



Automotive OEM & Tier Supplier
Paint Shop Practical Guide

4 challenges the right
paint shop partner can
help you solve





A practical guide for reducing complexity, improving responsiveness, and making better coating decisions

In high-volume automotive manufacturing, paint performance depends on more than the material itself. It depends on the partner's ability to support the line, respond when issues arise, connect data to action, and help teams manage changing vehicle requirements.

Automotive OEMs and Tier suppliers are being asked to launch faster, operate leaner, support evolving vehicle designs, and maintain consistent finish quality across locations and programs. In that environment, the paint shop partner you choose can influence more than color or coating supply. It can affect issue resolution, line stability, supplier coordination, sustainability progress, and the confidence teams have when production pressure increases.

The right partner is often the one that is easy to work with when the work gets difficult: responsive, collaborative, technically engaged, and committed to helping solve the problem in front of the team.

This guide outlines four common paint shop challenges and what to look for in a partner that can help address them without adding unnecessary complexity or unsupported promises.

Challenge 1: Complexity

Your coating system has too many moving parts

Few paint shop issues can be traced to a single product. More often, variation comes from the interaction of materials, process conditions, equipment settings, application practices, substrates, and specifications. When multiple suppliers manage different parts of the coating stack, the team can spend valuable time determining where responsibility begins and ends.

What the right partner can help solve

- Connect pretreatment, electrocoat, basecoat, clearcoat, and related technologies into a more coordinated system view.
- Support both OEM assembly operations and Tier supplier component coating requirements.
- Help teams manage evolving substrate requirements, including lightweight, mixed-material, and EV-related applications.
- Reduce the handoffs that can slow troubleshooting and decision-making.

Consider this

The partner test: Can they explain how each layer affects the next — and how the full system affects launch, line performance, and the finished vehicle?



Challenge 2: Uptime

When something goes wrong,
the line cannot wait

Paint defects, contamination, application variability, environmental changes, mix room issues, and process drift can quickly become rework, scrap, delayed shipments, or customer escalation. In these moments, teams need more than a product recommendation. They need a partner that understands the urgency of the floor and can work alongside the people responsible for keeping production moving.

What the right partner can help solve

- Provide practical technical support in the production environment, not just from a distance.
- Help identify likely root causes and stabilize operating conditions.
- Understand the customer requirement tied to the program, schedule, and part or vehicle specification.
- Bring a service mindset that is responsive, collaborative, and accountable.

Consider this

The partner test: When the issue is urgent, do they stay engaged until the team has a practical path forward?

Challenge 3: Visibility

Teams need speed in process conditions

Many paint shop problems are not solved through observation alone. Teams may know there is an issue before they know where it started, how it is trending, or which condition changed. A partner with digital capability can help move troubleshooting from assumptions to process-informed action.

What the right partner can help solve

- Bring relevant paint shop data into a clearer operating view.
- Support faster issue identification across areas such as pretreatment, electrocoat, mix room, color, and defects.
- Help engineering, technical, and operations teams spend less time searching for issues and more time correcting them.
- Create a more consistent way to track process conditions across teams and locations.

Consider this

The partner test: Can their digital tools help your team act on information, or do they simply create another place to store it?

Challenge 4: Future Readiness

Quality, sustainability, and appearance must move together

Automotive teams are expected to support sustainability goals, reduce waste, improve process efficiency, and still deliver the appearance standards customers expect. At the same time, color and finish remain essential to brand identity, especially as vehicle platforms, EV architectures, and component sourcing models evolve.

What the right partner can help solve

- Support waterborne, low-VOC, and other sustainability-advantaged technologies where they fit the application.
- Use digital color tools to evaluate appearance earlier in the design and development process.
- Help OEMs and Tier suppliers manage color harmony across parts painted in different locations or processes.
- Bring materials knowledge beyond the exterior finish, including EV battery pack needs such as dielectric protection, thermal management, battery fire protection, adhesives, sealants, EMI/RFI shielding and corrosion or impact protection.

Consider this

The partner test: Can they help improve efficiency and appearance consistency without treating sustainability, quality, and production performance as separate conversations?



Where PPG Fits

PPG's automotive coatings capabilities align with these four challenges because they combine materials, service, digital tools, and color expertise in a way that supports the broader paint shop operation. The value is not only in supplying coatings, but in helping teams work through the practical issues that affect launch readiness, uptime, appearance, and ongoing production performance.

PPG is On It with capabilities that make the difference

- Integrated coating systems across pretreatment, electrocoat, basecoat, clearcoat, and related technologies.
- Technical service and paint shop support designed to help teams troubleshoot production issues and reduce variability.
- PPG AIM™ SmartPaintline, which gives paint shop teams easier visibility into process conditions and supports more informed troubleshooting.
- PPG MaVis® digital design tool, which creates digital materials from real painted panels using multi-angle measurement data and high-end resolution renderings to help teams evaluate color and effect behavior earlier.
- EV battery pack material technologies, including dielectric coatings, thermal management materials, battery fire protection coatings, adhesives, sealants, corrosion or impact protection, and EMI/RFI shielding solutions.
- Sustainability-advantaged technologies, including waterborne and low-VOC coatings, electrocoat platforms, and digitalization that can support defect reduction, appearance improvement, process visibility, and paint shop efficiency.

Bottom Line

The right paint shop partner is not defined by one product. It is defined by how well they respond, how well they understand the system, and how effectively they help your team make progress when the answer is not obvious.

Partner Evaluation Checklist

- Can the partner support the full coating system, or only individual products?
- Can they support both OEM assembly and Tier supplier coating requirements?
- Do they provide technical expertise that can work directly with plant teams?
- Do they offer digital tools that improve visibility and decision-making?
- Can they support color evaluation, appearance consistency, and brand differentiation?
- Can they address emerging EV material needs beyond traditional paint layers?



Connect with PPG Today

Ready to evaluate what the right paint shop partner can help you solve? Connect with a PPG automotive coatings specialist to discuss your line, your launch requirements, and the capabilities that may support your team.



Contact a PPG Automotive Coatings Specialist

