AIRTRAC™ Air Control System for Precast Concrete

Instrumentation, knowledge, admixtures and service

Product Description

Historically, controlling air has been one of the concrete industry’s most vexing problems. GCP Applied Technologies is proud to announce a new system that can provide cost effective, reliable, air control for the precast concrete industry.

The GCP Air Control System takes a process control approach built around the ground breaking new CiDRA AIRTRAC™ real time air measurement device. The fundamentals of any process control system are a measurement system, a control element and a feedback loop. GCP has always offered the control element in a full suite of air entraining admixtures. What has been lacking is accurate real time information about the air volume of the concrete as it is mixing.

The CiDRA AIRTRAC™ is a proprietary, patent pending device for real-time air measurement during the concrete mixing process. It is designed to be suitable for all stationary outer wall mixers such as pan, planetary, twin shaft, turbine, etc.

This system provides data every second and can discern changes in air volume of less than one tenth of a volume percent. It provides this information instantly back to the batch / control room allowing the operator to take action while the batch is mixing. With a minimum amount of training and experience your operator can make sure that every batch is compliant with specified air limits.

But the GCP system goes beyond just bringing data back to the operator. Our trained field sales and service professionals will show you how to use the “eyes into the process” to optimize mix designs, materials sequencing and time of mixing. In addition, the data is uploaded to a secure web enabled cloud system enabling us to provide informative, actionable dashboards that allow management to track the changes in efficiency and control this system brings. Key plant personnel can also access the live data remotely. Your QC manager can be down at the beds and keeping track of every load as it is mixing. This also allows our key technical personnel to be able to access real time data and help you trouble-shoot any problems remotely.
Product Advantages

- Control and document the air in every batch
- Stop rejecting loads for out of spec air
- Stop wasting crew time while air is adjusted or while out of spec loads are discarded or diverted
- Tighten your air control and reduce your over-design
- Lower your costs while increasing your quality
- Become known as the innovative quality producer

Equipment and Service Included:

- Air and temperature measurement device
- Control room display providing real-time air and temperature for each batch, with daily summaries
- Hardware and software warranty
- Equipment installation
- Commissioning / training and support
- Remote viewing capability on smart phone or tablet
- Remote troubleshooting by GCP technical service
- Recommendations on mix, sequence and process optimization
- Management dashboards

Confirmations of Accuracy

Customer Requirements:

- Prepare mixer for installation per installation manual
- Allow access to mixer to GCP and CiDRA personnel for installation and service as required
- Allow for temperature and air data along with selected mix information to be uploaded to secure server to allow for remote access, remote troubleshooting and preparation of dashboard reports
- Perform ASTM C231 air measurements at agreed upon frequency and report to GCP and CiDRA on a weekly or monthly basis