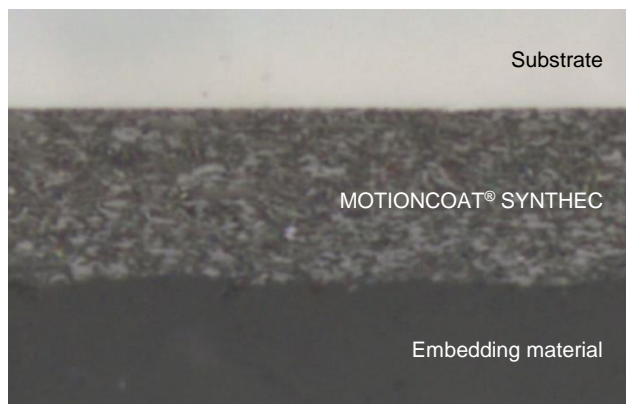# MOTIONCOAT® SYNTHEC

Tribology Solutions

DESCRIPTION

MOTIONCOAT® SYNTHEC is a running layer system that is applied directly to the component and features excellent tribological properties. Temperature and corrosion resistance, weight reduction, wear resistance and low friction make the MOTIONCOAT® SYNTHEC coating the preferred application for bearings and bushings, connecting rods as well as a replacement for bearings and bushings.

DETAILS

The polyamideimide-based polymer layer also contains solid lubricants in the form of MoS_2, graphite and hard material for wear protection.

Substrate

MOTIONCOAT® SYNTHEC

Embedding material

TYPICAL APPLICATIONS

Typical areas of application include radial and axial bearings, wear protection and friction-minimizing applications, especially with high mixed friction (e.g. start-stop).

APPLICATION PARAMETERS

Substrate material	steel, aluminum, copper alloy and sintered parts
Inner diameter of component	min. ~ 15 mm
Layer thickness	5 – 30 µm
Surface roughness before coating	Rz > 2,5 µm
Short-term temperature limit	240 °C
Long-term temperature limit	180 °C
Maximum running speed	22 m/s
Process temperature	180 – 250 °C

MOTIONCOAT® SYNTHEC PERFORMANCE CHARACTERISTICS – ALUMINUM BUSHING

Resistance to wear	++
Fatigue strength	++
Emergency running properties	+
Start-stop properties	++

Legend: 0 unchanged   + improved   ++ excellent

Note: All values are averaged and may vary. Final specification according to drawing and application.