

VAISALA

**Measurement
Solutions for the Food
and Beverage Industry**
Quality, Efficiency and Safety



Observations for a Better World



Vaisala is a global leader in environmental and industrial measurement. For over 80 years we have manufactured products for reliable environmental observations to help with better decision making, safety and efficiency. Our goal is to provide our customers with the means to influence and better understand their environment.

Food & beverage manufacturing companies can maintain ideal conditions in their processes, facilities and storages and save energy, cut costs and achieve more ecological processes and safer environments. This often requires accurate humidity, CO₂ and temperature measurement instruments and intuitive systems.



Learn how Vaisala's sensors are researched, developed & manufactured.

Explore



EXPERIENCE

What Makes Vaisala Different



MEASURE

Applications, Parameters, Instruments



DISCOVER

New Industrial Machinery



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Collection of Webinars



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Success Stories

At Vaisala we pride ourselves on staying connected with our customers throughout the lifecycle of their application and instruments. Many of our customers share their experiences with us. The following pages highlight a few of those stories.





Experience

Below is a story of how Techmark develops custom air-handling systems that monitor, control and distribute air to specification in potato storage facilities. Techmark has selected the duct-mounted Vaisala CARBOCAP® Carbon Dioxide Transmitter GMD20 for its air-handling systems.

"Vaisala's CO₂ sensors have been extremely reliable. We can count on their product availability with the lead times we need and Vaisala's customer support."

*Todd Forbush,
Vice President of
Techmark, Inc.*

CUSTOMER STORY

VAISALA / SUCCESS STORY

Pursuit of the Perfect Potato Chip



Stress increases the potato respiration rate, increasing concentration in the potato sugars cause defects in



Experience

The safety committee at Chateau St. Jean has recognized the need for monitoring CO₂ in their facility. They have been relying on the Vaisala CARBOCAP® GMT222 Carbon Dioxide Transmitters for monitoring the CO₂ in their winery for several years.

“Our monitors have performed flawlessly. We do a monthly inspection and an annual calibration with the Vaisala CARBOCAP® Hand-held Carbon Dioxide Meter GM70 on each monitor to verify accuracy.”

*Chuck Banks,
Maintenance Manager,
Chateau St. Jean*

CUSTOMER STORY



VAISALA

Monitoring CO₂ in Wineries

Case Study - Chateau St. Jean





Experience

It is necessary to measure carbon dioxide reliably in bottling plant environments. Vaisala CARBOCAP® Carbon Dioxide Transmitter Series GMT220 provides a well-founded solution for this measurement need. Read on to see how a leading soft drink company uses Vaisala to monitor their CO₂ levels.

CUSTOMER STORY

VAISALA / APPLICATION NOTE

Measuring Carbon Dioxide in the Soft Drinks Industry



In the United States, OSHA (Occupational Safety & Health Administration, U.S. Department of Labor) requires the average limit of CO₂ to remain at 5,000 ppm during an eight-hour working shift. This American



Experience

New innovations with careful cost control are imperative to remain competitive, of which a Finnish company called Valio is a great example. Valio manufactures demineralized whey powder, which is a by-product of cheese making. As often with drying processes, it can be challenging to avoid either over-drying or inadequate drying. The customer story explains in detail how Valio solved the issue and increased their production capacity by 20%.

"We are familiar with Vaisala's good reputation. Vaisala's sensors work on Mars, why would they not work in our process?"

*Marko Outinen,
R&D Manager,
Valio*

CUSTOMER STORY

VAISALA / CUSTOMER STORY

**+20% Increase in Production Capacity with
Zero Increase in Energy Consumption**
Dairy Manufacturer Valio Updated Dryer Controls



At Your Service

Vaisala brings Best-In-Class value to our customers every day. To ensure we continue to understand your needs, we take customer feedback seriously and cater to your specific requests. Our premium manufacturing facility ensures that the instruments we offer meet your most demanding requirements in a wide variety of applications.

The Vaisala experience includes also calibration, maintenance and adjustment with care. Vaisala calibration customers end up with an accurate-as-new product, a certification to prove it and peace of mind. Our Calibration and Premium Care Agreements make it easy for you to take care of your high-quality instruments for years to come.



“Our sales and engineering team is extremely **skilled** and **experienced** and is **always available** to help our customers with optimal solutions for their business needs.”

*Gerry Ducharme,
AMER Controlled
Environment Group*



Measure

For the food and beverage industry, Vaisala provides unique measurement equipment for process control and quality. Our reliable solutions can help you save in costs and energy usage, as well as increase safety, by optimizing your food processing and facility environment with accurate RH, CO₂ and temperature measurement instruments. Keep reading to learn more about the right fit for your application and the different parameters we measure.





Parameters and Applications

Click on the icons below for information
about the parameters we measure.



CO₂



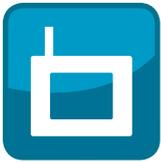
RELATIVE
HUMIDITY



TEMPERATURE



DEW
POINT



ENVIRONMENTAL
MONITORING SYSTEM (EMS)





Drying and Moisture Control

In many baking and drying processes, the right conditions provide a competitive advantage to manufacturers. Applications such as bread baking and cereal manufacturing, for example, must have a carefully controlled humidity level in the dryers and ovens in order to keep quality and yield high and to give distinctive characteristics to the finished product.

