

Sound Solutions No. 00-015

CTRL Systems, Inc. Best Practices

Industry

Facility Maintenance

Application

Bearing CBM

System

Chill water circulating motor and pump.

Component

Motor and Pump bearings

Current Procedures

Chill water circulating pump is used to circulate chill water throughout a facility cooling system for equipment, and personnel comfort cooling. With only one chill water circulating pump at the facility, it is run to failure with no planed down time for routine maintenance other than the occasional greasing.

CTRL's Sound Solution.

- 1. After a short training lesson of familiarization and application of CTRL's UL101, the maintenance technician selects the UL101 receiver, headset, and contact probe from kit.
- 2. Verify operation of UL101 in accordance with the operator's manual.
- 3. Ensure chill water circulating motor and pump are working properly.
- 4. Begin at one end or the motor and pump assembly. Contact the UL101 probe onto exposed zerk fitting or closest point to bearing on motor or pump housing.
- 5. If using CTRL's SoundCTRL and InCTRL, record bearing noise to begin bearing trend. Listen for pops or clicks from within the bearing that may indicate spalling or loud rough rolling that may indicate under lubrication.
- 6. Once a determination is made concerning bearing health, schedule maintenance as needed.

Benefit

Allowing bearing failure using the current procedure above may cause unnecessary damage to the motor and pump shaft as well as longer down times that may stop or slow machine or human production.

Using the UL101 with SoundCTRL and InCTRL will allow the user to trend bearing noise to determine bearing health over time. Even without SoundCTRL and InCTRL a seasoned maintenance worker will be able to determine differences in bearing sounds and make recommendations for maintenance. Being able to schedule repairs and maintenance is always better than repairs and maintenance scheduling you.

