

Mix Masters

Consistency is the Key to Best Practices in the Mixing Room

Watch a professional golfer hitting on the range, or a professional basketball player doing a free-throw drill... you can't help but be impressed by the way they strive to do things the same way every time they step up to the tee or the foul line. That's because professionals know that the key to winning, and a winner's paycheck, is consistency.

That's true on the playing field, and it's true in the collision shop.

"In the refinish business, it's tempting to concentrate on application," says Mark Lewis, PPG Refinish Color Manager—North America. "But for the artistry to be effective, first the chemistry has to be there. That's what mixing is—it's chemistry, calling for exact measures, and consistent, top-quality procedure. We refer to that procedure as 'best practices.'"

The Right Work Environment

Most shop owners and managers understand that mixing rooms have to be located away from dust sources. But the best go well beyond that.

"We know in this industry that spray-booth conditions have to be 'just right' all the time," Mark Lewis says. "But the environmental requirements of the mixing room should actually be a little more stringent than those we use in the



spray booth. After all, in a booth, our primary concern is to keep the work safe from dust. But in the mixing room, we're not only concerned about dust—we're guarding against other things: temperature extremes, drafts, and even vibration."

Particularly in hot and humid climates, mixing rooms should be kept cool, as high temperatures will accelerate the evaporation of solvent, drying toners and changing a toner's weight to the point that it could compromise a color match. Cool temperatures are also important for the *TouchMix*® computer, as lockups occur most frequently when the computer is in either a heated area or conditions that prevent cool air from getting to the cooling inlet.



As in everything in refinish, air movement is something you want to watch in the mixing room.

Drafts can not only carry dust and other airborne contaminants—they can also affect the accuracy of digital scales. Scales also need to be grounded, to prevent static charge

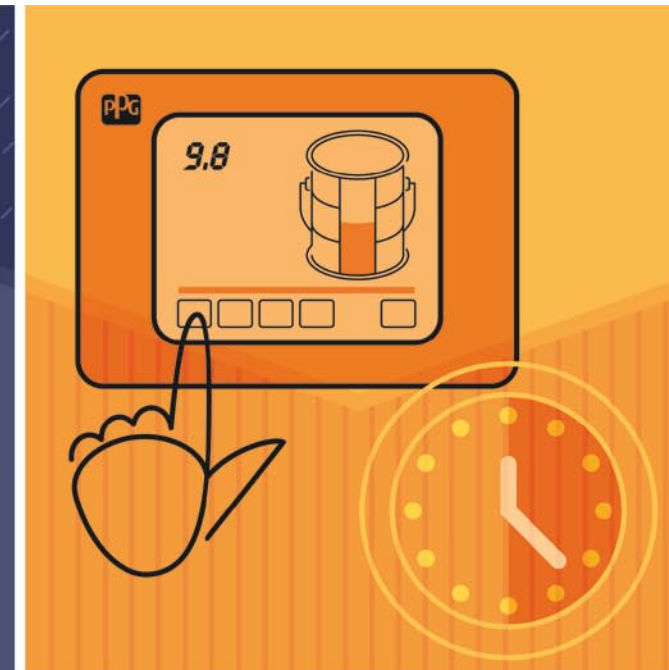
buildups that can affect scale accuracy. As plastic mixing containers can also create static problems, PPG recommends the use of metal cans over plastic containers, and if drift is occurring, plastic containers should not be used at all.

The scales should also be mounted perfectly level and located well away from air compressors and other potential sources of vibration. Vibrations will cause inaccuracies.

Other little things that count include storing toners upside-down to prevent pigment settling, and storing mixing containers upside-down so dust and contaminants don't collect inside of them.

First Things First

Mixing-room best practices begin before the first customers arrive in the morning, and even before the shop brews its first pot of coffee. Mixing banks, scales and the



PPG *Access*® *TouchMix*® touch-screen mixing-room tool should all be powered up 30 minutes before the mixing room is first used, each day. "This underlines two principles to best-practice mixing," Mark Lewis says. "Two things that are always important are keeping finish components in suspension and using tools properly, for accurate measurement."

Another important piece of preparation is to place new cans of paint toners on the shaker for 30 minutes before placing them on the mixing bank, and placing newly mixed color formulas on a shaker for 20 minutes, especially when using powdered pearls.

continued on page 14

**HIGHLIGHTS OF
BEST PRACTICES**

- Power up mixing banks, scales and PPG *Access® TouchMix®* computer 30 minutes before use
- Place new paint toners on shaker for 30 minutes before placing them on mixing bank—shake newly mixed color formulas for 20 minutes
- Don't ballpark measurements—use mixing cup, mixing stick or digital scale readings to ensure accuracy
- Use the exact toner called for—no substitutes
- Make sure toner cans are not damaged
- Check for airtight seals on agitator lids
- See that agitator paddles are properly situated
- Wipe mixing lids after each use
- Avoid pouring toner into rim of mixing can
- At end of day, clean mixing containers, scale and *TouchMix* system and power down all systems

“Shaking and agitation does more than just mix the components of toners and color formulas,” Mark Lewis says. “It also breaks down viscosity and improves pourability, in addition to getting everything back into suspension.”

