**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 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