Click on the thumbnails below to view our products:



DMT346



HMT330

FOOD PROCESSES





CO₂ Safety in Beverages & Refrigerants

Carbon dioxide (CO₂) is added to soft drinks during the bottling process to give the drink its fizz. It is also the most important gaseous metabolic product in fermentation. High CO₂ levels in the filler rooms and fermentation areas are a potential health risk. If the areas are not adequately ventilated, CO₂ can accumulate in the indoor air and pose a potential risk to workers. CO₂ level should be monitored to avoid CO₂ accumulation.

Click on the thumbnails below to view our products:



GMT221/222



GM70

CO₂ IN BEVERAGES





Air Quality in Greenhouses

Greenhouses are closed environments where conditions are optimized for plant growth. Optimal controls require information both from the indoor and outdoor environments. Vaisala offers instruments for measuring CO₂, relative humidity and temperature inside the greenhouse and wind, precipitation, various humidity parameters and temperature outside.

GREENHOUSES

Click on the thumbnails below to view our products:



HMT120/130



HM70



GMT220





Air Quality in Animal Shelters

Good environmental controls in animal shelters provide a consistent climate for the animals resulting in comfort and well-being.

Temperature, relative humidity and carbon dioxide are all parameters indicating comfort and adequate ventilation rates.

Click on the thumbnails below to view our products:



GM70



GMT220



DTR500 Solar Radiation Shield

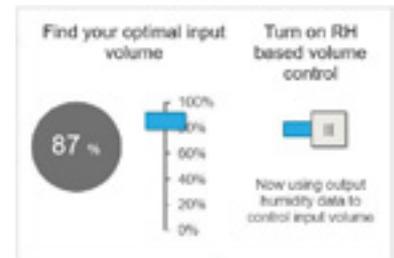
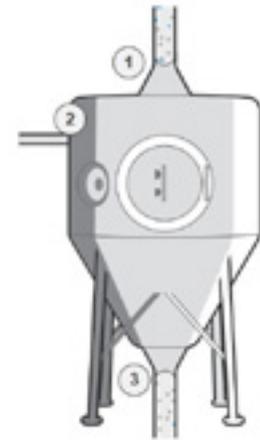
ANIMAL SHELTERS





Discover

You might be able to save energy and costs a great deal or increase your yield with the same amount of energy if you are currently over-drying your product. Take a moment to play with our drying simulator to see an example of how using relative humidity based input volume control may help you increase your yield.



DRYING SIMULATOR





Watch

These short two-minute clips on the next page will take you on a virtual tour of Vaisala. We'll introduce you to our best in class humidity, temperature and CO₂ instruments. By watching the videos you'll also experience state of the art calibration and repair services as well as our global cleanroom facility.

Scroll to the next page to watch our videos.





WATCH

Videos

YOUTUBE CHANNEL

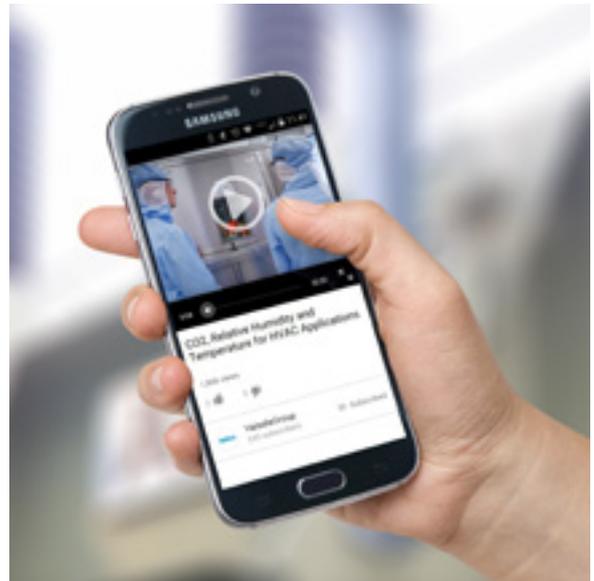


Vaisala HUMICAP® Humidity and Temperature Transmitter Series HMT330

Six models for various
demanding applications

CO₂, Relative Humidity and Temperature

Wide range of Vaisala HVAC
instruments and transmitters



viewLinc Environmental Monitoring

An Environmental Monitoring
System that Nearly Deploys Itself





Learn

Our free webinars are a great way to gain valuable knowledge about topics of interest in the field.



What is Relative Humidity and How is it Affected?



Understanding Your Specifications



HUMICAP Measurement Technology



Relative Humidity Best Practices



CARBOCAP Measurement Technology



Calibration of a Humidity Transmitter

[MORE WEBINARS](#)



Inquire

Our team brings to our customers 100+ years of combined mechanical, chemical, electrical and computer engineering experience.

Vaisala engineers are on hand to assist you with your product or application questions.

[CONTACT VAISALA](#)



Thank you!

VAISALA

www.vaisala.com

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www.vaisala.com/requestinfo



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more information

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