

# FACTIVITY

## Analytics Module

### Module Objectives

The Analytics Module allows manufacturing management a tool to drill down into data and find ways to improve their manufacturing floor's production process. Using Microsoft's Reporting Services functionality, these KPI (Key Performance Indicators) Analysis Reports provide an in-depth look at the standard set of OEE measurements of Availability, Performance and Quality.



This Module goes well beyond the simple analysis of up and down time on a machine. Simply capturing time on a machine, without capturing and recording the reason and operators involved, will not provide a path to process improvement. The root cause will only be realized if down time is associated with specified reason codes and analyzed over time. In addition, Dash Boards can quickly and easily display useful real-time data and provide immediate identification of floor issues. These issues may even have specific cause which can also be displayed. However, this is not historical and cannot show trends. Trends help management put corrective action into place.

Using Microsoft's SQL Reporting Services is a common way to analyze data in both a tabular and graphic display form. These Dash Boards displays, unlike their real time cousins, provide an easy-to-use tool for analytical evaluation of the underlying detail production and process information captured by the FACTIVITY Shop Floor Module.

This module has groups of reports that include OEE Analysis, Labor Analysis, Job Analysis, as well as, a facility to evaluate the various alarms triggered in the Shop Floor Module.

Using the power of the drill down in this pervasive and useful Reporting Tool, FACTIVITY helps manufacturers focus in on the root cause of problems captured in real-time. For example, to assist in finding the root cause of factory floor problems, each of the components of OEE are analyzed. Availability (Down Time), Quality



(Scrap), and Performance (Actual Rate) are viewed by user selectable filters. These "views" are the windows into your detailed FACTIVITY data base. For example, scrap can be evaluated by item, by reason code, by resource (machine) and by employee. Each can be seen over user defined date ranges. Ultimately, this information can be tied to parametric historian data when captured for further process improvement.

This metrics can be a great asset to management involved with Lean Manufacturing and an invaluable tool for Value Stream Mapping of a factory floor by viewing the "cycle time" and "queue time" metrics.

Comparing the Metrics among multi operational facilities can be a valuable way to find the best approach to identifying areas process improvements for the corporation. Using the Multi-Plant Module, operations management can see performance metrics from one facility to another for identification of best practices and/or common areas of needed improvements. By consolidating the metrics and KPI's from each plant and housing them into one data warehouse, trend and observations between the facilities can become visible. (Available with the Multi-Plant Module) ■