

3M Tech Talk:

Paint Booth Protection

Keeping Your Investment in Top Shape

New paint booths commonly sell for well-over six-figures these days. With the added capital investments required for specialized tools and equipment for advanced auto materials and ADAS technologies, it's important to maintain that investment for as long as possible. There are several types of products that are available to protect the paint booth, however, there's another available feature to consider that contributes an additional benefit – booth cleanliness.

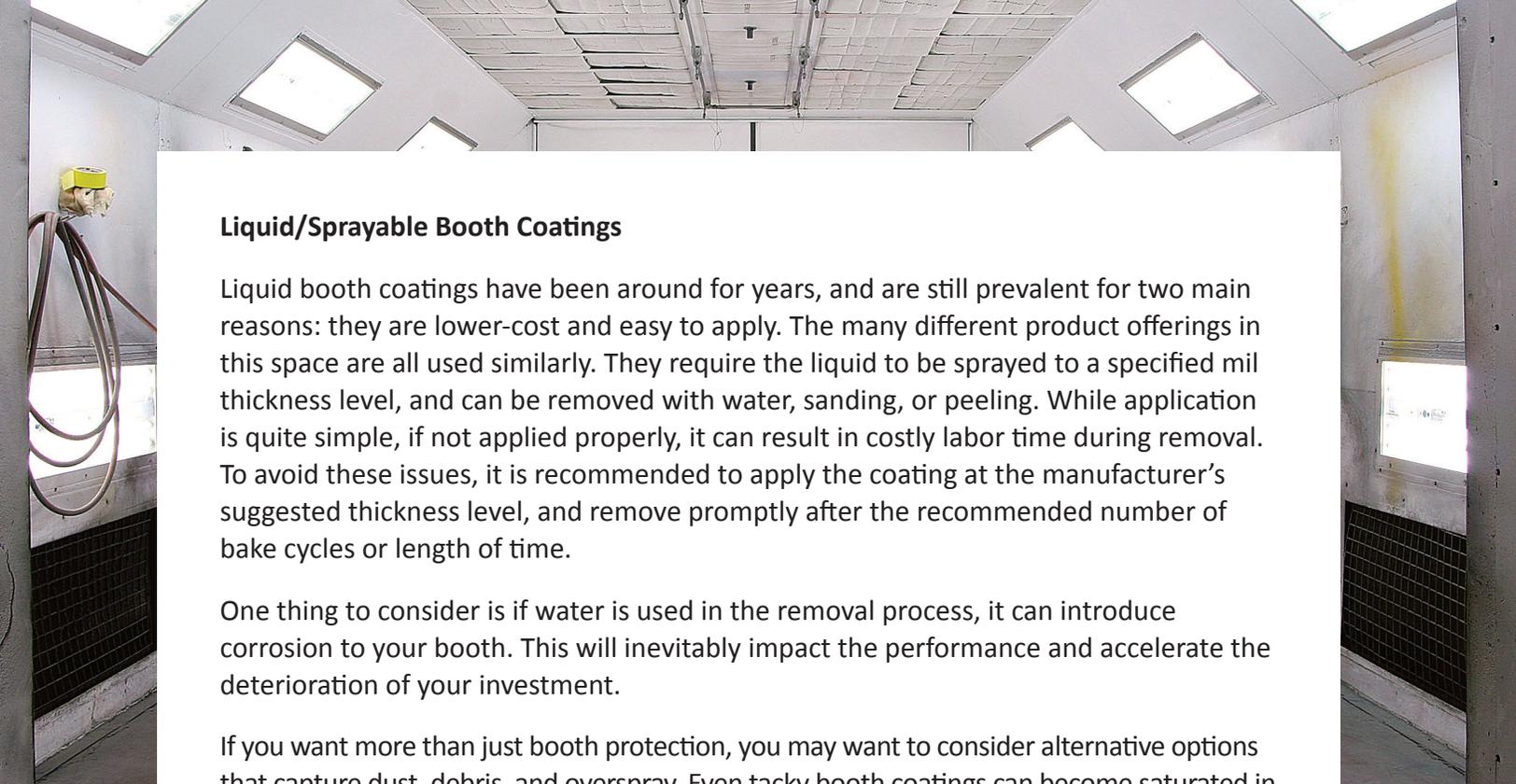
The dirtier the paint booth, the more likely it is that dust and dirt will get into the base or clear-coats. Booth cleanliness becomes even more important with shops that have cross-draft booths or spray water-borne base coats.

- Cross-draft booths actively carry particles across the booth, making it easier for any loose dirt to contact fresh coatings.
- Water-borne coatings require greater flash times between coats. Shops can bypass this by force-flashing the coats with blowers, but these blowers also stir up any loose particles and contaminants.

Shops that use either of these methods should look for a booth protection solution that can also reduce the number of particles in the environment.

With so many different offerings, it's hard to tell which may be best for your shop – but there are a few distinct differences between each of the categories.





Liquid/Sprayable Booth Coatings

Liquid booth coatings have been around for years, and are still prevalent for two main reasons: they are lower-cost and easy to apply. The many different product offerings in this space are all used similarly. They require the liquid to be sprayed to a specified mil thickness level, and can be removed with water, sanding, or peeling. While application is quite simple, if not applied properly, it can result in costly labor time during removal. To avoid these issues, it is recommended to apply the coating at the manufacturer's suggested thickness level, and remove promptly after the recommended number of bake cycles or length of time.

One thing to consider is if water is used in the removal process, it can introduce corrosion to your booth. This will inevitably impact the performance and accelerate the deterioration of your investment.

If you want more than just booth protection, you may want to consider alternative options that capture dust, debris, and overspray. Even tacky booth coatings can become saturated in as little as a few days, therefore reducing their effectiveness over the long term.

