

TAILORCOAT[®] ZnPh

Tribology Solutions







DESCRIPTION

Thick-layer zinc-phosphate coatings on carbon steels and spring steels improve the tribological properties, e.g., of clutch plates. Due to the improved tribological properties, stick-slip effects are avoided and seizure and fretting corrosion are prevented.

Zinc-phosphate surfaces prevent from corrosion and are used as a primer for sliding laquers. Zinc-phosphate serves as a lubricant with antiabrasive effect, e.g., for better machining in non-cutting forming processes such as drawing and pressing.

DETAILS

Dark-gray color that is rather matt, velvety and opaque. Fine-crystalline structure with 5 μ m to 20 μ m particles.



TYPICAL APPLICATIONS

Zinc phosphating is particularly suitable for clutch disks to increase the coefficient of friction and protect the driving disk from corrosion. Typical applications are clutch disks, clutch springs, hydraulic lines and generally components with stable coefficients of friction.

APPLICATION PARAMETERS

Substrate material	carbon steel and spring steels
Component dimensions	max. 950x500x700 mm (max. product window)
Layer weights	3 – 20 g/m ² (depending on base material)
Degree of coverage	99%
Temperature range	-50 to 270 °C

TAILORCOAT[®] ZnPh PERFORMANCE CHARACTERISTICS

Resistance to wear	+
Start-stop properties	++
Friction reduction	+
Corrosion protection	+

Legend: 0 unchanged + improved ++ excellent