



COMMANDOC

Strata Corporation

The Strata Corporation is a 100 year old company providing ready mixed concrete and aggregate within North Dakota and Minnesota.

The Challenge

From the late 1980's through 2010 Strata Corporation expanded through acquisitions. Like many other companies that have purchased other businesses, Strata found itself in a situation where many of the operational and quality aspects of the business remained as disjointed islands of operation. They identified that production, dispatch and quality control were primarily managed on a local basis. Mix IDs and mix designs varied from plant to plant, making it difficult to compare concrete test results in different locations. It was practically impossible to use historical strength data to reduce cementitious costs because of variations in mixes. In addition, batch plant operators had the ability to modify mix designs based on the customer and project, resulting in further differences between plants. Based on the company rate of growth, this represented risk they felt needed to be managed at the corporate level.

LOCATION
Multiple Plants

Strata to retrieve batch weights and analyze



RESULTS
Standardize Mixes

The Solution

In order to improve their product uniformity and aid in risk management, Strata decided to implement

an enterprise quality concrete control software solution. Hank Hauge, Technical Services Manager for Strata, assembled a team to review their options. They chose COMMANDqc for the following reasons: it allows for rapid development and adjustment of mix designs, then can upload them to the dispatch and batch systems; it's native integration with their COMMANDseries dispatch system also allowed

them together with test data; both concrete and aggregate tests could be stored in a central location, making them available to all interested parties; COMMANDqc's submittal package would speed up Strata's submittal process.

Strata worked with Command Alkon's Implementation Team to set up COMMANDqc and integrate the new system with their COMMANDseries dispatch system. Command Alkon then provided onsite training to enable Strata's staff to get the most out of their new software.

The Result

As a result of implementing COMMANDgc Strata has been able to standardize mixes in their plants. This resulted in more accurate accounting for material costs and a reduction in overyields. Strata credits the implementation of COMMANDgc with reducing the number of rejected loads. It has also enabled Strata to combine test results for the same mix, or similar mixes, for use in determining strength overdesign in accordance with the ACI Building Code. Strata then uses COMMANDqc to track the cementitious efficiency of mixes to determine the best use of materials. Concrete and aggregate test results are now stored in a central repository, which makes them more readily available for use in adjusting concrete mix designs and producing submittals. Engineers who previously required backup of mixes by a water/ cement ratio curve now allow the use of Strata's historical information. This has reduced the cost required to produce expensive laboratory water/ cement ratio curves by 80%.

In addition to accomplishing their planned objectives, Strata has encountered unexpected benefits due to the use of COMMANDqc. Batch weights were originally presumed to be within allowable ASTM tolerances, but COMMANDqc's Production Analysis reports showed otherwise. Even small over-runs multiplied by hundreds or thousands of batches added up. Once the out-of-tolerance trends were revealed, the Operations department was able to make minor changes to the batching operation

and bring the batches back within tolerance. This helped save money by reducing overbatching and by reducing the variation in cement batched. It also helped to improve strength variability due to changes in the batched cement quantity.

Submittals can now be created faster and more easily using COMMANDqc's Submittal module. All of the information required for the submittal is stored electronically and available at the touch of a button. COMMANDqc has helped Strata deal with customer complaints. The Incident Tracking module allows Strata to quickly assemble and print batch tickets for a particular project and summarize concrete performance. Strata has been able to use the software to quickly consolidate project data which has helped them resolve customer disputes before they became costly legal battles. Delivery errors of the wrong mix going to the site have been reduced by 70%.

COMMANDqc has become the basis for weekly training sessions for the QC Department. Personnel are instructed in proper data entry and the different types of reports that COMMANDqc can generate to provide better service for their customers. Every year Strata performs a Customer Review with their major customers. This review combines information from the Command Alkon suite of products, including COMMANDqc, to show the customer details of concrete performance combined with information on late deliveries, rate of delivery and time on job. This allows customers to adjust their delivery schedules and tactfully distinguish between scheduling problems caused by Strata and those caused by the customer.



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