

Dewpoint Measurement Application #9

Ozone (O₃) Generators

Application Moisture is monitored in the inlet air to ozone generators.

Problem Compressed air is typically dried via twin tower regenerative air driers.

This dry air is fed into an electric field where the oxygen molecules are split and then re-formed into ozone (O_3). The inlet air must be kept very dry for this process to work properly. Typically a -100° F dewpoint CDA dryer is used. Ozone is very corrosive and will also

react with excessive levels of moisture to cause heavy corrosion.

Solution Continuous monitoring of the dry air to warn of a dryer failure. Normal

measurements are very low, in the range of -100°F or lower. The

sensor should be capable of monitoring down to -112°F or better.

Equipment Any in-line instrument will work for this application, providing it is set

up with either the -112°F or -166°F sensors (-80°C or -110°C).

<u>Advantages</u> All Delta sensors will pick up a wet-up condition or dryer failure very

rapidly, and warn the operator before product degradation or system

damage occurs.

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