



PLEUNE SERVICE COMPANY MAINTENANCE SUGGESTIONS

- **Mechanical thermostat-** Check for proper operation & make sure the anticipator is not burned and that wire connections are secure.
- **Programmable thermostat-** Check program for maximum energy savings.
- **Pneumatic controls-** Periodically need to fine tune controllers & calibrate thermostats for maximum energy savings. Repair any leaks. Prevents air compressor cycling.
- **Water loop hot or chilled-** Take yearly samples to check ph, particulate, iron, freeze protection etc...Cannot see problems by looking at the outside of a pipe. Water must be sampled to correct problems before pipes degrade & heat exchangers foul.
- **Boilers-** Cleaning burners & pilots to keep system up & running. More importantly checking safeties to maintain safe operating condition. (high-limits & low water cut-outs) Combustion analysis is needed annually on many boilers. State of Michigan now requires annual safety inspection on boilers by licensed mechanical contractor.
- **Air handlers-** Grease bearings, change filters, check/replace belts. Check coils. Blow out condensate drain lines to minimize leak potential. Make recommendations to keep air handler as efficient as possible. Unit operates more efficiently with clean coils. Checking fresh air dampers and keeping clean filters in place helps maintain good indoor air quality.
- **Furnaces-** (standard furnace) Clean burners, pilots, check ignitors, inducers, safeties & controls. Make sure blower assembly is in good condition. High efficiency 90% furnaces require more attention. The condensate float/trap & drain line must be flushed. The secondary heat exchanger must be clean.



- **Chillers-** Important to keep (water or air cooled) condensers clean. Oil levels need to be checked along w/ pressures, and on chillers over 50 tons the oil should be sampled yearly & sent to the lab for an analysis. Repair and prevent leaks for less down time and better efficiency.
- **Fluid Coolers & water towers-** High Maintenance-Require frequent cleaning & reliable chemical treatment program to minimize solids & eliminate algae. A dirty tower is inefficient. Quarterly checks are not enough-we highly recommend monthly inspections.
- **Circulating pumps-** Thorough inspection to try & catch any problems before pump failure. Lubricate bearings and check couplers.
- **Rooftop & Condenser's-** Keeping coils clean, units, belts and motors in good condition to minimize down times & save energy. Check refrigerant levels and maintain proper gas pressure.
- **Heat pumps-** Checking controls & cleaning drain lines as part of a standard preventative maintenance, but it is critical to keep coils clean & water loops in good working condition. Otherwise the heat pump will not operate properly or efficiently.
- **Electronic panel Air Conditioning Unit -** Quarterly inspections to check charge, blowers & coils. Helps prevent shutdown. With this unit a failure in the summer typically means process machinery shut down.
- **Air driers-** Maximizing the units ability to condense moisture from compressed air requires: clean coils, a working blow down & a proper charge. Allows pneumatic controls and tools to operate more efficiently increases their life.
- **Digital Controls-** A service technician to confirm proper operation and calibrations. The benefit is saving energy through a well-controlled Building Automation System.



- **Energy Recover Ventilators-** Heat recovery wheels save energy while meeting air change codes. Keeping the wheel clean. Making sure the belts, motors & dampers are in good working condition will save energy.
- **Make up air units-** Require high level of maintenance; not only to stay reliable, but to keep the operation safe. Drilling of the burners and keeping the belts and bearings in good shape, and verify the safety and operational controls function.
- **Ovens-** Must check safeties, controls, gas trains, exhaust fans, burners etc. on a regular basis. It is important for a technician to get feedback on problems before a preventative maintenance because the preventative maintenance is typically done during a down time period.
- **Economizers-** (whether on a rooftop or a built up system) Keeping an air economizer in proper operating condition it will save energy by keeping the compressor off as much as possible. (FYI – When saying economizer is generally refers to an air economizer, but there are also water economizers, combustion air economizers & refrigerant economizers.)
- **Humidifiers–** Maintains employee comfort in a healthier environment. Helps computer room environments also.
- **Exhaust Fans-** Proper belt, bearing and cleaning maintenance helps maintain a work environment, which is better for the employees.
- **W/I Coolers/Freezers–** Clean coils and proper refrigerant levels improve system efficiency and reduce down time.