

## GENERAL CONSIDERATIONS FOR PLACEMENT OF THE VAPOR DEGREASER

This paper covers general considerations for placement of the vapor degreaser at your facility. There are three primary things to take into account when locating the degreaser: Room Size, Airflow and Heat Discharge.

### ROOM SIZE

- In general, vapor degreasers are best situated in larger open rooms with minimal air circulation over and around the tank.

### AIRFLOW: VENTILATION AND AIR TURNOVER:

- **Overhead ventilation.** Overhead ventilation is not recommended – as it pulls the vapors past the refrigeration zone in the vapor degreaser – thus reducing the containment capabilities of the equipment. The air over the vapor degreaser should be a calm as possible to minimize vapor zone disturbance.
- **Fans.** Fans and any other airflow disturbance should be eliminated.
- **Air Conditioning supply and return.** If you were going to set up cooling, generally you do not want your return or discharge to be over the vapor degreaser. Again, the air over the vapor degreaser should be a calm as possible to minimize vapor zone disturbance.
- **Air Turn Over.** Air turnover should match supply to discharge. The operation of the room under a negative pressure should be avoided if possible.



**AIRFLOW: FROM THE ULTRA REFRIGERATION SYSTEMS:**

- The ULTRA 2012LE vapor degreaser in its standard configuration has a refrigerated primary condensation coil and a refrigerated sub-zero condensation coil. These systems have air-cooled condensers which means that there is an air flow from left to right behind the vapor degreaser from the condenser fans.
- **Space round the equipment.** We recommend a minimum of 2 feet on the left and right side of the vapor degreaser for air supply and air discharge. Also, you will need space on the left to open the electrical cabinet and space on the right for access to change out filters and to drain atmospheric water from the water separator.

**HEAT DISCHARGE FROM DEGREASER INTO THE ROOM:** For example, The ULTRA 2012LE has 3400 watts of heat, so it will discharge approximately 13,000 BTU of heat into the room per hour.

- **Alternative – Chiller Configuration to eliminate heat discharge and air flow.** In a clean-room or small room setting, the vapor degreaser is typically configured with a chiller cooled primary coil (cooled glycol/water from the circulates through the condensation coil rather than refrigerant) and a sub-zero that has a chiller cooled condenser rather than a fan and airflow over the condenser.
- The chiller is then located remotely from the vapor degreaser, either in a different room where the heat and airflow is not an issue or it is outside of the facility altogether either on ground level or on a roof. Thus, the airflow from the vapor degreaser cooling is completely eliminated and the heat from the vapor degreaser is exported to the location of the chiller rather than in the room proximate to the vapor degreaser.

We hope this discussion is a helpful start for familiarity of vapor degreaser unit placement planning. Please give us a call if you would like to go through these considerations in more detail.

**Give us a call at: 847.640.8923**