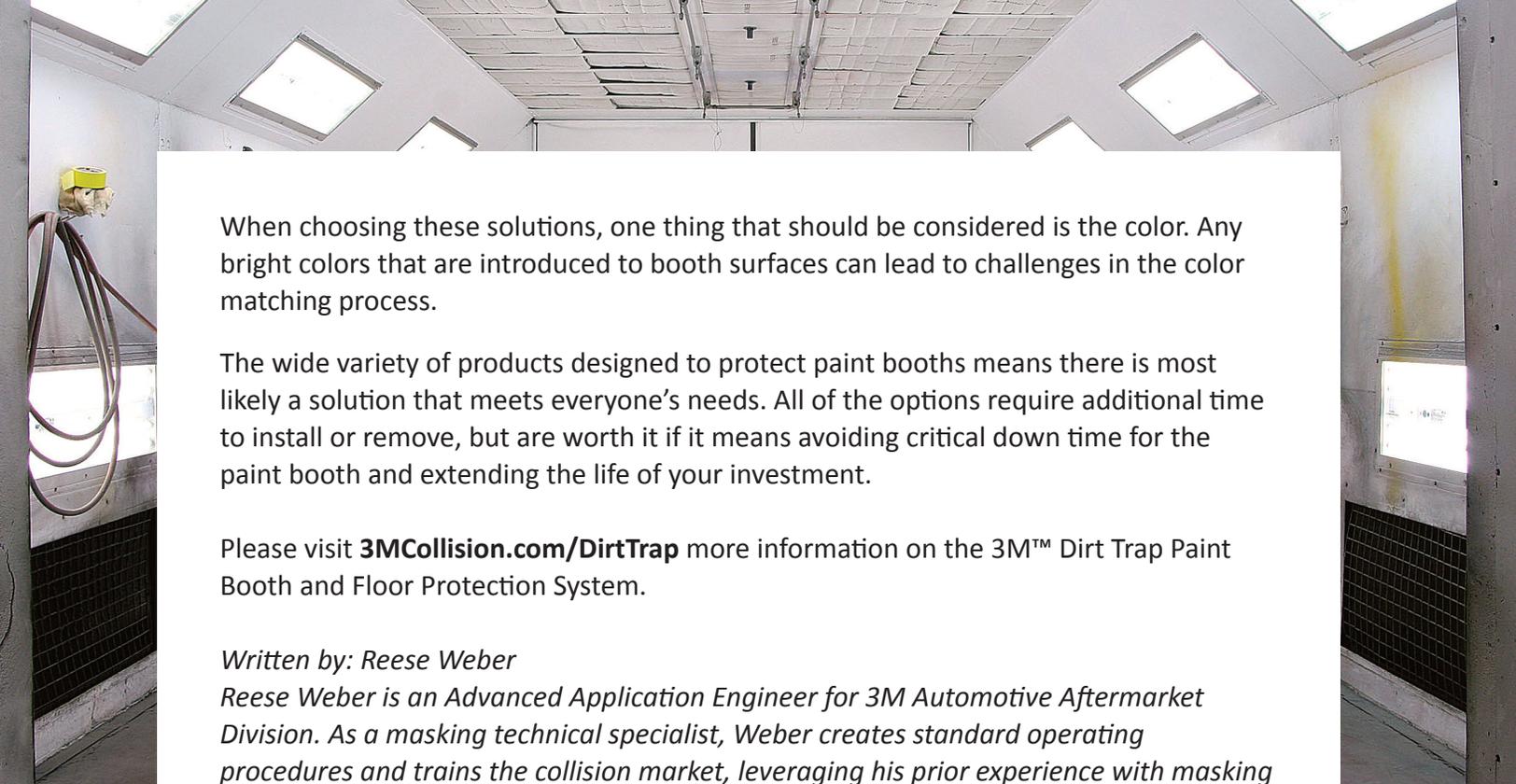
Booth Wraps

In the past few years, a variety of technologies in booth wraps have been introduced. There are plastic/film wraps, and those that more closely resemble fabrics or textiles. They are commonly coated with adhesive which enables them to hold onto booth surfaces. All require more time in the installation process when compared to booth coating, as the material needs to be manually adhered around corners, lights, and other equipment. This can be more challenging in paint booths that have numerous obstacles.

However, once the installation is complete, these solutions offer an easy and efficient dry removal.

Plastic booth wraps have very similar protection capabilities as booth coatings, but take more time to install and less time to remove. These products aren't designed to trap particles, but remain a low-cost option for booth protection.

Fabrics and textiles typically have a higher-cost, but have features and advantages that are worth paying for. These products are specifically designed to provide a solution for both booth cleanliness and booth protection. The fibers in the materials capture and trap dust particles – holding them from being re-introduced into the spray environment. While these advanced features do carry a higher initial investment, the savings can be observed in the results, with cleaner paint jobs and an overall reduction in buffing time. Fewer particles in the paint means more time can be spent painting and less time removing defects.



When choosing these solutions, one thing that should be considered is the color. Any bright colors that are introduced to booth surfaces can lead to challenges in the color matching process.

The wide variety of products designed to protect paint booths means there is most likely a solution that meets everyone's needs. All of the options require additional time to install or remove, but are worth it if it means avoiding critical down time for the paint booth and extending the life of your investment.

Please visit [3MCollision.com/DirtTrap](https://www.3m.com/DirtTrap) more information on the 3M™ Dirt Trap Paint Booth and Floor Protection System.

Written by: Reese Weber

Reese Weber is an Advanced Application Engineer for 3M Automotive Aftermarket Division. As a masking technical specialist, Weber creates standard operating procedures and trains the collision market, leveraging his prior experience with masking tape formulation in 3M's research and development lab.