Gimme' Data

"Transform data into information, and information into insight"
Carly Fiorina - Former CEO Hewlett Packard

Fresh Roast Systems, Inc. proudly introduces *insight*. The ColorTrack R/T and underlying patented ColorTrack laser technology represents the most significant advance in coffee roasting since computer profiling. Roastmasters have traditionally been totally dependent on monitoring time, temperature and color. Time and temperature can be computer monitored and controlled but color assessment is still totally dependent on the human eye. With the ever-changing characteristics of crops, environment and the subtle and quick changes in roast development, inconsistency and loss has been unavoidable, until now...
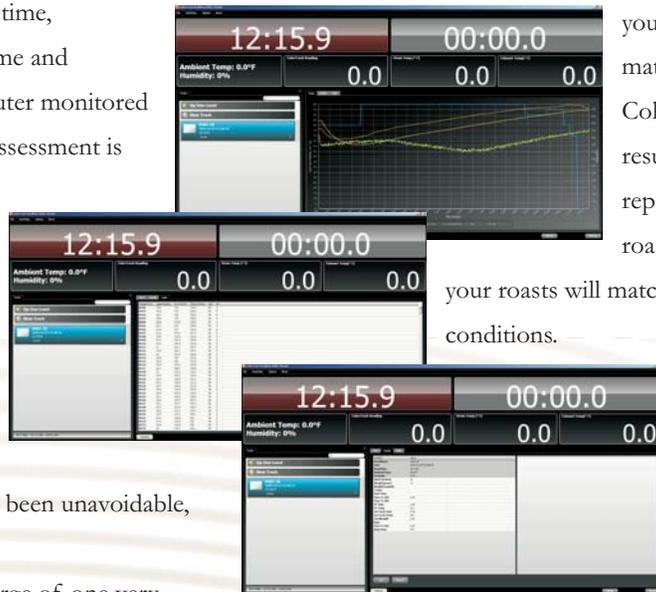
ColorTrack R/T takes charge of one very important part of the processing by providing an innovative solution offering unparalleled precision before, during and after your roast. The end result is an unmatched level of quality and consistency. ColorTrack R/T uses a patented laser system to analyze color development throughout the roasting process in real time and alerts you to the actual color development as it relates to your roast profile. When time and temperature control fails to yield the best results, ColorTrack R/T will control the degree of roast and allow you to stop the roast at the precise point when the desired color has been reached. ColorTrack closes the gap on even the most subtle differences in roasting variables making your finished product the best match to your standard. With ColorTrack R/T you get perfect results every time and absolute repeatability. Whether you're roasting in Tokyo or Topeka, all your roasts will match regardless of local conditions.

ColorTrack R/T eliminates loss. There is never waste or the cost of labor associated with reworking. The roast is perfect every time regardless of profile. Whether your operating a global plant operation or a simple shop roaster, savings will be significant. ColorTrack R/T delivers, guaranteed.

Call to get more information on ColorTrack R/T and the other patented ColorTrack tools that no roasting operation should be without. Make your coffee the best and most consistent it can be.

ColorTrack™ R/T

SYSTEM OVERVIEW

The ColorTrack R/T (Real Time) System is an inline roast degree analyzer. Instead of taking routine samples and running a color analysis on each one, the RT System allows the user to evaluate the roast degree of coffee during the actual roasting process, providing a second by second data stream of the roasting conditions.

The laser module is the essential hardware component, utilizing newly patented 785 nanometer technology that allows it to transmit and receive reflection data at the rate of 40 readings per second, while the beans are roasting

PC BASED DATA ACQUISITION

Data acquisition is the process of measuring an electrical or physical phenomenon such as voltage, current, temperature, pressure, or sound. PC-based data acquisition uses a combination of modular hardware, application software, and a computer to take measurements.

APPLICATION SOFTWARE BUNDLES

The ColorTrack R/T System utilizes two seperate software bundles to form a complete operating system. The **FreshRoast R/T (Roast Logging) Software Pack** is a comprehensive data logging software package that evaluates time and temperature as it relates to roasting coffee.

The **ColorTrack SOFTWARE Pack** allows for the dynamic monitoring of color as it relates to roast degree. It has the capability of providing output in it's own scale, or it can be programmed to read out in other formats like the Agtron Scale

MODULAR HARDWARE

Of course, a pc based data acquisition system is useless without a computer. The ColorTrack R/T System comes with all software and hardware except the PC.

As a service we will programa dedicated PC of your choice, or provide a preprogrammed HP TouchSmart 300 1020 at our cost.

The HP TouchSmartt 300 1020 was selected for it's ergonomics, and touch screen capabilities, eliminating the need for a mouse or keypad.

The **NI USB 9211A** Windows Based DAQ for Thermocouples and the **NI USB 6008 Multi function DAQ**, are modular bus powered data acquisition modules that convert the analogue data from the sensors in to 0-20 ma linear output, or low voltage signals.

New technologies such as NI signal streaming make it possible for sustained high-speed and bidirectional data streams over USB to achieve maximum throughput on USB data acquisition devices.