

## Air Handling Equipment Inc. Uses Vaisala Dew Point Instruments to Offer Accurate Monitoring Services of Commercial Air Dryers

### Industrial Processes Rely on Clean, Dry Compressed Air

Robotic and pneumatic tools used in industrial applications operate with compressed air. Monitoring and controlling moisture in compressed air is critical to ensuring a contaminant-free process and equipment reliability since water vapor in compressed air can cause clogging, microbial contamination, freezing and machinery breakdowns.

Air Handling Equipment Inc., a full-service air compressor and dryer distributor in Ohio, helps companies in automotive, food and industrial production monitor dew point to ensure their compressed air equipment and dryers in their facilities are operating per specification. A growing part of their service business is offering predictive maintenance to prevent problems related to water vapor in compressed air from occurring.

### Routine Audits Aid in Reliability

Using Vaisala dew point instruments, Air Handling Equipment technicians are able to provide predictive maintenance to their customers by conducting routine reliability audits and by tracking the dew point results. Over time, a trend report can be generated which allows them to see how the equipment is performing compared to specification. Armed with this information they can more easily spot trends in equipment performance that may predict a performance issue before it could result in costly, unplanned downtime.



#### Challenge

- Water vapor can adversely affect the equipment in compressed air and dryer applications
- A dew point meter that accurately measures dew point across wide temperature ranges in both refrigerant and desiccant air dryers
- Reliable, portable instruments for audits and spot checks by field technicians

#### Solution

- Vaisala DRYCAP® Dew point and Temperature Transmitter Series DMT340 for fixed instrument applications
- Vaisala DRYCAP® Hand-Held Dew point Meter DM70 for handheld instrument applications
- DRYCAP® sensor technology provides accurate and fast dew point temperature to  $-80^{\circ}\text{C}$  ( $-112^{\circ}\text{F}$ ) with an accuracy of  $\pm 2^{\circ}\text{C}$  ( $\pm 3.6^{\circ}\text{F}$ ) over the entire range

#### Benefits

- Accuracy across wide dew point temperature ranges permits monitoring across various types of air dryers with one instrument.
- Logging at 20-minute intervals with logs saved for one year for searching out problems
- Portable, handheld unit that can be used for predictive maintenance services

*“I was won over during a performance comparison test of dew point instruments using the chilled mirror process. Vaisala was the only one that performed accurately on refrigerated and desiccant dryers.”*

*Kurt Barhorst,  
Air Handling Equipment, Inc.*



*Vaisala DRYCAP® Dew point and Temperature Transmitter Series DMT340*



*Vaisala DRYCAP Hand-Held Dew point Meter DM70*

## Commercial Air Dryers Remove Moisture

To remove moisture from compressed air two types of commercial air dryers are generally used: refrigerant and desiccant. Refrigerant dryers are used in general assembly applications and condense water vapor via mechanical refrigeration at dew point temperatures near 40°F. Desiccant dryers are typically used in high-tech applications where higher quality compressed air is required. These dryers use chemical desiccants to absorb water vapor at dew point temperatures to -40°F and lower. To ensure the dryers are working properly routine monitoring of the dew point is needed.

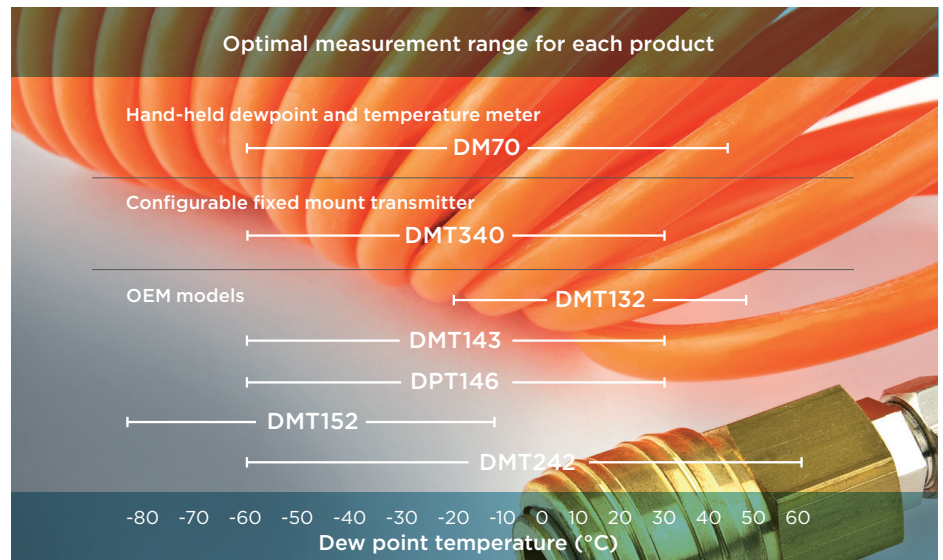
## Accuracy and Logging of Dew Point

Air Handling Equipment services desiccant and refrigerant dryers, so using one instrument that is accurate over a wide range of dew

point temperatures is their preferred solution. The company observed a comparison test of dew point instruments where Vaisala instruments clearly proved their accuracy in both types of dryers. In addition, Vaisala DRYCAP® Dew Point and Temperature Transmitters log data points in 20 minute intervals which are saved in the unit's memory for one year, providing Air Handling Equipment the temporal resolution needed to identify trouble spots and trends before there is a downstream problem in their customer's equipment and production process.

## Accurate Handheld Dew Point Meter

Air Handling Equipment also relies on Vaisala's hand-held dew point instrument, DM70, for its field service technicians to easily and accurately spot check dew point during their audit services. Both the fixed and portable units have easy-to-read LCD displays.



*Vaisala offers the right dew point instrument for optimized compressed air quality.*



For more information, visit [www.vaisala.com](http://www.vaisala.com) or contact us at [sales@vaisala.com](mailto:sales@vaisala.com)

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