

PlasmaCoat®

metallic coatings and combination coatings
for highest requirements



surface
technologies

PlasmaCoat®

The safe and trouble-free handling of materials or sheet products made of plastics, textiles or paper requires transport rollers and other components with wear-resistant traction surfaces, which must also have non-stick and conductivity properties, depending on the application. Aalberts surface technologies offers a variety of perfect coatings with the PlasmaCoat® process. These are applied by thermal spraying. PlasmaCoat® combines the extreme surface hardness and excellent wear protection of thermally sprayed metal or ceramic coatings with the non-stick and anti-friction properties of fluorinated polymers as a matrix. The adjustment of different roughnesses and profiles leads to the desired traction properties.

With PlasmaCoat®, high-quality metal coatings and ceramic coatings are produced by thermal spraying. The highest surface hardness improves wear protection and extends the life cycle of mechanically highly stressed components. In addition, excellent non-stick properties or extremely wear-resistant anti-friction properties can be achieved with a topcoat. PlasmaCoat® coatings can be applied to almost all metallic materials and also to CFRP materials. PlasmaCoat® can also replace hard chrome coatings when mechanically reworked.

PlasmaCoat®	process details
Applications	sealing and sliding seats of motor rotors, gear shafts and pinion shafts, bearing bores, running surfaces of piston rods, sealing strips, seats of axles and shafts, valve spindles, roller surfaces, shaft protection sleeves, gears, pins, cylinders and cylinder liners, etc.
Coatable base materials	aluminum, steel, stainless steel, cast iron, brass, copper, aluminized steel
Pre-treatment	degassing, sandblasting, degreasing
Properties	excellent non-stick properties with high wear resistance and traction (round- or sharp-edged structure)
Performance characteristics	layer thickness: 80-300 µm abrasion resistance: very good hardness (scratch resistance): 28-70 HRc bending strength: good, radius 6 mm without cracking
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.