W. H. Cooke Times

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Manufacturer of thermocouples, RTD's, and thermistors and distributor of instrumentation and controls for temperature, pressure, level, flow, pH, RH, flame and gas detection and heaters for almost any application. We also carry chart recorders and chart paper and pens as well as paperless recorders, data loggers, pumps, valves, and motors, and industrial oils, solvents, and lubricants. Here is a link to our website. www.whcooke.com

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Interesting Quotes

"If you really want to do something, you'll find a way. If you don't, you'll find an excuse."

-Jim Rohn

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DEFINOX
BOOST YOUR PERFORMANCE

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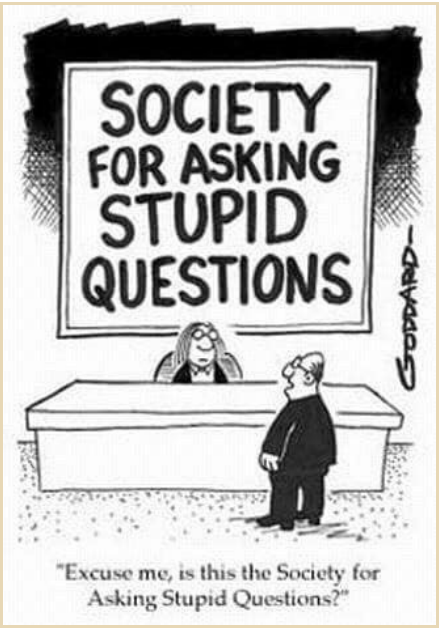

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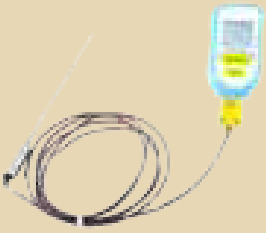

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Customer Service & Teamwork

"It is amazing what you can accomplish if you do not care who gets the credit"

Harry S. Truman

The above quote is attributed to my favorite president. I think he was one of the most fair and humble people to walk this earth.

It takes Teamwork to provide good customer service. We hope you have noticed the mention of out "Team" email address at W. H. Cooke & Co. in our spring newsletter.

The address team@whcooke.com should be used for all orders, inquiries for quotations, expediting etc. and anything else can be sent to this address. All of our office personnel have access to this email box, and we can quickly see when a new email arrives. If one of us is out of the office, having lunch, talking with a customer or vendor, someone else can pick up your email and will either handle it, alert someone else, or at the very least let you know that we received it.

We have always tried to be responsive to anyone who contacts us by email, phone, fax or walks through our front door. It's just the right way to treat people. But we always seek to improve our service and the way we do business and so we have added this address.

This new address has improved our response time and we hope you noticed. Please send us your suggestions on how we can improve our customer service to team@whcooke.com It will help us to become better. Thank you and we look forward to hearing from you.

Sincerly,

Wayne Cooke Sr.

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Featured Line - DEFINOX

W. H. Cooke & Co., Inc. is proud to be a Distributor for DEFINOX who manufacturers Sanitary Valves mostly used in applications for Food, Dairy, and Pharmaceutical manufacturing. Please call or email with your specs and we will cross you over to DEFINOX Sanitary Valve. The price is very competitive with some of the other big names out there and the quality is better. The changing

out of seals is also very easy.

Click on the pictures below to view full PDF

Catalog

Process Valves

VDCI MC PMO-C

Sensor of the Quarter | The Baking Industry

Probably somewhere in the early 1980's Cooke Co. was asked by a large bakery in Baltimore to help them eliminate the problems associated with their wet / dry bulb temperature / humidity measurement & control systems in their proofer ovens.

Proofer ovens (commonly known as proof boxes) are large low temp temperature humidity chambers - both walk in and conveyorized - in which bread dough rests or passes through over the period of an hour or so. This allows the dough to rise prior to being baked. Steam is passed through a valve to a closed coil heat exchanger and air blown over it to provide heat while steam is injected directly into the box to provide the humidity.

At that time wet / dry bulb measurement and controls systems were being used

in proofer ovens almost exclusively around the country and world. It works by utilizing a "dry bulb" temperature sensor to measure the "dry" temperature in the box and another similar "wet bulb" temperature sensor which has a cloth sock over the sensor which is contained in a pan (shallow water reservoir) with the bottom of the sock hanging in the water so capillary action keeps it damp. Air passes over the dry and wet bulb sensors as the ambient air in the box is re-circulated to provide even heat and humidity throughout so the dough within rises properly.

These wet/dry bulb systems are notorious for being difficult to maintain and keep working properly. The water reservoir is automatically refilled as water evaporates from the pan. This is typically accomplished by using a float level fill valve. These often hang up and either don't fill at all or overflow, spilling water onto the floor of the proof box. In addition, the "sock" which should be changed regularly, is often neglected resulting in it falling off the sensor, disintegrating or getting dirty and becoming unsanitary. When your maintenance crew is busy, it's difficult to be everywhere and this is an area that can be easily overlooked.

OK, so now that you know how a proofer oven functions and why, we can continue.

The bakery Maintenance and Management Departments asked us to develop a system for them to eliminate their troublesome wet / dry bulb control systems. We proposed using one sensor assembly to measure both temperature and humidity along with the shelf din controllers. Our first systems used resistive sensors that worked well but could fail after being hit by water from high pressure hoses during sanitation procedures (wash down) in the box. After the sensors were in service for 6 months to a year, they began to require attention such as removal and drying out or rewinding of the resistive element. Still, they were much better than the wet / bulb system.

