The second use of ground coats is when the color coat is very translucent, often with high levels of mica and/or transparent pigments. In the factory, these are applied over color-coded primers so that the proper film build is achieved in the plant. The color is not applied to hiding in most cases. Therefore, to achieve a proper color-match during the repair & refinish process, use of a ground coat that simulates the color-coded primer used in production is required to ensure the proper film build of the color coat. The use of the required ground coat color is required to achieve color-match of translucent colors, and cannot be achieved with additional coats of basecoat only.

The proper use of ground coat improves color-match and reduces film build to maximize performance and durability of refinish materials. Ground coat colors required for color-match are included in BASF's color information when referencing the color formula.

While some ground coats are created using a derivative of the basecoat, others are created using tinted sealers. The area to focus on here is the second use of ground coats mentioned in the statement above. These ground coats are created using tinted sealers that range from white to black and are dependent on the basecoat color. That paragraph states, "The use of the required ground coat color is required to achieve color match of translucent colors and cannot be achieved with additional coats of basecoat only." This is why the low use of sealer and high use of basecoat during my review raised a red flag. While checking to validate my red flag, it was found that some colors required a ground coat to achieve the proper color-match and excessive basecoat was mixed to recreate the OEM finish. Over-applying basecoat to achieve color-match is waste—with the use of the correct ground coat it can be eliminated.

The complaint I hear from painters is that they don't get paid to apply a ground coat. I don't imagine they get paid to put on multiple coats of basecoat either, but the point is they *can* be paid for it. Motors Guide to Estimating shows that published refinish times are for one color and a tinted ground coat is a second color, which makes some two-stage refinish operations a three-stage process.

REFINISH TIME PREMISE

Published refinish times are for one color applied to new undamaged replacement components, without exterior trim, interior trim or other attached components and applied in one continuous process. For damaged panel(s), published refinish times may be applied after the damaged panel has been returned to a NEW UNDAMAGED condition.

In the Use of Ground Coats statement above is states, "Ground coat colors required for color-match are included in BASF's color information when referencing the color formula." This information, when printed and included in the repair notes, will give you justification to bill for the additional process. I created the formula below after working with painters to determine the extra time needed to apply the required ground coat.

22		Trunk			
23	Repl	Trunk lid	$558.60	1.1	3.4
24	Refn	Add for clear			1.2
25	Refn	Add for ground coat — To account for ground coat materials and labor use half of the clear coat time			.6
26		Note: Paint code 46V has a translucent color coat and requires the use of ground coat color to achieve color-match which cannot be achieved by additional coats of basecoat only.			

In the formula sample above it shows the trunk lid was replaced with refinish time of 3.4 allowed and an add of 1.2 for clear. In my discussion with painters it was determined that the application of a ground coat is the same as application of one coat of tinted sealer. Application of clear is generally two coats, so taking half of the clearcoat time to apply the ground coat is reasonable. By adding a manual line for the ground coat with a line note indicating the paint code and the ground coat requirement, the claim approvers will most often be satisfied. For additional justification, a photo of the color formula in the mixing computer can be used as well as a formula print-out.

Checking your paint costs is a good habit to get into, most often your paint jobber can give you market averages to compare. Validating the highs and lows will not only keep you profitable and reduce your waste, it will help you ensure your refinish operations follow OEM and paint-warranty guidelines.