

Roofing Zone Profile Display

The application of Total Line Control has resulted in a fast payback as measured by:

- | | |
|------------------------|---------------------|
| Material Savings | Quality Improvement |
| Increased Productivity | Reduced Downtime |
| Reduced Scrap | Reduced Labor |

System Highlights

Operator Ease of Use

- Menu Driven
- Profile Displays
- Alarm Presentation
- Custom Displays

Single Product Code Setup For:

- Flat & Non-Flat Profiles
- Coating Rolls
- Control Tuning
- Auxiliary Equipment

Scanner Specification::

- Designed specifically for roofing applications
- Smart C-Frame
- Standard Eurotherm RS-485 communications link
- Vertical pass line
- Standard wide gap- 2"
- 100 mCi Sr⁹⁰ source for beta transmission
- Measurement range 0 to 7000 GSM
- Up to 56" product width, optional to 68"
- Sealed detector, cable, and connectors
- Sealed TENV motor with position encoder
- Stainless steel rails
- Rail covers on top
- Stainless steel sprockets and chain
- Air wipe for sensor window and detector head
- Remote shutter lights
- Interconnecting cables
- Cable Track Support

Control Strategy including:

- Optimum Separation of Machine Direction and Cross Direction Variations
- Compensation for Speed Changes and Transport Lag
- Machine Direction Thickness Control or Integration with **FACTS** Total Line Control
- Cross Direction Profile Control

Profile Control Strategies including:

- Control to Flat or Non-Flat Targets
- Straight Line "Best Fit" for Error Profile
- Feedforward speed Gap Compensation
- Correction for Geometric Profile to Actuator Relationship
- Interface to Existing or **FACTS** Provided Coater Actuators

FACTS TRC 5410

Total Roofing Control Systems

The **FACTS TRC 5410** Total Roofing Control System is designed specifically for the integration of scanning gauge measurement and control of web weight in the machine direction as well as individual cross direction zones for the roofing coating process. The system incorporates a high-resolution color screen and sealed keyboard for operator command input plus data and graphics display. The **TRC 5410** is operator-configurable, requires no computer skills, and comes as a completely configured software and hardware system for your specific line.

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

Multiple Modes of Operation including:

- Scan Mode: scan and display of web being produced
- Fixed Position Mode: display of the data from a fixed head
- Zone/Lane Mode: enables the display of both zone and lane data

Specialized Displays for:

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

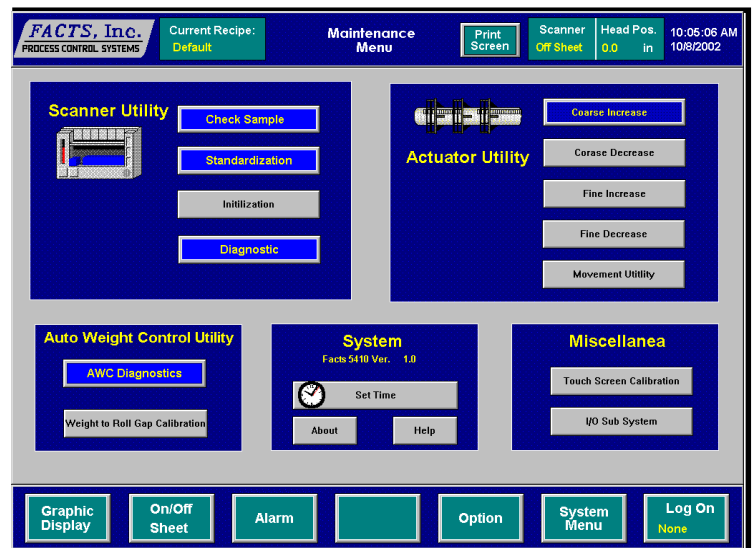
Graphic Charts/ Data Displays Selection include:

- Scan Deviation
- Historical Trends
- Text Report
- Single Bar Trend
- Skid or Roll Report

Operations and Alarm Logs:

- Alarms - 100 Most Recent
- Operator Actions - 50 Most Recent

Roofing Maintenance Screen



System features

Product Codes

- Up to 150 product codes stored on the configuration disk
- Each product code stores scan parameters, data manipulation factors and display parameters
- Product code editor enables customization of product codes for each product
- Product code data can also be printed on optional printer
- Product code can be created based on current product codes or by editing the initial default values
- Target profile for each product is also saved; this may be flat, a profile that was saved based on scan data, or manually created using the editor

System Configuration

- Ability to edit and print all configuration parameters
- Configuration of scanner and sensor default values, options, I/O scale factors, and Auto Weight Control parameters and tables.

