

عنوان مقاله:

Controlling Cooling Water Quality by Hydrodynamic Cavitation

محل انتشار:

مجله چیلر و برج خنک کن، دوره 1، شماره 4 (سال: 1390)

تعداد صفحات اصل مقاله: 10

نویسندگان:

Erfan Ziarifa - Islamic azad university of Mahshahr, Amir Kabir Petrochemical

Bijan Ghanavati - Scientific Board Member of Islamic Azad University, Mahshar Branch

Behnam Amini - Islamic Azad University, omidiyeh Branch

خلاصه مقاله:

An independent field study was conducted on a cooling tower system at an automotive manufacturing facility to evaluate the performance of a VRTX hydrodynamic cavitation device for disinfection, scaling, corrosion and heat transfer efficiency. The VRTX treatment enabled the cooling tower system to operate at higher eyeles of concentration than those obtained while on the chemical program without adversely affecting scaling, corrosion and heat-transfer efficiency. On average, water consumption was reduced 10% and blowdown was reduced over 30%. The test results also showed that the VRTX treatment performed as well as the chemical treatment program that it replaced with regard to bacteria control without adding any chemicals. The bacteria population was maintained at equal to or less. .than bacterial levels obtained while on chemical treatment. No Legionella was detected during the study period

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/281204>

