

MAINTENANCE SERVICES

PREVENTIVE MAINTENANCE: REFRIGERATION MECHANICS

WESTERN MICHIGAN UNIVERSITY



| Description | Shift | Frequency | Area |
|---|-------|----------------|---|
| 1. Air Dryer – Haenicke Hall <i>Filter Changes, system check/switch/clean condenser coils, and electrical inspections</i> | 1 | Monthly/Yearly | GF |
| 2. Air Cooled Condensers <i>Pressure, temperature, oil, voltage & amp check, belts, and lubricate fans</i> | 1 | Monthly | Lawson, 511, Campus Svcs, Lee Honors, Waldo Stdm, Rood, Haenicke, University Arena |
| 3. Air/Water Cooled Refrigeration System (Split/Package Units) <i>Clean condenser fins, check belts, electrical, check operating condition</i> | 2 | Yearly | AE/GF |
| 4. Air Dryers <i>Inspect electrical, compressor, clean condenser, check drain pan, change moisture, oil filters</i> | 2 | Yearly | AE/GF |
| 5. Compressor Oil Sample Analysis <i>Take sample and run sample in house</i> | 1 | Yearly | Lawson, 511, Campus Svcs, Lee Honors, Waldo Stdm, Univ Arena, Rood, Haenicke, McCracken |
| 6. Compressor Top End Teardown <i>Top end of compressors, check all electrical oil level filter changes</i> | 1 | Yearly | Lawson Ice Arena |
| 7. Fyrite Combustion Analyzer - Boiler <i>Efficiency combustion test, loss percentage</i> | 1 | Yearly | Knollwood, Aviation Building |
| 8. Humidifiers – Nortec/Armstrong <i>Check unit for proper operation, change canister if required, clean drain valve, run sequence check</i> | 1 | Monthly | GF |
| 9. Ice Pro Machine – Ice Rink <i>Check pressure, refrigerant and oil levels, temperature, compressors, record data, electrical</i> | 1 | Monthly | Lawson Ice Arena |
| 10. Ice Machine – Cubed/Flakes <i>Clean condenser, clean water circuit, electrical fan and compressor check, change water filter</i> | 2 | Yearly | AE/GF |

REFRIGERATION MECHANICS CON'T

| Description | Shift | Frequency | Area |
|---|-------|-----------------|---|
| 11. Leibert Air Cooled Systems <i>Filter change, system sequence check, clean condensate/humidifier pan, change belts, motor, control panel</i> | 1 | 45-60 Days | AE/GF |
| 12. Operating Season Boiler Check <i>Flame and burner operation, expansion tank, boiler water temperature, fuel train, primary water cut off test relief valve, corrosion inhibitor test</i> | 1 | Weekly/Monthly | AE/GF |
| 13. Pool Pak – Swimming Pool <i>Check oil level, refrigerant charge, belts condensate lines, exterior filter, space temperature, pool water temperature, check damper operation</i> | 1 | Monthly | SRC |
| 14. Pre-Winter Season Shutdown – DX Cooling System <i>Pumpdown, turn power off, close suction and discharge valve off</i> | 1 | Yearly | AE/GF |
| 15. Pre-Summer Season Startup – DX Cooling System <i>Check piping, electrical, crankcase heater, oil level, refrigerant charge</i> | 1 | Yearly | Lawson, 511, Lee Honors, University Arena |
| 16. Side Stream Filter <i>Replace bag filter as required</i> | 1 | Monthly | Campus Services, Rood Hall |
| 17. Window Air Conditioners <i>Clean condenser fans, coils, check amp, voltage, check unit for proper operation</i> | 2 | Yearly | AE/GF |
| 18. Drinking Fountains <i>Clean condenser, fan, test water temperature/bubbler settings</i> | 1,2 | Yearly | AE/GF |
| 19. Heat Pumps <i>Change Filters, belts, check controls, condenser and evaporator valves</i> | 1,2 | 6 Months-1 Year | AE/GF |