

# TANDEM EXTRUSION COATING APPLICATION PACKAGE

PRODUCT APP50-11

The Tandem Extrusion Coating Application package is designed specifically for tandem extrusion coating lines and is further tailored for each specific application. The Package defines basic real time measurement, network communications, data processing, and operator interface functions.

Optional enhancements, such as special displays, control, SPC, IndustrialSQL Server™, third party I/O servers, etc., are available to expand the basic application package to a complete process management system.

The Tandem Extrusion Coating Application Package supports the whole range of coating applications for the lightest to the heaviest substrates. Single frame multisensor solutions to multiframe multisensor (up to 6 frames and 15 sensors per system) are supported. Multiple systems can be interlinked.

MD Control greatly improves product quality by adjusting the process to hold product to its average target. Nominal Control adjusts product average to a fixed target. Target Management Control adjusts product to a System calculated flexible target, while providing both low point and low average protection.

The Automatic Profile Control (APC) package includes hardware and software to control auto dies to achieve and maintain cross-direction uniformity of extrusion coated films. APC utilizes high-resolution product profile measurements from the System scanning sensors to continuously adjust die bolts, resulting in reduced profile variations.

When coupled with Nominal Control, APC ensures product uniformity and superior roll quality, resulting in quality improvement, scrap reduction, and material savings for tangible economic returns.

21Plus!™ provides a platform for the integration of data and displays of optional software packages widely used in the Extrusion Industry, such as EM-3 temperature controllers, Roll Quality Management System Reports etc.

21Plus!™ also provides for a multitude of Link options to various Tandem Extrusion Coating Line controls, such as PLCs.

## FEATURES AND BENEFITS

- Application Package provides core operating software for tandem extrusion coaters
- Accommodates the full line of sensors for a variety of measurements, which includes FSIR direct coat measurements.
- SICAL™, Substrate Independent Calibration, simplifies coat weight calibration
- EXACTRAX™ Same Spot Measurement ensures accurate net coat weight calculations
- Continuously monitors and preprocesses all product and product data for viewing, archiving, reporting, and analysis
- Provides a set of standard user friendly displays configured specifically for extrusion coating applications
- Provides a platform for optional special displays, control, reporting, and interface packages
- Experience with all major makers of tandem extrusion coating lines and dies.

# TANDEM EXTRUSION COATING APPLICATION PACKAGE

PRODUCT APP50-11

## DESCRIPTION

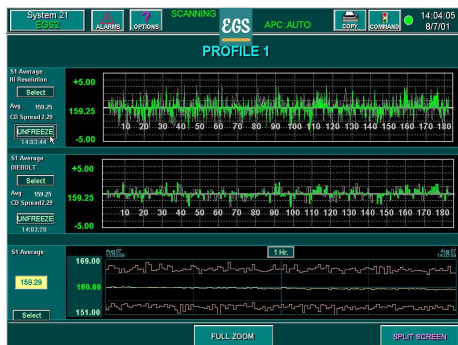
The Tandem Extrusion Coating Application Package provides the system's core software. This application is designed to take advantage of the power of Wonderware® InTouch™ software.

### Accurate Net Coat Weight Profiles

SICAL, Substrate Independent Calibration, simplifies setup by matching the calibration of the substrate and coated product scanner. By eliminating substrate sensitivity from the calibration, SICAL reduces the number of calibration sets from all combinations of substrates and coatings to only the number of coating grades. EXACTRAX Same Spot Measurement ensures accurate net coat weight calculations by ensuring that the substrate and coated product scanners traverse precisely the same path on the web, even as line speed varies. This synchronization eliminates sensitivity to point-to-point variations and formation in the substrate material. Network coupling of the scanners results in synchronization of scanner timing, which is more precise than conventional systems.

### Distributed Data Acquisition

The Tandem Extrusion Coating Application Package provides support for distributed process inputs, which interface to the system. Communications to other modules is by means of a high speed Ethernet Network. Optional Wonderware I/O servers enable full integration of distributed devices, providing transparent access to controllers, PLCs and other intelligent devices from the operator displays.



### Intuitive Display Structure

The system is designed to allow operators to easily navigate the system and access information quickly. Values and text are modified with a pop-up keypad or menu, which is called by simply touching the field. The common display header on each screen provides direct access to the most common displays, such as, Scan, Control, Recipe, Alarm and status messages.

### Platform for Process Integration

Optional software packages allow the Extrusion Coating Application Package to be expanded to address full process integration. These enhancements include advanced control, display, communications, analysis, and database functions. The scalable architecture of the system enables these advanced functions to be added incrementally, as process and business requirements dictates, such as ability to interface via OPC to any line control.

## STANDARD DISPLAYS

### Profile

- High Resolution
- Die Bolt
- Full
- Split
- Zoom
- Freeze

### Roll Summary

- Current
- Previous

### Single Point Sample Check

Trends  
Billboard  
Data  
*\*Optional*

### Setup

- Frames
- Sensors
- MD Control \*
- APC Control \*

### Auto Control \*

- Machine Direction (MD)
- Cross Machine Direction (APC)

Recipes  
Alarms  
Messages  
Translations

©2006 Thermo Electron Corporation. All rights reserved. Results may vary under different operating conditions. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details.

Formerly EGS Gauging  
+ 1-800-225-0080

**Thermo**  
ELECTRON CORPORATION