

عنوان مقاله:

An investigation of cavitation erosion behavior of casting Cu-based alloy

محل انتشار:

دهمین همایش مشترک و پنجمین کنفرانس بین المللی انجمن مهندسی مواد و متالورژی و انجمن علمی ریخته گری ایران (سال: 1395)

تعداد صفحات اصل مقاله: 8

نویسندگان:

Hamidreza Aliakbar - School of metallurgy and materials engineering, College of engineering, University of Tehran, Iran

Saeed Reza Allahkaram - School of metallurgy and materials engineering, College of engineering, University of Tehran, Iran

Hamidreza Bakhshandeh - School of metallurgy and materials engineering, College of engineering, University of Tehran, Iran

خلاصه مقاله:

Casting Cu-based alloy is a common industrial propeller alloy. The relative popularity of this alloy is due to its mechanical and cavitation-resistant properties. In this study, cavitation erosion behavior of this alloy was investigated using ultrasonic vibratory facility conforming to ASTM Standard G32-92 in distilled water and 3.5% NaCl aqueous solution. Scanning electron microscopy (SEM) showed that cavitation made the surface of this alloy very rough, with large cavities or pits. Also, the weight loss of sample and depth of pits increased when cavitation tests carried out under corrosion condition, in 3.5% NaCl aqueous solution. Finally, polarization test were utilized to investigation of corrosion behavior of samples

کلمات کلیدی:Cavitation, corrosion, synergistic

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/574942

