



Welsch Ready Mix

Welsch Ready Mix was started in 1920 Joliet, Illinois. The company now consists of 9 plants in 7 locations in Chicago.

The Challenge

Chris Pusateri, Welsch's QC manager, became aware that as their company grew, it was harder for their existing staff to keep pace with the increased demands for their technical services. Their manual quality control effort was cumbersome to maintain. Mix designs, material tests, and concrete tests were stored in different computers for different plants, using a variety of different software. Maintaining proper yield in the mix designs, retrieving test data and producing submittals had become a major effort. Producing concrete mix submittals required scanning files out of multiple file cabinets, getting printouts from Excel spreadsheets and finding PDF files located on various computers, slowing down their sales efforts. The customer then received an email with multiple attachments that were difficult to organize and

The Solution

They evaluated several different QC software programs. Mr. Pusateri attended a COMMANDqc training seminar in Orlando, FL and had a chance to learn more about the system and to meet with other producers currently using the program. He realized that he could get everything he was looking for from the same company that provided their dispatch software, which eliminated any risk associated with integrating software from two different suppliers.

The Result

After the installation Welsch realized that there were



some problems with its batching processes. By using the software it was discovered that the plant operators were pressing the tolerance override button more often than anyone in management realized. This was costing Welsch money in terms of overbatched product. Welsch went to work identifying and resolving mechanical and operational problems that resolved the out-of-tolerance events, reduced the amount of overbatching and resulted in a savings of raw materials.

Welsch now uses COMMANDqc's Batch Watcher feature to provide real-time notification of out of tolerance loads. These real-time notifications have been used to prevent out-of-tolerance loads from leaving the plant. In one case a sticking gate resulted in a large amount of cement being added to a load destined for a large slab. The QC department was able to stop the truck before the concrete went into the slab. If the concrete had been placed in the slab the variation in setting time might have caused problems for the finishers to the point that the concrete might have needed to be removed. Instead, no corrective action was necessary, eliminating costly concrete replacement. The customer was never even aware of the issue.

Before COMMANDqc was installed, if there was a question about a placement, the QC department had to go to the batch plant in question and look through box after box of batch tickets. Since COMMANDqc was installed QC now has all batch weight information centralized and available on their own computers, saving valuable time.

Welsch also updates its concrete mix designs and automatically pushes the revised mixes to the applicable batch system. Air entraining agent dosages can be adjusted on a daily basis. Welsch uses Illinois DOT published values for aggregate specific gravities to determine its material quantities. Each year, when IDOT updates its density report, if there are any changes in aggregate specific gravities Welsch can rapidly adjust all mix designs containing those materials. Welsch makes these changes during the course of the day, but defers updating the batch plants until night time when the plants aren't batching so that no mix designs are changed in the middle of a placement.

Welsch uses COMMANDqc to monitor material tests. As Aggregate gradation reports can be produced to show the aggregate supplier how the materials are varying and how that affects the concrete. Many of Welsch's customers are accustomed to ordering mix designs by "sack content" – the quantity of cement. Now concrete test results are readily available to use in statistical analysis to determine cement requirements and document mix design strength, which shows customers that the strengths they need can be produced at lower cement contents and at a lower cost. This has resulted in a win-win situation for the contractor, Welsch and the environment.

Welsch routinely produces 7 or 8 concrete mix submittals a day. With its previous system of filing cabinets and spreadsheets, producing each submittal could take 1 to 2 hours. Using COMMANDqc Welsch now produces these submittals in just a few minutes, enabling the QC department to spend its time on other activities to maintain a quality product. In addition to benefiting customers, Welsch's management has seen a big savings. Quick response time, reduced overages and bottom line savings in production have enabled COMMANDqc to pay for itself in its first year of operation. On a recent project 825 cubic yards of concrete were placed into an Interstate bridge deck with no rejected loads. Considering how demanding DOT projects can be, this was a major accomplishment for Welsch.



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