

# Rockwood Monitors Pigment Performance Around the World

## Background

Rockwood Pigments is a primary manufacturer and processor of liquid, powder, and granulated forms of iron-oxide color pigments, natural and synthetic inorganic pigments, and automated pigment-handling systems used by manufacturers of coatings, colorants, concrete products, plastics, rubber, paper, vinyl, cosmetics, pet food, ink, toner, and other industrial uses.

## The Need

The previous plant-quality practices used Excel spreadsheets for recordkeeping and Minitab for ad hoc SPC control charts. This approach seriously limited the capability to manage and improve the process.

- The number of product codes and process steps made recordkeeping for monitoring and analyzing process and quality data cumbersome in Excel.
- Responding to customers' requests to trace lots took several days.
- Monitoring, visibility, and control of process and products included delays that could increase rework and scrap costs.
- The ability to share production status information with technical service headquarters was limited.
- Automatically producing Certificates of Analysis was not possible.

## The Decision

Rockwood Pigments decided to make a significant investment in its IT infrastructure to improve process management for the Taicang and Shenzhen plants in



China. A central application in this upgrade is the NWA Quality Information System™.

The NWA Quality Information System had to meet the escalating complexity of process and quality-data management. The flexible architecture of the NWA Quality Information System fit within the plant-corporate environment.

*"Before, we were using Excel spreadsheets. These sheets did not support effective data management and retrieval. It required too much time and effort to find the sheet with the lot number we were looking for. Now with QIS, we can look at more than finished goods data and actively analyze and manage the process."*

Dale Gu, Technical Director Rockwood Pigments AP

## The Quality Information System Solution

NWA QIS provides configurable data collection that can download test results from test instruments over the network and produce real-time visual display of alarms for both operators and supervisors. The integrated system carries batch information and test results forward to the next step in the process. At all points in the process, the system produces SPC control charts of any test or process parameter and delivers real-time warnings.

QIS integrates with the rest of the plant systems. For example, the system can read product specifications from external corporate databases.

An important consideration in choosing the system was that QIS is scalable and maintainable by existing plant personnel and does not depend on a sophisticated IT or Manufacturing Engineering department. The administration tools make it easy to set up the configurable database and manage quality information.

Plant management can use the analytics and charting to maintain and improve process performance. They are able to easily filter the data so it can be "sliced and diced" to get to relevant process improvement views. The system produces Certificates of Analysis of batch test results compared to product specifications to provide quality deliverables for each lot. Lot traceability has been developed with SQL reporting tools that use the QIS database of quality information.

The QIS has been well received and has boosted productivity. As Dale Gu, Technical Director of Rockwood Pigments AP, says, "The technicians really like the user-friendly interface. Before, they were using Excel for entering the data. Now, with the Quality Information System interface, they can use screen icons to quickly select and open the right data files. Two plants had previously trained in Minitab, but found NWA a much easier platform to work with. The data is always there and up to date."



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### For More Information

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