

# Tomorrow's Bearings for Today's Engines



## ***We are Bearing Specialists***

King Engine Bearings was founded in 1960 with one objective: to supply the highest quality bearings available in the marketplace. King manufactures engine bearings for a wide range of applications: automobiles, light and heavy-duty trucks, marine, aviation, standby power, high performance and many other types of internal combustion engines. From concept to final product, everything is done under one roof. This gives King complete control of the entire production process, resulting in an unequalled level of product quality.



## ***King for extreme performance***

### ***King Racing Activities - The Science of Speed***

King XP and HP bearings have already led to new records on the race track. King's ability to exceed the challenging demands of the racing industry with our unique materials and geometric features is a testament to the quality and reliability of our bearings.

By analyzing the specific needs of race engines, we have developed unique features including:



U-Groove™



Elliptix™



Bull's Eye Tolerance™



Radialock™



Eccentrix™



pMax Black™



### ***King Aviation - OE Partner***

King is the first choice partner to the aviation industry. 7 out of 10 internal combustion aviation engines rely exclusively on King bearings. King works closely with OE aviation manufacturers to design new products and develop engineering solutions to meet their requirements. Our aviation partners rely on the strict quality control that King provides and benefit from our precision manufacturing and high quality materials. King is an AS9100 company certified by the International Aerospace Quality Group (IAQG), and by the FAA.



# King Materials Selection

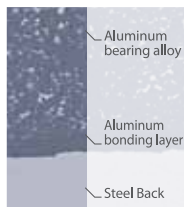
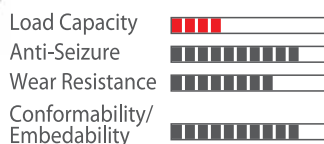
Today's engines require components that can withstand ever greater loads and stresses. To address these demands, King has developed a wide range of innovative bi-metal and tri-metal materials that excel in the following parameters: load capacity, wear resistance, anti-seizure, embedability and conformability.

## Advanced Materials for Superior Performance

### AM



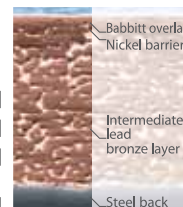
Conventional aluminum based material, equivalent to SAE-783, for low and medium load engines.



### SX/XA



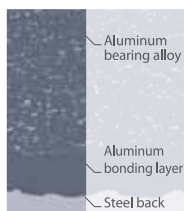
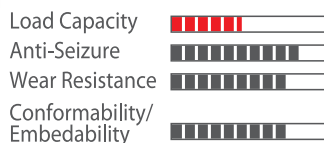
Strengthened copper based material, with higher tin content, for medium and high load engines.



### SI/HP



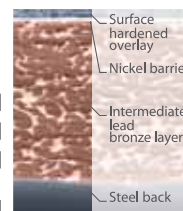
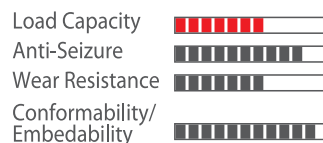
Aluminum based material, strengthened by 2.5-3% silicon, for medium load engines or nodular cast iron crankshafts.



### XP (pMax Black™)



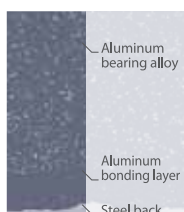
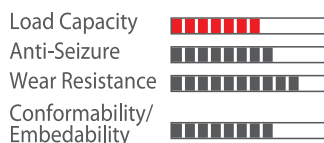
Unique tri-metal structure for race applications. Overlay features proprietary nano-scaled hardening process producing superior load capacity.



### SM



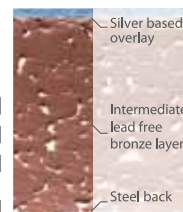
The strongest aluminum based material. The alloy is strengthened by the addition of manganese and chromium (Mn, Cr), for high load applications.



### SV



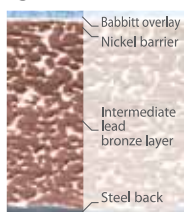
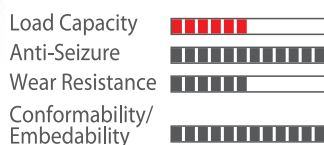
A lead free silver based overlay material containing solid lubricant additives distributed throughout the silver matrix. For extreme load engines. Can be used as a sputter replacement.



### CP/CA



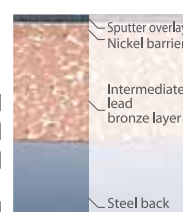
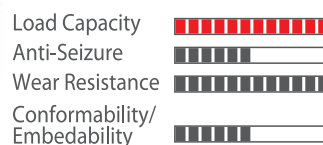
Conventional copper based material, equivalent to SAE-794, for medium load engines.



### SP



Lead free or leaded material with sputter overlay (plated by Physical Vapor Deposition) for extreme loads.







<b>Bearing types:</b> MB- Main bearing set CR- Con rod bearing set CS- Camshaft bearing set TW- Thrust washer set	Number of pairs in a set	Random code	Material construction	Dimension/ undersize	Item barcode	i-King code for online verification and warranty activation (revealed by peeling back the hologram label)
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