

F127-10 Woof Ceramic Coating

Woof Develops Plasma Ceramic Coatings Range

Metallisation customer, Woof Thermal Management Technology, has applied well proven plasma ceramic coatings technology to high performance automotive applications, to provide highly effective thermal barriers in extreme conditions.

Woof Thermal Management Technology, based in Bradford, West Yorkshire, provides premium specialist coatings and engineering services to industry and end users. The plasma ceramic coatings range has been developed for the nuclear industry, but is proving itself to be very effective and valuable in heavy engineering, aerospace and motorsport industries.

Using Metallisation Plasma spraying equipment, Woof Thermal Management Technology has extensive experience in supplying premium thermal barrier coatings to the motorsport industry. Woof coatings have been specifically developed to reduce under bonnet temperatures, increase power output and increase the reliability and longevity of ancillary components.

The durable plasma ceramic coating provides a highly effective thermal barrier on exhausts, turbo's and brake parts and enables high performance vehicles to run at cooler temperatures. The plasma ceramic coatings work by preventing heat transfer, which means an increase in power and reduced heat input to other components. A typical drop of 25°C in under



bonnet temperature will result in decreased intake temperature, which can give up to a 5% increase in power and significantly increases ancillary reliability.

The Woof plasma ceramic coatings can reduce surface temperatures by up to 160°C and can withstand temperatures of up to 1400°C. This compares with typical standard ceramic containing paint, which may only reduce surface temperatures by up to 9%.

The Woof premium performance plasma ceramic coating contains magnesia / zirconia and offers the best thermal barrier coating. The coating is creamy white in colour, with a slightly rough surface texture.

There is an alternative darker plasma ceramic coating, which contains alumina / titania and has a grey coloured appearance. This offers similar reductions in surface temperature, although the radiation of heat is slightly greater than with magnesia / zirconia. In all cases, except maybe some extreme situations, this coating gives the performance advantage but is less prone to aesthetic degradation due to its darker colour. This means the coating stays fresh and smart looking, which may be important for concourse cars.



The well known white exhaust coatings became very popular in the 1990's and are applied on many new breed turbo charged four wheel drive world rally cars. The proof of their success is demonstrated by the teams who opted for these coatings, which include key players in the industry such as Subaru and Mitsubishi.



These days the use of ceramic coatings has become widespread including Touring Cars, Super Car manufacturers and various rallying disciplines, which has led through to private owners using the coatings on track day cars and fast road cars. Woof Thermal Management Technology currently supplies Mellors Elliot Motorsport and the works Proton S2000 Team.

John Holdsworth, Managing Director at Woof Thermal Management Technology, says: "It's a really exciting time for Woof and we are thrilled to be expanding our services within the motorsport industry. To support our commitment to the industry we have decided to sponsor the Lancashire & Districts Subaru owners' club 'Best in Show' trophy at the prestigious Preston Flag Market car show in April. This lets us get close to the car owners and provides great networking opportunities."

For more information on Woof Thermal Management Technology please visit www.woof-tmt.com. For more information on metal spraying solutions, or Metallisation Ltd, please contact Stuart Milton on 01384 252 464 or visit www.metallisation.com