

论文摘要

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NaCl溶液中腐蚀学因素对化学镀Ni-P合金腐蚀磨损行为的影响^①

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摘要: 在自行研制的腐蚀磨损试验机上, 研究了腐蚀学因素对化学镀Ni-P合金腐蚀磨损行为的影响。结果表明, 当NaCl浓度为3.5%时, 化学镀Ni-P合金的腐蚀磨损速率、摩擦系数和腐蚀磨损协同作用率具有峰值特性。NaCl浓度升高将引起Ni-P合金的自腐蚀电位负移, 温度升高将引起Ni-P合金的腐蚀磨损速率增大, 协同作用率上升。化学镀Ni-P合金可以作为G105钢在NaCl溶液中抵抗腐蚀磨损的表面改性材料。

关键字: 氯化钠 化学镀 Ni-P合金 腐蚀磨损 协同作用

EFFECT OF CORROSION FACTORS ON THE CORROSIVE WEAR BEHAVIOURS OF ELECTROLESS Ni-P COATING IN NaCl SOLUTION

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Abstract: The effect of corrosion factors on the corrosive wear behaviours of electroless Ni-P coating in NaCl solution was studied using a device made by authors. The results showed that electroless Ni-P coating had better of wear than G105 steel, and the main loss forms were the pure mechanical wear and the synergy between corrosion and wear.

Key words: electroless plating Ni-P coating corrosive wear synergy NaCl solution

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