

The **FACTS Total Line Control (TLC)** System integrates and centralizes control of the entire process.

Applicable to all Hose & Tube Extrusion Processes



## Full Line Integration

### New Lines or upgrades to existing lines

Letoffs	Vacuum Sizing Tanks
Feeders:	Flaw Detectors
Volumetric	Gauging: OD/ID/Wall
Gravimetric	Laser
Extruders	Ultrasonic
Melt Pumps	Pullers/Capstans
Screen Changers	Cutters
Dies	Windup/Take up
Knitters/Braiders	Information Management Systems

## System Features

### Operator Ease of Use

- Menu Driven
- Interactive Line Graphics
- Alarm Presentation & History
- Real-Time SQC charts
- Customer Specific Screens
- 17" touchscreen flat panel display
- Trend plotting of ALL parameters
- Security System
- Product Code Selections & Admin

### Specialized Displays For:

- Production
- Quality Assurance
- Management
- Maintenance
- Engineering
- Multi-Language

## Benefits and Payback

### Quality Benefits

- Consistent Operation
- Continually Improve Line, not just run it
- Closed Loop Control

### Increase

- Line Speed
- Material Efficiencies
- Quality
- Customer Satisfaction

### Decrease

- Operator Requirements with a simple interface
- Maintenance Questions
- Scrap by staying on Spec
- Downtime by eliminating obsolete parts

### Start Up/Setup

- Fast
- Consistent Parameters
- Whole Line Coordinated Start-up

## Providing

### Control/Monitoring of:

- Feed rates
- Temperatures -- Cold Start Protection
- Speeds
- Pressures
- Tensions
- Positions
- Timing
- Dimensions

### Heater & Drive Enclosures

- Information Management:
  - Data Collection & Logging
  - Data Analysis
  - Production Reporting
  - Visualization
  - Inventory Tracking

# HOSE & TUBE EXTRUSION TOTAL LINE CONTROL SYSTEM



## System Highlights

Only **FACTS** integrates both control and management of your manufacturing process, equipment and job histories to provide your optimum production efficiency.

### System Setup & Product Codes

NO PROGRAMMING REQUIRED  
1000s of Unique Product Codes  
Configurable System Design  
Selectable Security System at All Functional Levels  
Real Time Trend Plots of All Process Variables  
Real Time SQC Charts  
Built in Diagnostic Displays

### Product & Process Analysis

Process Analysis and Historical Reporting with the **Total Information Manager HOST**  
Historical Trend Plots & SQC Charts of every parameter  
Logs for Data, Operators and Alarms

### Support for Upper Level Functions such as:

Job Scheduling, Job Tracking, Production Tracking Reports, Raw Material Usage/Reports, Networking Interface to Customer MRP & MIS Systems

## Additional Control Features

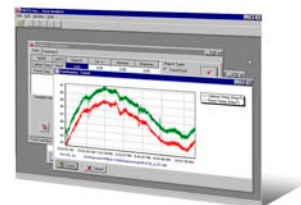
Real Time Trend Plotting  
Cascade/strategy loop control (configurable)  
PID loop control (configurable)  
Remote Configuration Option  
Master/slave speed coordination (configurable)  
Cold start protection  
Thread/start-up mode  
Failed/broken thermocouple detection  
Alarm/new alarm function  
Advanced math calculations & complex Boolean logic functions  
Transaction & Alarm logging

## Options

Full Line Graphics Operator Interface  
SQC Data Entry & Real Time SQC Display Station  
Support for:  
Remote HMI stations  
Bar Code readers & Tag printers  
DeviceNet, Profibus, Ethernet, etc.  
Intelligent peripherals requiring complex protocol support  
Melt Pump Control -- Full Interlocks & Auto Prime  
Gravimetric Control, Silo Inventory, Total Resin Consumption  
Production Report Generator  
Target Shifting -- Setpoint Optimization

### Total Information Manager Host System

Data collection, graphical analysis of historic data, configuration editor, remote support and interface to plant database systems.



**FACTS** Inc. is the leader in process control technology for the polymer market. In fact, we wrote the book on extrusion control—literally. For the Society of Plastics Engineers, **FACTS** penned the chapter on Extrusion Control in the “Guide on Extrusion Technology & Troubleshooting.”

**FACTS** Inc. routinely provides new and existing process lines with complete electronic control systems and integrated HMI. Controls provided include, but are not limited to: temperature, speed and pressure control; sequence control; drive and heater systems; and measurement systems.

**FACTS** Inc. offers you experience at your fingertips with 24/7 support via Internet or modem.

**FACTS** Inc. provides the tools to control your bottom line. Contact us today.