

Infrared Curing Technology with PPG Products



The following Technical Bulletin regarding the use of Infrared Curing Technologies with PPG Products is designed to be a general overview of recent technologies in the market. It is recommended to consult your PPG rep and equipment manufacturer for specific product requirements.

Overview of Infrared Curing Technology

Infrared curing technology is an established technology, although it is re-emerging within the automotive refinishing aftermarket, utilizing some new approaches that have previously not been seen. The more common available technologies are Medium Wave Max Reflection, Short Wave Max Transparency, Drytronic Max Absorption and Exothermic Chemical Reaction.

Each of these technologies are designed for the same purpose—to cure the paint coatings efficiently and thoroughly without creating adverse results for the coatings or the vehicle being repaired. The newer systems accomplish these results, however, there are many variables to consider, such as:

- Distance from the panels
- Intensity of temperature
- Duration of exposure to the panels
- Travel speed of the equipment
- Airflow requirements in the curing environment

These new IR curing technologies, however, do offer many similarities:

- They are all designed to offer a source of curing for the paint. They provide the heat necessary to achieve substrate temperature for a duration of time in order to cure the coating applied.
- The technologies emit energy by way of a panel of lights, elements, reflectors or catalyst beds to provide the heat source directly to the repair area.
- While they share the same goal of efficient cure, each has a specific approach and/or process by which the vehicles or panels are prepared for repair and paint to ensure a successful outcome.
- When these systems are properly calibrated to the shop's process and environment, the visual quality of the repair can meet the same standards as vehicles cured in conventional bake technologies.

Tips for Success

- Consult with the manufacturer, distributor and/or tech rep to ensure that the infrared curing equipment is setup correctly in your facility .
- Ensure the equipment manufacturer, distributor and/or tech rep understands the work flow requirements and cycle time demands required by the shop.
- Adjustments to the repair process may be required to maximize the efficiencies offered by these infrared curing technologies.
- Consult with your PPG representative to discuss the product requirements with the infrared equipment to ensure the best outcome for the repair