

**NEW!**

## Oil, Acid & Moisture PURGER Saves \$24,000 per Year!

(Approximate Savings for an average Chiller)

**Removes Oil, Acid and Moisture from Centrifugal Chiller's refrigerant charge and Returns the Oil to the chiller's oil sump where it belongs.**

**Redi Controls** is pleased to announce the introduction of its new patent pending "OAM Purger." The OAM Purger is designed to remove Oil, Acid and Moisture from a chiller's refrigerant charge (its main purpose is to remove OIL and automatically return it to the chiller's oil sump where it belongs). It is common knowledge that oil build-up occurs in all centrifugal chillers. Oil invariably finds its way into the evaporator where it mixes with refrigerant, degrading system efficiency and capacity. This occurs when the evaporator tubes become coated with oil, heat transfer efficiency is retarded and drastically reduces the cooling effect. In fact, recent studies have identified excess oil on the refrigerant side of a chiller as a leading contributor to chiller inefficiency, and that the problem is widespread.

**In one study**, ASHRAE Research Project 601-TRP, refrigerant samples were taken from 10 operating chillers and analyzed for oil content. All of the chillers were found to contain excess oil in varying amounts from 3% (enough to significantly degrade performance) to as high as 23%. According to one OEM, as little as 1% (by weight) of oil in refrigerant could result in as much as a 3% loss in chiller efficiency.

**Chiller manufacturers recommend** oil concentration levels no higher than 0.5% by weight. However, in our conversation with the OEM's we learned that 12% is typical. Thus, for the typical 500 ton chiller, this could mean a 36% loss in efficiency and a penalty to the chiller owner of \$24,000 per year in additional energy cost!

As you know, once oil gets into the chiller's refrigerant it's very difficult to get it back out. In the past, the only way an oil-logged chiller could be fixed was to either remove and distill the refrigerant, or replace the charge with virgin refrigerant. In either case it was a very expensive process and it required a considerable amount of down time. As you are aware most centrifugal chiller applications simply cannot afford to have a chiller down, Period! Also utilizing the past methods, the fix was only temporary. The minute the chiller was placed back into operation oil contamination began all over again.

### Advantages to the chiller owner



OAM Purger installed at the 3M facility, Buffalo, NY

- 1. The OAM Purger** quickly cleans the chiller's refrigerant charge to only a trace level of oil.
- 2. Quickly restores** chiller to peak operating efficiency.
- 3. Substantially reduces** energy consumption saving the owner thousands of dollars in operating cost.
- 4. The OAM Purger pays** for itself in 3 to 4 months. So, in effect, retrofitting an OAM Purger doesn't really cost the owner anything. In fact, retrofitting an OAM Purger is a financial investment that keeps on paying dividends (in some cases thousands of dollars per month).
- 5. Reduces maintenance** and helps prevent premature failure.
- 6. The OAM Purger is extremely energy efficient;** in fact, power consumption is approximately equivalent to a 200 Watt light bulb.

**Conclusion:** Every chiller truly needs an OAM Purger. All you need to do is refer to the results of the latest refrigerant analysis, and consider the benefits of retrofitting an OAM Purger.

**Redi Controls**

Check our Web Site:  
[www.Redicontrols.com](http://www.Redicontrols.com)

Call or Write  
for additional  
information

Phone: (317) 865-4130  
(800) 626-8640  
Fax: (317) 865-4145