Alarm System

- Keeps track of three types of alarms: new, acknowledged and cleared
- New alarms alert the operator to their existence
- Alarm display can be called from all menus

Operation Logging

- Tracks all system activities that have an impact on modes of operation, editing operations or system problems
- Color coded display for new and previously viewed entries

Security

- Security structure with 10 levels and up to 160 codes
- Only operations that are not a part of normal operation are secured, i.e. editing or maintenance functions

Maintenance

- Diagnostic for touchscreen system
- Touchscreen calibration
- Status display for scanner to "5410" communications link
- Ability to force commands to scanner from the "5410" for support purposes
- Scanner system initialization
- Check sample testing

Accuracy

- .25 to .5% typical, dependent on product, source and detector used
- Accuracy can be quoted for specific applications

FACTS, Inc.
2737 Front Street
Cuyahoga Falls, Ohio 44221
Phone: (330) 928 2332
Fax: (330) 928 3018
e-mail: facts@facts-inc.com

Visit our web page: www.facts-inc.com

Configuration

- Freestanding NEMA 12 enclosure - environmentally protected
 - Complete power regulation and isolation
 - Internal air temperature control through electronics grade air conditioner or water to air heat exchange
- Communications support for
 - Remote control or display stations
 - Local or remote printers
 - Bar Code readers & printers
 - Intelligent peripherals such as scales & digitizing calipers
- 17" sealed high-resolution color screen
 - Menu-driven command input via sealed membrane keyboard
 - Real-Time SQC charts & Trend plotting of All inputs

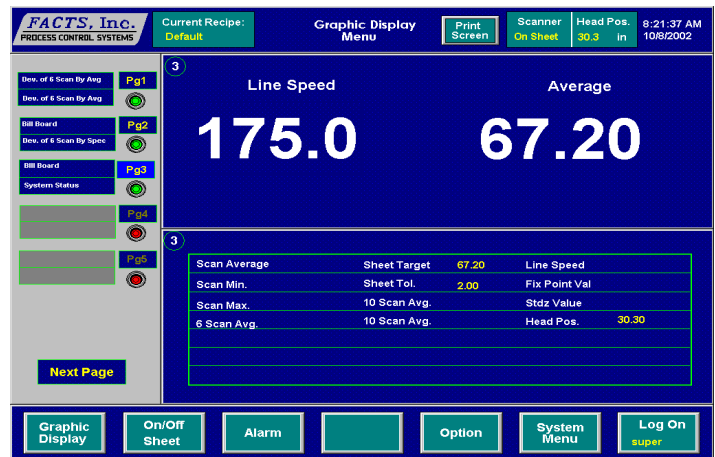
Hardware Specifications

- Environmental capabilities
 - Electrical noise - the supplied line conditioner provides better than 60 db of noise rejection
 - Electrical variation +/- 20%, short-term variations +/- 50%
- Ambient temperature 32-125 °F (0-50 °C)
- Relative humidity - 0-95% non-condensing
- Power Requirements
 - 120 or 220 volts AC nominal, +/- 20% (customer specified)
 - 60 Hz or 50 Hz as specified
 - 2500 VA including air conditioner or heat exchanger
- Physical
 - Main control cabinet/operator's station - 64"H x 27"W x 28"D
 - 17" color monitor

Options

Total Information Manager 3001NT Host System: TIM 3001 NT

- Off-line data collection and complete analysis for historical data (i.e. trending, SQC charting, X/Y analysis, etc.)
- Complete hardware and software
- Transaction logging of any or all operator activity such as set-point changes as well as logging of all alarms
- Provides full Job or Work Order system support including job sheet presentation to operator at touchscreen operator interface



**FACTS Total Control Solutions means
Total Profit Control.**