Customer interaction is key

Making accumulated data work for continuous automated quality monitoring systems

Many companies in the industry have invested heavily in quality measuring devices. In QuinLogic's latest Quality Execution System (QES) software offerings, the company has carefully collected quantities of data, and then used this data to give continuous quality monitoring a new direction. The software goes through all the data, creates digital twins, finds correlations, relates the data using relational trees and finally sums up these relations into new logical rules ready to use right away.

Data integration

Integrating of data involves:

- Getting hold of all data that exists and connecting it with all other available data
- Getting hold of all data existing for a certain product or coil.

A well-integrated system allows for simplification of rules that were previously complex. It is possible to restrict the access to sensitive data or to data that may not be modified in any case.

Translation, modification and definition

This part involves:

- Rules that were in use thus far are translated into rules for the new automated system using the effective data integration achieved earlier
- More accurate logical quality rules are introduced for a better monitoring system.

Genealogy

Every minute detail related to a coil (including the raw material and applied processes) that were ever recorded is stored as information against the coil in a separate database and can be pulled out as and when required. Simply put, a problem can be traced back to its source without investigating any further than looking up its digital twin in the system.

Data correlation and feedback

Correlations are plotted for material and process data of coils, whose output qualities are comparable using data for all coils made available with genealogy. Such correlations help present a clearer picture about the offending upstream parameters and make it easier to modify existing and/or define new logical rules to improve the final coil (product) quality on a global scale.

Quality improvement

Integrating data, transforming and defining logical rules, creating digital twins and then correlating them into intelligent algorithms provides useful feedback, leading to quality improvement through continuous automated quality monitoring.

Automated coil grading can be a powerful tool and help to further improve the already high levels of quality achieved in the rolling industry. QES' software suite claims to help the user reduce down-time and achieve higher quality goals through its powerful data integration, easy rule translation and writing, extensive coil information storage using genealogy and suggestions for new rules alongside rule simplification.

Customer interaction

QuinLogic has established itself as a powerful player in the quality game and continues to strive hard to improve its offerings through continuous customer interaction.

QuinLogic customers are encouraged to share their experience as QES users with other members from the industry

With the company's annual user meetings, QuinLogic attempts to bond with customers through a two-day interaction session in the form of presentations from QuinLogic employees and customers, plus Q&A and feedback sessions. Customers are encouraged to share their experience as QES users with other members from the industry.

During the Q&A sessions, prospective as well as existing customers get a chance to put questions to QuinLogic employees that very often are answered by customers themselves. The highlight feedback session, unlike most other feedback forms, is also an interaction session where individual customers come forward with feature requests specific for their plants, which once added in the software, are available for use to all. These feedback requests get integrated into the QES software over the following year to be presented at the next user meeting.

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