Coating Solutions for Brake Disc Challenges

Metco Joining & Cladding provides surface solutions for brake discs that reduces fine dust, increases lifetime and protects from corrosion. Now your brake discs can have improved safety, increased efficiency, a perfect look and top performance year round as the manufacturer intended and the driver expects.

As a pioneer in brake disc coating innovations, Metco Joining & Cladding develops and offers dedicated coating powders and application technology for brake discs that meet upcoming regulation goals including EURO 7. Metco Joining & Cladding was the first to develop and offer dedicated coating powders and application technology for brake discs implemented in serial production.

Brake Fine Dust Emissions
Driven by regulations like the EURO norm, much work was done to reduce emissions from exhaust systems. Today, there is only ¼ of fine dust volume emitted via exhaust systems compared to 20 years ago, despite an ever-increasing number of cars. Brake system related emissions contribute with over 30% to the overall automobile fine dust.

Corrosion and Brake Disc
Brake disc corrosion can compromise safety and operating comfort. This is especially true for electric cars which are more prone to corrosion as a result of regenerative braking that actuates brake pads less frequently.

Brake Disc Lifetime
Limited lifetime of standard grey cast iron brake disc leads to higher waste and higher cost of ownership. Also, the fine particles that are emitted from friction brake system can cause detrimental health effects.

The Benefits of Our Coating Solution
DiscCover™ Beam uses high-speed laser cladding and our MetcoBrake™ dedicated powders to drastically reduce fine dust from vehicle braking. DiscCover Beam solutions are already successfully tested by OEMs and proven to reduce fine dust emissions while maintaining brake performance.

- Our dedicated materials and coatings of Nickel, Cobalt and Copper free, support OEMs in achieving substantial reductions in brake system related fine dust emissions (up to 90% compared to standard discs)
- Metco materials withstands more than 1000 hours in standard salt spray test – Excellent corrosion protection
- 10 times increased lifetime helping to reduce waste and cost of ownership
- As a result, safety and comfort are improved and brakes perform to perfection