

CENTRIFUGAL AND REFRIGERATION CHILLER LOG – PERIODIC MAINTENANCE

(Post near chiller and initial when tested)

IMPORTANT

For reliable and uninterrupted service, the following maintenance items should be given attention as indicated.

Compressor

- After 40,000 operating hours or 5 years, whichever comes first, the compressor should be disassembled. Impeller(s) should be examined for rubbing, grooves and cracks – cleaned, nondestructively tested and balanced. Guide vanes, linkage and bushings examined for lost motion, wear, sticking stems and nondestructively tested. The main shaft, pinion, and gears should be nondestructively tested.

Tubes

1. The water side surfaces should be cleaned **annually**.
2. Eddy current analysis should be performed on condenser tubes within 3 to 5 years of service, and on evaporator tubes within 5 to 7 years of service. The detection of any wear, corrosion, or deterioration of tubes will determine when subsequent testing of the tubes should be performed.

Controls

- All safety and operating controls should be tested annually, calibrated to design conditions and their set points recorded. Defective safety devices and controls should be replaced.

Oil/Refrigerant

- When oil or refrigerant is added, record date and amount.
- Also indicate leak tests, repairs and adjustments.
- Oil samples should be taken and tested for physical and chemical properties.

Purge Unit (Centrifugal Compressors)

- When provided, should be overhauled at least once a year with interim service checks performed as recommended by the manufacturer.
- Use Reports section below to record all service calls including:
 1. Service Company/Name & Tel. No.
 2. Date of service call.
 3. Work performed.
- Date and time machine shut down on safety control.

OPERATING AND SAFETY CONTROL TESTS								
TUBES	OIL PRESSURE SAFETY CONTROL		LOW REFRIGERATION PRESSURE/TEMPERATURE CONTROL		LOW CHILLED WATER TEMPERATURE CONTROL		FLOW PRESSURE DIFFERENTIAL CONTROL	
DATE CLEANED	SETTING	CONDITION	SETTING	CONDITION	SETTING	CONDITION	CHILLED WATER	CONDITION
DATE OF EDDY CURRENT TEST	DATE TESTED	INITIALS	DATE TESTED	INITIALS	DATE TESTED	INITIALS	CONDENSER WATER	CONDITION
REMARKS							DATE TESTED	INITIALS