After a couple of years using the resistive sensor we switched to a capacitance style humidity sensor which proved to be much more reliable. We've been using the same sensor well over 30 years now along with our third generation of controllers. We've added features along the way including recorder output terminals and a humidity lock out feature that prevents steam being injected until the box is up to temperature, thereby preventing condensation from forming inside the box.

The system can be ordered set up to control solenoid steam valves, pneumatic or motor operated valves with a 4-20 milliamp control signal. Many customers

use our sensor only with their house PLC based control system.

We have sold systems all across the country from Alaska to Florida and Maine to California. Some of those original systems are still in service. If you have a temperature or humidity measurement or control application, please give us a call.

Best Regards,

Wayne Cooke Sr.

Designed for retrofitting your existing proof box or fermentation room, the Cooke PCS-3000 state of the art control system eliminates all of the problems associated with wet/dry bulb control systems.

1. Maintenance is virtually eliminated.
2. Better product quality and consistency.
3. Reduced product waste & lost production.
4. Closer control reduces fuel consumption.
5. Eliminates unnecessary sling psychrometer checks.
6. Troublesome start up condensate is prevented by a built-in humidity lock out feature.

Your Plant Electrician can easily install the PCS-3000 following these three simple steps:

1. Drill a 1/2" hole through the side of the return duct and mount the combination temperature/humidity sensor using only two screws.
2. Mount Nema 4X control box at any convenient location, connect AC power and pre-wired sensor cable.
3. Install four control wires from terminal strip in control box to control valves.

Your proofing in a matter of minutes! Leave your old system in place and run it parallel with the PCS-3000 for a short time. This will allow production personnel to become acquainted with direct RH readings rather than interpolating from a psychrometric chart.

The PCS-3000 is maintenance free and flexible. It can be field wired to control solenoid, proportional pneumatic, or electric motor actuated valves. You can easily add a recorder at any time.

SCORES OF BAKERIES from Kissimmee, Florida to Anchorage, Alaska have discovered and are using the Cooke PCS series Proofer Control System."

Industry leaders such as Flowers, Bimbo, George Weston, Safeway, Sara Lee, Interstate, Northeast Foods, and East Balt have installed the "Cooke" system over the past twenty years. Scores of other independent and progressive bakeries in both the United States and Canada are satisfied customers.

The W. H. Cooke & Co. RT-888 is a Type T thermocouple Dough probe 6" long with a reduced tip for faster response and a heavy duty blue cord with a right-angle bend and tether. It is the replacement probe for the RTS-820 Dough Monitoring System below. After hearing multiple customers complain of losing thermometers in their dough batches and having to shut down lines and clean them thoroughly to remove broken glass we came up with this product. For more information on the RTS-820 Dough Monitoring System, please visit the link:
https://www.whcooke.com/files/bakingIndustry/RTS-820_Manual.pdf

RT-888

RTS-820

Tech Tips

How to check to see if a thermocouple is functional and if it is grounded or ungrounded

Part 1 of a 2 part series with Wayne Cooke Sr.

A. Check for continuity by using a multimeter set up to measure ohms. Connect the multimeter test leads to the 2 thermocouple leads (polarity doesn't matter for this test) and if the meter reads 0 or open circuit, then at least one of the thermocouple leads are broken. Could be at tip and not visible to you or could be somewhere along the lead wire portion of the assembly.

If you do get a reading it should be several ohms (for a short assembly) to 20, 30, 50 ohms or more depending on the lead length. Ex: a 4 ft. length of 20 gauge type J (iron-constantan) lead wire = 1.396 ohms (.349 / ohm per combined ft. x 4)

For a quote on any Fluke products please give us a call or email sales@whcooke.com

B. To determine if a thermocouple is grounded or ungrounded, perform this check. Using the multimeter in the resistance measuring mode, connect one lead of the meter to one lead of the thermocouple and touch the other meter lead to the sheath of the thermocouple. The meter should read 0 or open if that lead (or side) of the thermoucouple is ungrounded. Repeat test on other lead of thermocouple and observe reading. If open that lead is also isolated from the sheath and the sensor is ungrounded. Grounded thermocouples are useful when there is electrical noise in the area of the thermocouple and that noise cold be induced into the sensor.

Note: When checking an "ungrounded" thermocouple, it is possible to have some leakage to ground in a mineral insulated thermocouple. It is difficult to keep the magnesium oxide insulation in a mineral insulated thermocouples (MgOs) completely dry. Most of the time this is not a problem when it's connected to an instrument or PLC input module, even though you might see some resistance to ground in the megaohm or even kilohm range. When the thermocouple is heated in the process, it tends to drive the moisture out of the tube and create better insulation.

Stay tuned for part 2: Polarity checks

Lame Jokes

Q. Why couldn't the lifeguard save the hippie?
A. He was too far out man...

Barber "Your hair is getting a little gray."
Customer "Try cutting a little faster."

Q. Why was the cannibal thrown out of class?
A. He was buttering up his teacher.

Two cannibals are eating a clown. One cannibal stops and looks at the other cannibal and says "does this taste funny?"

A bar I frequent has a sign that reads "If you drink to forget, pay in advance."

Interesting Quotes

"In order to succeed, we must first believe that we can."
-Nikos Kazantzakis

"Many of life's failures are people who did not realize how close they were to success when they gave up."
-Thomas Edison

W. H. Cooke & Co., Inc.

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[Sender_Name]
[Sender_Address], [Sender_City], [Sender_State] [Sender_Zip]