

### **Hot water washer use on the refrigeration coils.**

It is important to clean refrigeration coils at least once per year to extend the life and improve performance of the system. Monthly checks are required especially with the outside unit to make sure there is no debris plugging air upstream of the condensing (outdoor unit) coil(s). This can seriously impair refrigeration units operation and cause unnecessary shutdowns/failures.

### **Cooling coils – inside the cold room/warehouse slab coils or unit coolers.**

- 1) Turn off main unit (outdoor unit and unit cooler – lock out tag out to be used).
- 2) If unit coolers in use, remove front fan guards from the housing.
- 3) Cover all electrical devices such as motors, electric valves, pressure transducers, junction boxes with plastic bags to minimize water penetration to electrical components, other electrical components maybe in close proximity, please avoid them, and cover them with plastic if possible as well.
- 4) Set hot washer wand for low pressure hot water, cooling coils are usually made of copper tubing and copper or aluminum rather thin fins that can easily bend so care should be taken while washing the coils
- 5) Start washing coils from downstream of the air flow to push dirt collected inside the coil out against the air flow, comb coils up and down from one side to the other
- 6) Wash/comb the other side and likely will need to repeat the process unless you can see the light thru the coils, you can shine into the coils to see how well they are cleaned inside
- 7) In case of unit coolers remove plastic from electrical devices, replace fan guards, in case of the refrigeration slab coils remove plastic from any electronic valves/transducers if present

### **Condensing unit (outdoor refrigeration unit).**

- 1) Please make sure the power is turned off and locked out
- 2) Please cover refrigeration compressors with plastic and all other electrical devices situated beneath the refrigeration coil to prevent water from entering
- 3) Remove fan guards from the top of the fans
- 4) You can use cold water/standard garden hose with 35-45 psi pressure to wash the coils, coils are copper tube with steel fins, they are much stronger but will not withstand high pressure either, hot water wash will always do a better job especially when dirt is present mixed with oil or other sticky substance
- 5) Start washing coils from top combing it just as the cooling coils (slab horizontal coils) or from inside of the coil in case of vertical coils(smaller units), then wash/comb coils from the bottom (vertical coils from outside) then finish washing/combing on top (in case of small coils from inside of the unit)
- 6) Remove plastic from all electrical components, if not sure inspect them to assure nothing has flooded with water. Let the unit dry off for an hour, then repower the system

**ACT/BTU is not liable for any damage due to the cleaning process, please contact us if you have any questions or concerns, this is a simple guideline to help your maintenance staff.**