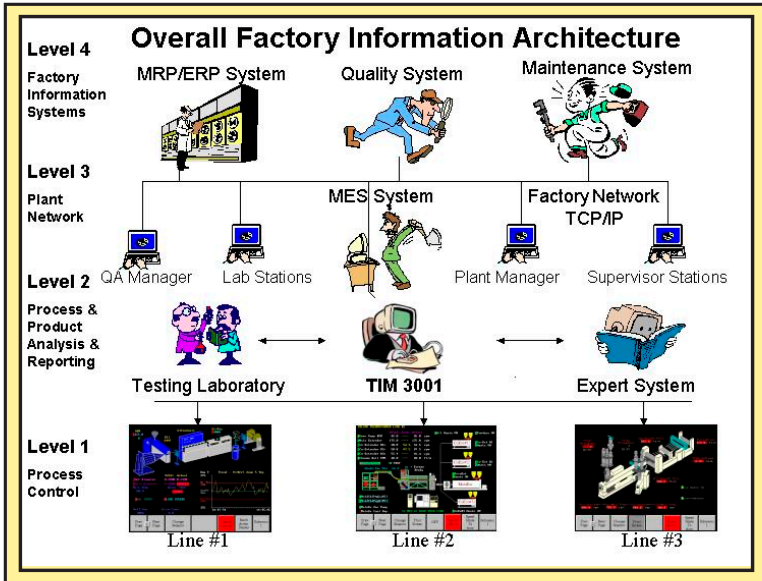


Factory **FACTS** Total Shop Floor Control & Information System



Measurement, Control & Information Management Systems for Total Factory Floor Automation

Synopsis

Factory FACTS is an integrated network architecture for On-Line Measurement, Process Control and Information Management systems. The **Factory FACTS** architecture is a comprehensive information network for manufacturing operations that provides accurate and timely information directly from the factory floor to the manufacturing operation.

Approach

Factory FACTS is a flexible architecture that leverages our extensive experience providing engineered systems for Rubber and Plastic applications. **FACTS** knows the industry, knows the equipment and knows the process. The **FACTS** approach derives factory floor information as a natural by-product of automating the process. The result is a cost effective information management system that provides accurate and timely data to the manufacturing operation. The data is driven up from the factory floor by a system designed for reliable operation within a manufacturing environment. In addition, the **Factory FACTS** architecture is flexible and will accommodate changes to your manufacturing process and information management requirements.

Features & Benefits

- Coordinate and control the complete production process
- On-line measurement and control of product attributes
- Data and event logging
- Collect qualified data direct from the production process
- Analyze and optimize the process
- Real Time production status tracking
- Down load job scheduling
- Inventory utilization
- Reporting – Quality, Downtime, Product Tracking/Genealogy

Factory *FACTS*

Factory Architecture Levels

Level 1: Measurement, Process Control and Operator Interface (HMI)

Level 1 resides at the factory floor with direct control over the processing line and interaction with the operator. Level 1 provides an integrated measurement and control system for the entire process and increases productivity, improves quality while reducing scrap and labor. Qualified data from Level 1 systems is served to the upper levels.

Key Functions:

- Integrated measurement & control of the complete process
- Store and recall product code/recipe functions
- Local trend charts for all process parameters
- SQC charts for key process parameters
- Alarm system
- Bar code support

Level 2: Process and Product Analysis & Reporting

Level 2 provides centralized logging and storage of process data and events from the factory floor. Level 2 equipment resides in the office/lab environment with dedicated Ethernet interfaces to the factory floor equipment as well as connections to the Office/Business network enabling the logged data to be available for use throughout the plant.

Key Functions:

- Long term storage of process & product parameters
- Logging of events
- Product and Process data analysis – trend, SQC and histogram charting
- Real time line status indication

Level 3: Manufacturing Execution System/Work-In-Process

Level 3 provides complete product traceability, manufacturing resource tracking, work-in-progress tracking and inventory control. Material is tracked from raw materials inventory through work-in-process and finally to finished goods inventory. Batch and/or summary data is made available to the upper level ERP/MRP system.

Key Functions:

- Product tracking and reporting – tracking Lots, Batches, Individual Parts, Raw Material, Operator ID, Production Summaries, Machine Utilization Information
- Data reporting to upper level ERP/MRP
- Work-in-process inventory tracking
- Reporting – Downtime, Production, Scrap

Level 4: Factory Management Information Systems (ERP)

Level 4 systems consist of commercial packages that provide functions ERP, Quality System Services, Financial System Services, Maintenance System Services and Document Control System Services. The scope of supply by **FACTS** includes an interface to and an exchange of data with these systems, but does not include the supplying them.

Key Functions:

- Production Planning & Scheduling
- Quality Tracking & Reporting
- Document Control
- Labor Reporting
- Costing Analysis
- Maintenance Scheduling & Reporting