FAG 54206 of the bearing with the mounting dimensions



The so-called phosphating processing refers to the metal surface in contact with acidic solution containing dihydric phosphate, chemical method for treating surface insoluble inorganic compound coating of chemical reaction and the formation of stable on the surface of metal. The formation of a film called the phosphating film. Its film forming mechanism is: (to zinc system as an example)

A) accelerator acceleration

Step reaction releases hydrogen is adsorbed on the surface of the metal workpiece, and prevent the formation of FAG 54206 of the bearing phosphate film. So adding oxidation accelerator to remove hydrogen. The chemical reaction formula was: 3Zn (H2PO4) 2+Fe+2NaNO2=Zn3 (PO4) 2+2FePO4+N2 +2NaH2PO4+4H2O (up 2) Type is the action mechanism of additive sodium nitrite.

B) the dissolution process of metal

When the metal is immersed in phosphating solution, first with phosphoric acid in phosphating solution, generation generation of iron phosphate, and a large number of hydrogen

Gas precipitation. The chemical reaction is;

Fe+2H3PO4=Fe (H2PO4) 2+H2 - arrow

The above formula shows that the phosphating began when dissolved only metal, without membrane formation. C) hydrolysis reaction and phosphate level three dissociation

The basic composition of FAG 54206 of the bearing phosphating bath is acid phosphate of one or more heavy metals, its molecular formula Me (H2PO4) 2, the acid soluble in water, in a certain concentration and PH value was hydrolyzed overtone method, to generate free phosphate.

Due to the hydrogen ion concentration of the metal workpiece surface decreases sharply, resulting in phosphate levels of dissociation equilibrium moves to the right, eventually become phosphate.

The formation of phosphating film

When the metal surface of the dissociation of trivalent phosphate and phosphate in the bath (workpiece surface) of FAG 54206 of the bearing the metal ion reaches saturation, namely crystal deposition in the surface of the metal workpiece, the grain grows continuously, until in the phosphate film continuous water insoluble bond generated on the surface of metal workpiece.