



# Today's engines are more demanding than ever. Can your bearings handle it?



King's superior materials and construction meet or exceed the toughest demands of all market segments: automotive, heavy duty, industrial, aviation, marine, and high performance.

Specialists at King Engine Bearings developed an advanced polymer coating range to address market needs.

King coating solutions enhance seizure resistance and provide with extra lubrication which protects the engine during metal to metal contact and oil starvation.

In the range: MC bi-metal coated for start stop and hybrid engines, XPC coated for superior wear resistance, TFC for TOP FUEL and PRO MOD, and GPC for diesel performance and extremely high load engines.







Aviation



QA System



# Advanced Materials for Superior Performance

www.kingbearings.com

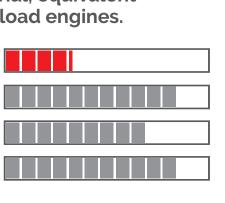


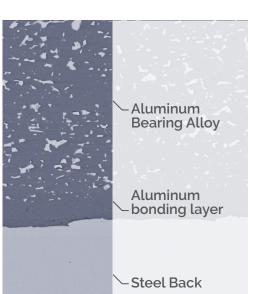
Standard aluminum based material, equivalent to SAE-783, for low and medium load engines.

**Load Capacity** 

Anti Seizure Wear Resistance

Conformability/Embedability



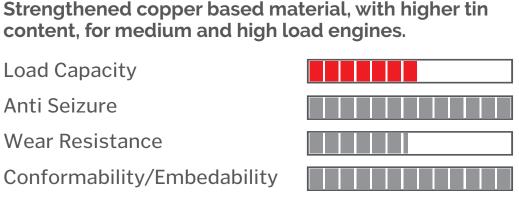


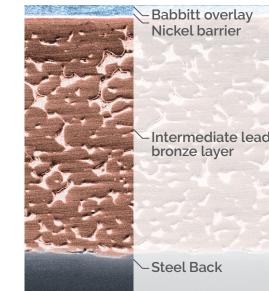




Anti Seizure

Wear Resistance Conformability/Embedability





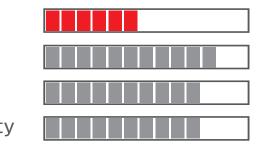


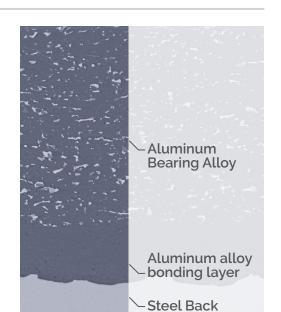
SI/HP

Aluminum based material, strengthened by 2.5-3% silicon, for medium load engines or nodular cast iron crankshafts.

**Load Capacity** Anti Seizure

Wear Resistance Conformability/Embedability







## XP (pMax Black™)

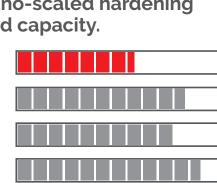
Unique tri-metal structure for race applications. Overlay features proprietary nano-scaled hardening process producing superior load capacity.

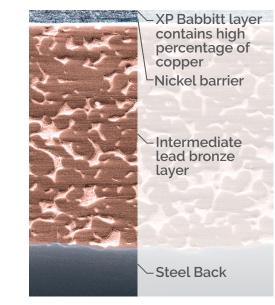
**Load Capacity** 

Anti Seizure

Wear Resistance

Conformability/Embedability



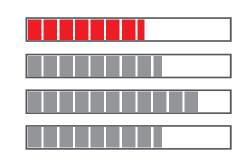


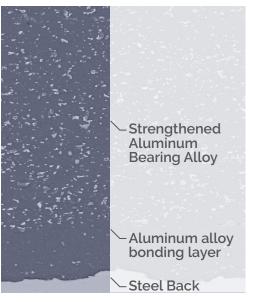


The strongest aluminum based material. The alloy is strengthened by the addition of manganese and chrome (Mn, Cr), for high load applications.

**Load Capacity** Anti Seizure

Wear Resistance Conformability/Embedability





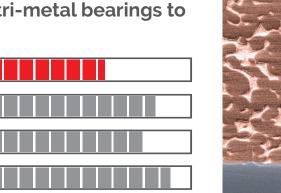


# XPC (pMax Kote™)

The coating serves to improve XP bearing wear resistance under conditions of metal-to-metal contact. It also increases the resistance of tri-metal bearings to cavitation erosion.

**Load Capacity** Anti Seizure

Wear Resistance Conformability/Embedability







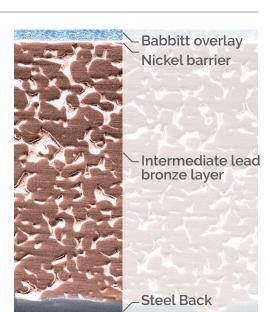
# CP/CA

Standard copper based material, equivalent to SAE-794, for medium load engines.

**Load Capacity** Anti Seizure Wear Resistance

Conformability/Embedability

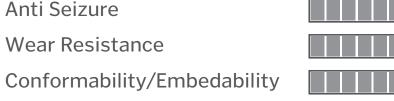


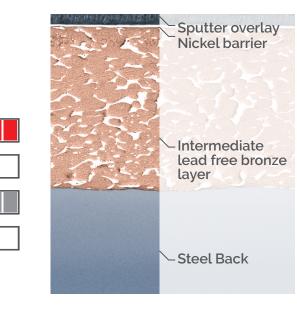




Lead free material with sputter overlay (plated by Physical Vapor Deposition)

for extreme loads. **Load Capacity** 



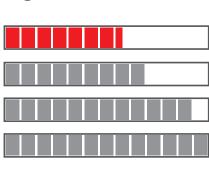




# MC

Factory coated aluminum based material with a nanocomposite polymer coating containing solid lubricants and ceramic additives, designed for superior service life and performance in modern engines.

**Load Capacity** Anti Seizure Wear Resistance Conformability/Embedability



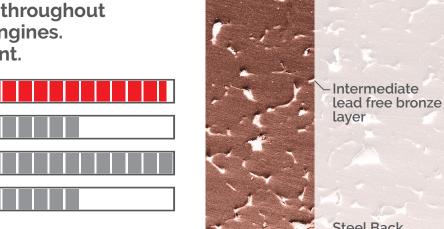




A lead free silver based overlay material containing solid lubricant additives distributed throughout the silver matrix. For extreme load engines.

Can be used as a sputter replacement. **Load Capacity** Anti Seizure Wear Resistance

Conformability/Embedability

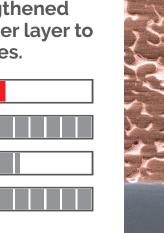


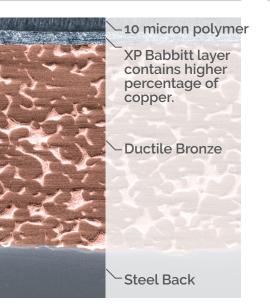


# **TFC**

Strengthened steel back with ductile bronze to withstand high pressure. composed of strengthened Babbitt and coated with an extra thick polymer layer to provide low friction and anti-seizure properties.

**Load Capacity** Anti Seizure Wear Resistance Conformability/Embedability







Polymer coated lead free silver based overlay material. used for applications that require a bearing to withstand extreme loads, high pressure and metalto-metal contact due to minimal oil film thickness.

**Load Capacity** Anti Seizure Wear Resistance Conformability/Embedability



