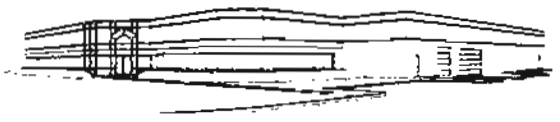


# HANSEN TECHNOLOGIES CORPORATION



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## APF SERIES AUTO-PURGER

for Fluorocarbon Refrigeration Systems

Hansen Technologies Corporation now offers a refrigerated purger for removal of air, water vapor and other contaminants from industrial and commercial fluorocarbon refrigeration systems. The AUTO-PURGER is a "purifier" for the high side fluorocarbon refrigerant gas, removing air, water vapor, and other non-condensable gases created by atmosphere leakage and refrigerant or oil breakdown.

Leaky valve stems, booster compressor seals, and repairs to the system often permit water vapor as well as air into the system. It has been discovered that this water vapor lingers in the condensers and receivers with the air, tending to not travel toward the conventional liquid or suction line driers. Water not only is a problem in plugging system expansion valves and also causing acid formation, but in addition the partial pressure due to free water vapor in the condenser increases the condensing pressure, thereby increasing power cost while reducing system capacity. Free water vapor, air, and refrigerant gas from the condenser purge point passes through a filter dryer located in the "foul gas" line connected from the condenser or receiver to the purger. An additional filter dryer is located in the incoming refrigerant liquid line to the purger. While these driers are primarily intended to protect the AUTO-PURGER cycle from freezing water stoppage, they also act as a supplemental water removal method to the primary system liquid line driers.

The APF Series has all the same deluxe features as the AP Series of AUTO-PURGERS.

1. High air removal capacity.
2. Self-contained refrigerant control for automatic start-up and operation.
3. Completely pre-wired and piped, ready to mount on a wall or column.
4. Factory pre-tested and operated.
5. Counter to record the number of air removal cycles.
6. Factory insulated purger vessel.  
(Except Basic AP01F).
7. Liquid bubbler column to indicate when air released to atmosphere.

#### Advantages

The APF AUTO-PURGER has all the same advantages that the AP Series AUTO-PURGER has over conventional purgers:

1. Power savings all year, not summer only.
2. Operates efficiently at reduced condensing pressures.
3. Location and elevation are not restrictive.
4. Greater air removal capacity (2½" times).

PLUS: APF AUTO-PURGER removes free, trapped water vapor as well as air from the condenser to further reduce condensing pressure and to help clean refrigerant.

<u>Model</u>	<u>Description</u>
AP01F	Basic, low cost, packaged, single point AUTO-PURGER for fluorocarbon systems. (less insulation)
AP08F	Deluxe, self-contained, packaged AUTO-PURGER for fluorocarbon systems. Automatically purges 2 to 8 points. Includes insulation and air release indicating bubbler column.
AP16F	Deluxe, self-contained, packaged AUTO-PURGER for fluorocarbon systems. Automatically purges 9 to 16 points. Includes insulation and air release indicating bubbler column.
AP24F	Deluxe, self-contained, packaged AUTO-PURGER for fluorocarbon systems. Automatically purges 17 to 24 points. Includes insulation and air release indicating bubbler column.
APCF	This AUTO-PURGER for computers is deluxe, self-contained, packaged for fluorocarbon systems. Purges multiple remote points by using the plant's computer to control purge point solenoid valves. Includes insulation and air release indicating column.

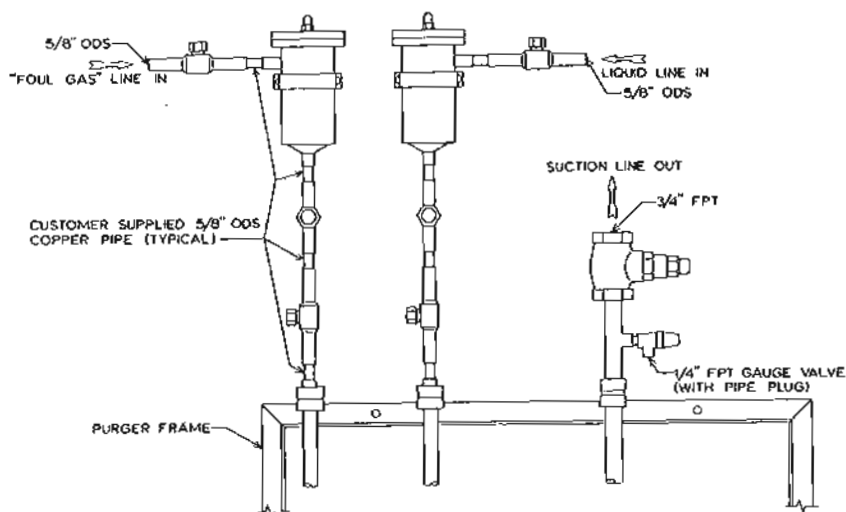
### Filter Dryer Conditioning System

The special construction features for the APF series purger include a filter dryer conditioning system for the foul gas line and liquid line. (See figure below) Water vapor as well as non-condensable gas is present at the purge point. The filter gas is present at the purge point. The filter dryer removes moisture prior to entering the purger. A filter dryer is also located on the liquid line. Both dryers are used to protect the purger from water freezing stoppage but they also act as a supplemental water removal method to the primary system liquid line dryers. Sight glasses located downstream of the dryer indicate when the dryers are saturated with water and require new filter dryer cores.

Another feature is a small dryer in place of the strainer and prior to the metering valve to filter small particles and capture residual moisture present in the purger.

### Air indicating column for Fluorocarbon

The APF series purger is equipped with an air indicating column. The clear tube is manually filled to the marked line with a light weight clear oil. Air expelled from the purger bubbles up through the column as an indication to the operator of proper operation of the purger. Additionally, a counter keeps a record of how many times the purge gas solenoid valve opens to release air into the column.



**INSTALLATION OF PURGERS SHOWING DRYERS**