

F131-11 Vanshack and Flame Spray

### **Metallisation Equipment Repairs Body Panels**

Metallisation Flamespray equipment is the preferred option for classic Volkswagen specialist repairers Vanshack Ltd, to repair and protect the vehicle body panels of its Volkswagen Vanshack (VWV) customers' cherished vehicles.

Vanshack provides a range of services including servicing, engine rebuilds, engine re-specification, MOTs, body repairs and customisation to VWV customer's vehicles and have recently introduced metal spraying with zinc to its range of services. Vanshack has chosen the Metallisation MK73 Flame Spray system to metal spray zinc, to both the vehicles of VWV customers and other makes of Classic Vehicle body panels. Vanshack is using the system for vehicle body repair and conservation, using Flame Repair for the restoration of peppered panels, Flame Fill as a Lead Loading replacement, Flame Seal for seam sealing, Flame Coat for anti-corrosion protection and Flame Build for component restoration.



Vanshack discovered Metallisation while searching for anti-corrosion protection solutions. During its research Vanshack came across metal spraying and discovered that the process could be used for more applications than initially thought. Following a number of discussions, and a very successful demonstration by Metallisation, Vanshack opted for the Flamespray MK73 system and took the demonstration to the next level.

Metal spraying involves the projection of small molten particles onto a blast prepared surface. Upon contact, the particles flatten onto the surface, freeze and mechanically bond, firstly onto the blasted substrate and then onto each other, as the coating thickness is increased. To create the molten particles, a heat source, a spray material and an atomisation/projection method are required.

In the Flamespray process a wire is fed by a driven roller system through the centre of an oxygen-fuel gas flame where it is melted. An annular air nozzle then applies a jet of high-pressure air, which atomises and projects the molten material, in this case zinc, onto the vehicle panel surface.



For Vanshack, Flamespraying zinc onto a peppered body panel is a revolutionary way of restoring and protecting original panels, to 'conserve the original'. Traditional methods would mean the damage would have to be cut out and replaced but now, using metal spraying, zinc is sprayed over the exposed perforations, replacing what has been lost. In some

cases, where the holes are quite large, a support panel or tape is applied behind the open holes to aid the build up of zinc. The zinc will not bond to the support panel or tape, which is simply removed after the repair is complete. The Vanshack Team refers to this as Flame Repair.



Flame Filling is also used by the team, as an alternative to Lead Loading in body filling repair work. This enables car panels to be filled without the risk of heat distortion, which can be created by Lead Loading. The metal spraying process has made the skills required for Lead Loading much easier, however, this still requires a trained and experienced body repair technician to finish the panel to the highest standards. In addition, if a panel or section has to be replaced the team now uses the metal spraying process to load the joins of the panel. A custom coach-works would melt lead into the seam, which is a highly skilled process that can cause heat distortion and is difficult to control in complex and vertical seams.

Seams traditionally would have been sealed using mastic in production cars, which is less robust and more unsightly than metal spraying with zinc. The zinc also offers additional anti corrosion properties, in the repair and seam areas, that are vital to the longevity of the vehicles the Vanshack Team works with. The Vanshack Team refers to this as Flame Seal.

Metal spraying is an excellent alternative to galvanising when spraying entire car panels, Flame Coat provides a good base for the final paint coating to be applied. There are no heat distortion issues, associated with galvanising thin panels, and the coating can be applied in localised areas or over the whole panel. Once the panel has been metal sprayed, Vanshack then applies an appropriate paint coating to the highest standard set by professional coach-works companies.

Kim Hubbard, Business Manager, Vanshack Limited, says: "I love the technology of the Flamespray process and the longevity provided by metal spraying with zinc. It has also been a good experience to work with Metallisation. It's great to work with a like-minded company to find an effective solution. We are passionate about our business and only want to work with companies that are customer focused and are prepared to deliver what we need, as our customers are 'friends in business' not just customers."

Metallisation has worked closely with the Vanshack Team to get the basics of the metal spraying process right for their specific needs of panel Flame Repair. Vanshack continues to develop this process and enhance the repair process, restoration and conservation of Classic Volkswagens and other Classic Vehicle body panels.

To find out more about Flamespraying, contact Stuart Milton, Sales and Marketing Manager, +44 (0) 1384 252 464 or visit [www.metallisation.com](http://www.metallisation.com)

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