

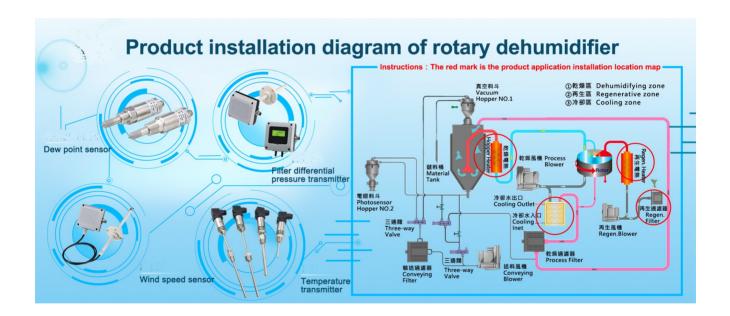
Rotary Dehumidifier industry applies dehumidification wheel equipment dew point measurement solution

Many industries, such as petrochemical, electric power, food electronics, aerospace, biological pharmacy, metallurgy, textile, civil air defense engineering the requirement of humidity measurement is more strict than before, Therefore, humidity measurement has gradually become a new field of technology, especially how applicable in low dew point environment, for example dehumidifier, dryer, plastic/plastic dryer, is the most important field be concerned.

## **Benefits**

The rotary dehumidifier uses the hygroscopic material (silica gel or molecular sieve) in the honeycomb rotary wheel to absorb air moisture.

It is stability for continuous dehumidification of dry air, especially in low humidity moisture absorption is better than other dehumidification methods, combined with the dewpoint sensor monitoring is more easier to control humidity, dew point range can be up to - 80  $^{\circ}$ C.



For example, in the process of paper products, paper moisture content changes may cause size changes. General paper moisture content of 5%-7%, indoor relative humidity should be 40%-50%.

Photosensitive materials require clean air and accurate temperature and humidity control during manufacturing, processing and storage. General film storage environment temperature is 15 -16°C and 10°C, the relative humidity is 50-40%.

Different types of food industry also have different environmental requirements, such as chocolate storage temperature and relative humidity of 18 °C, 50 °C respectively, eggs for -1 °C, 85%~90%, nuts for 7 °C, 60%~65%. fudge with 12% ~ 16% moisture content , should be stored at 65% . According to the above industrial application, it can be seen that the dehumidifier required for low humidity demand and dew point range is -100 °C to 60 °C, and the dew point at -80 °C (pressure is a standard atmospheric pressure, temperature 20 °C) corresponding relative humidity is : 0.002%, the corresponding moisture content is 0.55 PPM, so the dew point sensor for the dehumidifier should be compact, small, high accuracy, long-term stability, in order to measure its actual dew point value.

Plus industrial-grade dew point sensor can be planned according to customers' factory software. Imported Capacitive Humidity Sensor & PT 100  $\Omega$ , three-wire system circuit, the standard RS - 485 and 1 analog output, can be link to PLC, industrial computer, low humidity environment pressure: 16 bar, measuring range: 60...-60dp  $^{\circ}$  C.

Linear accuracy : ( working range of dew point : -60  $\sim$  +60dp°C )± 2 dp°C ( at + 25°C )± ( 0.02% F.S/°C ), Dew point Max. scaling range -100 ... +60dp°C.

PPM/v and PPM/w, just half hour can guickly reach a steady state measurement.

Plus quality control and calibration is by Yuden-Tech dew point calibration lab dew point range -80... + 60°C.

Now FTI Plus has been widely used in CDA system/dehumidifier/refrigerated dryer/adsorption dryer and its monitoring engineering scheme. Its fast, accurate and stable, professional quality has been recognized by the industry.