



Making complex colour and paint line application simpler.

Painters and bodyshops today face significant challenges due to the growing complexity of automotive colour applications. Colours are becoming more sophisticated, making them harder to match accurately.

Understanding complex paint lines

Wet-on-wet paint lines can **help boost productivity and increase efficiency** compared to traditional coat-dry paint lines, but the **application can be significantly more technical**. Here are some factors to consider:



Avoid creating runs or sags as wet coats of base are applied and stacked on top of each other.



These paints are thicker so they need to be atomised finer than what is typically needed for basecoat.



Wet-on-wet paint lines can be difficult to blend, extra steps or additives may be needed.



"Basecoat splashing," a defect that resembles fisheyes, can be caused by overapplying basecoat.



Being cautious of the potential challenges that can arise when applying wet-on-wet paint lines, can help painters avoid rework. With these complicated paint lines, proper spray gun settings coupled with highly technical application and blending techniques are key.

Applying complex colours

Complex colours which often include **limited use toners, specialty additives and ultrafine metallics**, can be **challenging to replicate** in a bodyshop. When applying these colours, consider the following:



Use finer abrasives during paint prep, as a single sand scratch could ruin a paint job.



Some colours include limited use toners which can drastically affect the cost of materials.



Specialty additives modify a paint's properties to perform optimally in specific environments.



Metallic colours could shift if applied too heavily, but can be avoided with proper spray gun setup.

As the OEMs' use of speciality colours continues to expand, the demands on expert painting techniques and proper equipment become more important. Additionally, it is crucial to ensure that these speciality colours are properly captured on the repair estimate, as they take additional time to spray and could have a significant financial impact if not accounted for.

Proper repair planning on the paint side.

As vehicles advance, the need for meeting OEM requirements for paint is essential. Failure to meet these requirements could put your bodyshop and customers at risk.



Film Thickness Requirements: OEM position statements and technical bulletins specify critical film build requirements, especially near sensors and across entire panels. Failure to meet these standards can lead to calibration issues for ADAS-equipped vehicles, resulting in potential liability and safety risks.



Radar-Safe Paint Formulas: Certain toners can affect long-range radar, and some paint companies' mixing software can alert users to these issues, providing radar-safe formulas. If a radar-safe formula is unavailable, bodyshops may need to sublet the job or use a different paint line that meets OEM standards.



Non-Repairable Areas and Repainting Limitations: Manufacturers' guidelines specify non-repairable areas and limitations on repainting certain parts, such as bumpers. Ignoring these guidelines can lead to significant liability and additional costs, as some parts may need to be replaced rather than repainted.

Adhering to OEM requirements and Standard Operating Procedures (SOPs) is essential for compliance and cost-efficiency. Bodyshops must regularly check film build before and after painting using ferrous and non-ferrous coating thickness gauges. Staying updated on frequently changing guidelines can help ensure quality repairs and avoid costly errors.

Spray the smarter way with the 3M™ Performance Spray Gun System.

Each replaceable nozzle is optimised for consistent atomisation and excellent transfer efficiency, making it easier to tackle these complex colours. Swap out the replaceable nozzle and experience like-new spray performance each time.

