

MG-1B 铜基无铅自润滑轴套

MG-1B Bronze Pb-free Self-lubricating Bushes



材料组织 Material Structure



1. 聚四氟乙烯与亲油性纤维混合物
0.01-0.03mm
2. 球形青铜粉0.2-0.35mm
3. 铜背0.7-2.3mm
1. PTFE with Fiber 0.01~0.03mm
2. Porous bronze 0.2~0.35mm
3. Bronze backing 0.7~2.3mm

使用参数 Technical Data

最大承载 Max.load	静承载 Static	250N/mm ²
	低速运转 Very low speed	140N/mm ²
	旋转、摇摆运动 Rotating oscillating	60N/mm ²
最大PV值(干摩擦) Max. PV (dry running)	间断性运作 Short-term operation	3.6N/mm ² ·m/s
	长期运作 Continuous operation	1.8N/mm ² ·m/s
使用温度 Temp. limit		-195℃~+280℃
摩擦系数 Friction coefficient		0.03~0.20
最大线速度 Max. speed	干摩擦 Dry running	2m/s
	流体润滑 Hydrodynamic operation	>2m/s
导热系数 Thermal conductivity		60 W(m·k) ⁻¹
线胀系数 Coefficient of thermal expansion		18 × 10 ⁻⁶ ·K ⁻¹

MG-1B青铜基轴承，是以锡青铜为基体，中间烧结青铜球粉，表面轧制聚四氟乙烯(PTFE)和耐高温填充材料而成。它具有很高的安全系数，在连续工作不能停机修理的场所和高温不能加油的场所特别适用。目前已广泛应用在冶金钢铁工业，连铸机方坯滚道、高温炉前设备，水泥灌浆泵和螺旋式输送机上。它可以在外部组合钢套，也可以制成翻边，达到端面、内孔同时摩擦使用的效果。桥梁支座滑动部位，就是采用MG-1B耐磨层加厚的产品以取代纯PTFE板，达到130N/mm²轴载使用的要求。

MG-1B is with a high safety factor, which is particularly appropriate for high temperature environment where oil is insufficient and where the machine has to be under successive long period working condition.

This is widely used in steel metallurgy industry such as bushes for roller grooves of successive casting machines, cement grouting pumps and screw conveyers for cement. It can also be composed in steel housing or fabricated into flanged bushes which can move both in radial and in axial directions. It can be applied in bridge base place because the thicker inner surface layer can reach 130N/mm² on axial load.

应用特点 Application Feature

1. 聚四氟乙烯与亲油性纤维混合物在运动时可形成很好的转移膜保护对磨轴。
2. 烧结层与铜基板具有良好的导热性，可迅速转移运作过程中产生的热量。
3. 铜具有自润滑性能，可用于长期运作而无法停机检修的部位。
4. 基体铜具有良好的抗腐蚀能力，可应用于弱酸、强碱场合。
5. 具有良好的承载能力。
6. 产品已广泛应用于冶金钢铁工业、高温炉钢环部位、水泥灌浆泵、螺旋式输送机、港口机械及船舶机械上等。
7. 可在外部组合钢套；或制成翻边，达到内孔、端面同时使用的效果。

1. PTFE and lipophilic fiber can protect the shaft while the machine is in running-in operation.
2. Bronze has good thermal conductivity, which diverts heat while the machine is in operating.
3. It can be applied in the machine with working for a long time but with incapable examinations and repairs, because the bronze has self-lubricated property.
4. It is used in the weak acid and alkali conditions because of its good anti-corrosion of bronze backing.
5. Good load capacity.
6. It is widely used in steel metallurgy industry, such as bushes for roller grooves of successive casting machines, cement grouting pumps and screw conveyers of machines.
7. It can be composed in steel housing, or fabricated into flanged bushes which results in function for motion both on flange and I.D.