



COMMANDQC

Delta Industries, INC.

Delta Industries, Inc. started in Jackson, Mississippi and has expanded to its current 36 locations in the mid-south region of the United States.

The Challenge

Concrete and materials test results were stored in file folders throughout the company and the data could not be easily accessed and examined. Verifying batch tolerances required going to the plant and manually reviewing paper tickets, an extremely time-consuming operation. On top of that, every division did things differently, making it difficult to consolidate data. In short, Delta wanted to find a system that would make it easy for them to verify that all their internal processes were operating as expected so they could be certain their own house was in order and they could concentrate on providing the best product possible to their customers. Although Delta's operational processes were standardized and they had selected COMMANDbatch as their standard batching system, they had not yet determined how to centralize all QC reporting and mix design generation. Quality control was to be the focus of the next step in their internal verification program.

The Solution

Delta Industries ultimately selected COMMANDqc

as part of a single-source solution to consolidate their data, such as for materials, mix designs and concrete test results. COMMANDqc had all the features they needed, such as: built-in integration with Delta's dispatch system, Integra, which allowed Delta QC personnel to easily review batch weight tolerances for all their plants from the QC department without having to use Integra itself; a Batch Watcher feature that allowed for real-time notification of



LOCATION

Jackson, MS



INDUSTRY

Ready Mix



RESULTS

Efficient Mixes

out-of-tolerance batches; a central repository for all materials test data and concrete test data; and the ability to quickly update concrete mixtures for changes in materials' sources. By concentrating on monitoring and maintaining their in-house processes, Delta felt they could produce a better product at a lower cost.

The Result

Prior to implementing COMMANDqc, Delta had already determined that there were some instances of overbatching of materials. Simply resolving this situation could result in a material savings that would pay back their investment in the system. COMMANDqc quickly demonstrated to Delta that there were some plants that were batching very well and that there were opportunities for improvement at some of the plants.

Using COMMANDqc, Delta was able to generate graphs showing actual batch variation. When batch variations were compared to ASTM C94 allowable tolerances, there was sometimes a significant discrepancy. It quickly became obvious that, especially for small loads, the batching system was not properly tuned to meet the ASTM tolerances. After fine-tuning the batch plants, it was apparent that proper plant maintenance was critical for meeting the ASTM tolerance limits.

A leaking pneumatic line or an insect nest covering a sensor could cause an out-of-tolerance situation. Batch Watcher gave both QC personnel and production personnel an immediate notice of an out-of-tolerance load. This made it possible to prevent the trucks containing these batches from leaving the yard without corrective action. Multiple successive notifications made it obvious to the plant manager that there was a problem that needed addressing. By entering material test results into COMMANDqc, Delta was able to document variations in aggregates, especially with regard to aggregate grading. When variations occurred, Delta was able to generate charts and graphs that made it easy to show the material supplier how their variability was affecting Delta's concrete. When concrete test results were

entered into COMMANDqc, it showed that some of Delta's old "sack mixes" were achieving strengths substantially beyond what was required by the Building Code. Delta was able to start producing more efficient concrete mixtures while still being able to document appropriate overdesigns.

When materials change or when a currently used material is unavailable and another must be substituted, COMMANDqc makes it easy to do a mass update of all mix designs using that material and substitute the new material. It can even make adjustments in materials proportions to maintain yield when a specific gravity changes.

When information was stored in file boxes and cabinets spread across an entire state it was difficult for the Technical Service staff to get the "big picture" about their processes and concrete quality. By bringing everything together the software allowed them to see trends in the mix and plant performance that previously were not visible. They could then start investigating the unknown.

As Delta's use of COMMANDqc has matured they developed even more confidence in their operations. When a problem did occur it was easier to justify to material suppliers and to contractors that they needed to investigate their own operations and testing to look for the cause of the problem.

As a direct result of Delta's attention to their own operations, customers have started commenting on the high quality of the concrete and the uniformity of the delivered product. Pumpers, never an easy group to satisfy, have noted that very few of Delta's loads need adjusting before pumping. As an added benefit, this has reduced the time that trucks need to be on the jobsite.



Transforming your operations by replacing manual and complex tasks and processes with efficient, scalable, and reliable solutions. Learn more at commandalkon.com