

FlexiColor®

decorative powder coatings
for highest requirements



surface
technologies

FlexiColor®

The metallic surfaces of a large number of components, housings and covers must be protected from corrosion and weather influences and they must also be impact and scratch resistant. There are also requirements for the optical appearance and the tactile feel. This range of properties is provided to electrically conductive surfaces through powder coating. In powder coating, an electrically conductive material is coated with powder paint. Electrically charged particles of the coating powder and the workpiece to be coated attract each other. The powder is electrically charged via an electrode in the spray gun. The workpiece is earthed so that an electric field is formed between the material and the gun, transporting the powder particles to the surface of the material. The subsequent thermal treatment of the coated materials at 160 - 200°C causes the powder particles to form a

smooth, uniform surface. The powder coatings used are based on polyamide, epoxy or polyester resins and offer good protection against scratches, impacts, corrosion and weathering. Powder coatings are available in almost all RAL colors as well as in different variations of brightness and structure and can also be used for decorative purposes. Aalberts surface technologies offers the eco-friendly FlexiColor® process as a solution.

In order to ensure optimum adhesion of the powder coating to metallic substrates as well as very good corrosion protection, even for damaged paint surfaces, Aalberts surface technologies uses modern zirconium-based conversion coatings.



Powder coating: Application of powder paint in the spray booth.



Covers for gas distribution with powder coating.

FlexiColor®	process details
Applications	car bicycle carrier, devapor housing, vehicle trim
Coatable base materials	most metals and almost all electrically conductive materials
Pre-treatment	degreasing, pickling, passivating
Properties	high corrosion protection, excellent optics, antibacterial structural coating for medical use, excellent chemical resistance, impact resistance
Performance characteristics	layer thickness: 35-600 µm, temperature resistance: -40 °C to 160 °C, depending on coating type
Service	We find the optimal coating process for your components based on an individual consultation. From the first sampling to the introduction into series production, we define the relevant production steps together with you. On request, we can also supplement our technical services with a logistics concept tailored to your needs, including pick-up and delivery services.