

# CENTRIFUGAL AND REFRIGERATION CHILLER LOG – WEEKLY

*(Post near chiller and initial when tested)*

## INSTRUCTIONS:

- Continued safe operation of a chiller depends on regular maintenance and testing of the chiller. The tests and checks outlined below are designed to determine whether or not the chiller and controls are in good operating condition.
- Should any check or test indicate that the device being tested or observed is not in good operating condition, it should be repaired or replaced immediately. Record repairs or replacements under "Remarks" so that a complete record will be available for review at any time.

MANUFACTURER								NUMBER								REFRIGERANT								WEEK BEGINNING													
DAY AND TIME	Outside Temp	Position Cap Indicator	COMPRESSOR						MOTOR			GEAR OIL		CHILLER			CONDENSER				PURGE		Operator on Duty														
			BEARING		OIL				VOLTS	RL AMPS		Press.	Temp.	REFRIGERANT			WATER		REFRIGERANT		WATER TEMP.																
			Temp.	Temp.	Level	Temp. Reservoir	Temp. Leaving Cooler	Press.		A	B			C	Level	Press.	Temp.	In	Out	Press.	Temp.	In		Out													
MON	A.M.																																				
	P.M.																																				
TUES	A.M.																																				
	P.M.																																				
WED	A.M.																																				
	P.M.																																				
THUR	A.M.																																				
	P.M.																																				
FRI	A.M.																																				
	P.M.																																				
SAT	A.M.																																				
	P.M.																																				
SUN	A.M.																																				
	P.M.																																				
LOG REVIEWER <i>(This log reviewer should not be the same individual who fills this log on an hourly basis.)</i>										REMARKS																											
REVIEWED BY								DATE																													

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 This log is intended to complement the equipment manufacturers' recommendations - not replace them. If you have doubts about any particular testing or maintenance procedure, contact the manufacturer or your equipment service representative.

*(If you have any questions regarding your equipment or need to schedule an inspection, call 1-800-333-4677.)*

**SEND REQUESTS FOR ADDITIONAL LOGS TO:**  
 The Hartford Steam Boiler Inspection and Insurance Company  
**Attn:** Inspection Services  
 Hartford Steam Boiler  
 PO Box 61509  
 King of Prussia, PA 19406  
 or by email: NSCINSP\_hotline@hsb.com

*or scan this code*



## 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