

# AUTOMOTIVE PAINT TECHNOLOGY INTO THE 21st CENTURY



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International ISS Institute/DEEWR Trades Fellowship

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# Executive Summary

The introduction of water-based paint into the Australian Auto Refinishing Industry will provide significant benefits for the environment, manufacturers, the repair industry, and individuals working in the trade.

This International ISS Institute/DEEWR Trades Fellowship enabled the Fellow to access timely information and state-of-the-art skill sets on water-based application techniques and related issues.

Skill deficiencies addressed and new insights gained through the Fellowship experience included:

- State-of-the-art processes in water-based paint application
- Methodologies of colour matching of water-based paint by eye and spectrophotometer technology
- Robotic spraying techniques
- Water-based paint application in trade areas
- Comparative effectiveness of different spray guns used in the repair trade and manufacturing
- Identification of technical difficulties and trouble shooting solutions for water-based paint application
- Waste management techniques for manufacturing and refinishing
- Occupational health and safety (OH&S) issues relating to volatile organic compounds (VOC), including a study of the current European Union VOC regulatory regime

From evidence collected it is clear that the more quickly that Australia can introduce new VOC laws and implement water-based systems into vehicle repair workshops, the more quickly Australia will be able to contribute to cleaning up the environment.

The methods used in application of water-based paints are being introduced to the industry in Australia. Based on this, the Fellow's view is that it should be a very smooth and seamless process to introduce into the existing repair industry. With education and training the repairers should be able to see the advantages go far beyond just a cleaner environment.