When it's time to begin work, accuracy and attention to detail are the keys to consistent success. When reducing products, special



care is particularly important. PPG does not recommend pour-offs, so gallon toners should not be poured into a smaller container for use. And when a procedure calls for measurement, it should be just that: a measurement and not a guess.

“Ballpark measurements should be left in the ballpark,” Mark Lewis notes. “When reducing products, it's important to use a PPG mixing cup, mixing stick or the digital scale readings for the product, as found in the training manual or in the PPG *Access® TouchMix®* tool. It's also important to use the



right measuring tool for the job—a measuring stick, for instance, should not be used in a container with tapering sides, because the volume in the upper part of the container is going to be larger than that in the lower part.”

Of course, when tinting it's important to use exactly the toner that's called for, and not a substitute. Follow what's in the formula.

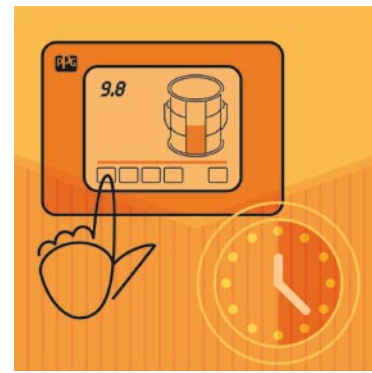
Winning Technique

How you work in the mixing room also affects your results. Toner cans should be checked for damage, as a dented or crumpled can might not fit onto the mixing bank, or could keep mixing paddles from turning. Agitator lids need an airtight seal and should be kept clean, so solvent loss and contamination are minimized. Mixing lids should be checked to make sure paddles are properly situated, and the mouth of the mixing lid should be wiped after each use. If you leave the mixing area in mid-process, you should place a lid over the mix container to prevent evaporation or contamination. And it goes without saying that toner should be poured into the container and not slopped onto the top or the rim.

“The reason for this is more than cleanliness,” Mark Lewis says. “It's accuracy. If the toner doesn't get into the container, then it's not part of the mix, and the proportions are no longer what's called for by the formula.”

End of the Day

As in most work environments, neatness counts in the mixing room. If mixing containers are to be reused, all residues must be cleaned out of them so they won't throw off



later formulas. The scale should be kept clean so paint build-up doesn't cause inaccuracies. The *TouchMix®* system should be powered down each night so it can go through defragmentation and other preventative maintenance automatically when it powers up in the morning. Paint on the computer screen can be removed with a razor blade (same as you'd use on a windshield), and blown away with low-pressure air. That way, everything's ready to go for the next day.

“Best practices are really good work habits,” Mark Lewis says. “And good habits produce winning results.” ■

Delfleet®

Broad-Range Beauty for a Tough Commercial World



Fleet vehicles... commercial trucks... special work vehicles... they all have rigorous workdays, and typically see more miles per year than the average car or truck. That calls for a finish that's beautiful and durable—and easy to work with when it's time to repair or repaint.

PPG has answered that call by developing a complete line of premium fleet coatings designed specifically for this market. Incorporating the latest in coating resin technology, PPG *Delfleet* is a stand-alone system of basecoat/single stage color, primers, clears and ancillaries available in a variety of VOC compliance levels.

“*Delfleet* is being used by manufacturers producing Class 8 trucks, fire and emergency vehicles, and special-

purpose truck bodies,” says John Lewis, PPG commercial brand manager. “It is also used in a wide range of after-market refinish and refurbishment applications. Being successful in all these areas requires



a strong commitment to color. Across all systems, approximately 200,000 color formulas exist. In addition, the *Delfleet* color selector is the largest in the industry with 2,300 solid colors



and 1,500 metallic/mica colors.”

The color systems available in the *Delfleet* line include:

- FDGU—2.8 VOC (max) single-stage ultra-high solids polyurethane enamel
- FDGH—3.5 VOC single-stage high solids polyurethane enamel
- FDG—Conventional VOC single-stage polyurethane enamel
- FBCH—3.5 VOC high-solids polyurethane basecoat
- FBCS—3.5 VOC high-solids spot repair basecoat
- FBC—Conventional VOC basecoat

“*Delfleet* is an extremely powerful system for today's commercial-vehicle builders and fleet refinishers/refurbishers,” says PPG's John Lewis. “Having a complete product line, backed by PPG's supporting tools and programs allows our distributors to effectively meet the needs of all areas of the premium fleet market.”

For more information on *Delfleet*, contact your PPG jobber, distributor or wholesaler, or look on the PPG Refinish website: www.ppgrefinish.com. ■