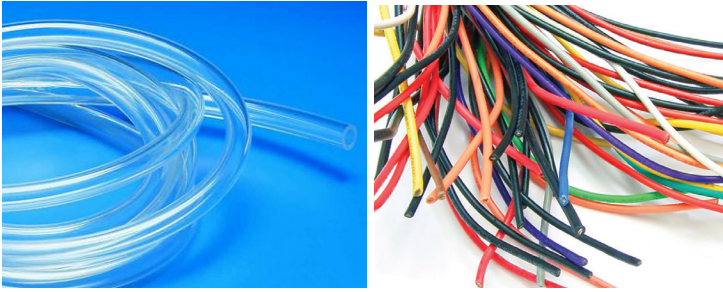


INCONTROL™



Process Visualization
and Control System



- ▶ Improve product quality
- ▶ Boost process reliability
- ▶ Increase productivity
- ▶ Reduce manufacturing costs

Process Visualization and Control

...Made Easy

Advantages

- ▶ Increase productivity with user-centric graphical interface
- ▶ Perform fast, simple changeovers of products
- ▶ Reduce start-up time with precise monitoring of die center
- ▶ Decrease material usage, give-away and rework with closed-loop control
- ▶ Drive product quality with process analysis and statistics
- ▶ Improve data management with real-time charts, printed reports, data logging, alarming, networking and integration
- ▶ Maintain tighter product specifications
- ▶ Easily integrate with other systems through I/O flexibility

Today's manufacturing landscape has never been more competitive. Organizations are under pressure to produce more higher-quality products in less time and with less waste. The key to succeeding is having the ability to better visualize process data and closely control the quality parameters during production.

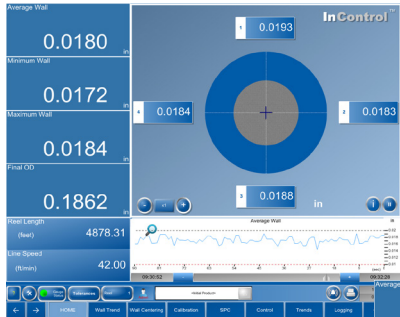
Process Control & Data Management Has Never Been Easier

The **new InControl system** brings advanced production process and product insight into complete focus. InControl provides the most intuitive graphical user interface to visualize process and measurement data, such as inner and outer diameter (ID/OD), wall thickness, concentricity and OD ovality, from a variety of Beta LaserMike gauges. **Easy to set up, simple to configure and effortless to use**, InControl enables you to precisely and efficiently control production processes to drive quality manufacturing.

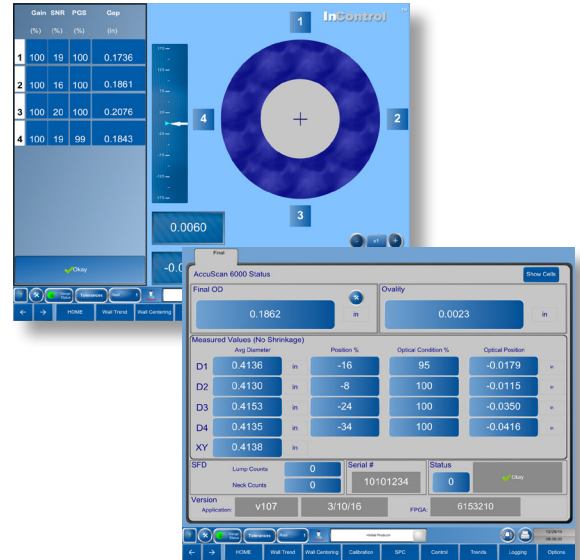
InControl Features:

- ▶ 19" color touch-screen display
- ▶ Multiple gauge support: AccuScan 5000, AccuScan 6000, UltraScan and LaserSpeed®
- ▶ Line overview configurator
- ▶ Cross-section display with multi-layer capabilities
- ▶ Total wall thickness calculation
- ▶ 4 Control loops
- ▶ Scanning flaw detection (AccuScan 5000 & 6000 Series)
- ▶ High-speed tolerance checking (UltraScan)
- ▶ Alarms for reject and tolerance limits, including alarm history log
- ▶ Select from an unlimited number of products and configurations
- ▶ Language support for Japanese
- ▶ Product defect marking
- ▶ Reel length and line speed monitoring
- ▶ Real-time trend analysis with configurable trend charts
- ▶ Real-time Statistical Process Control (SPC) with on-screen statistics and charts
- ▶ Historic trend graphs
- ▶ Inputs/Outputs: 8 Digital I/O, 4 Analog Inputs, Serial to UltraScan, Serial/Ethernet to AccuScan, and relays
- ▶ Optional OPC UA Server module for flexible, central control
- ▶ Flexible installation options

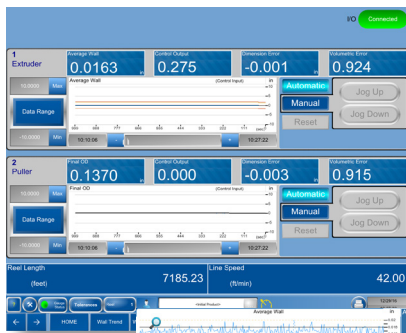
Powerful Tool for Improving Your Processes and Product Quality



Home Page displays cross-sectional view of tube and pipe concentricity, and enables you to precisely monitor product dimensions, reel length and line speed to reduce start-up time and scrap for quality production. Easily customize the Main Menu to the way you work.



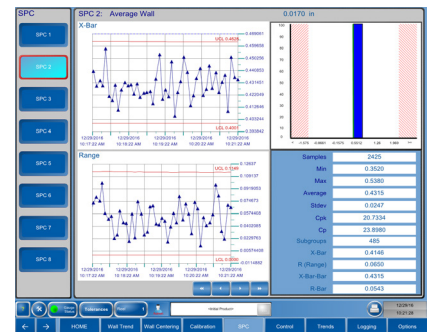
Display up to 8 parameter tiles at one time in place of trend data on the home page.



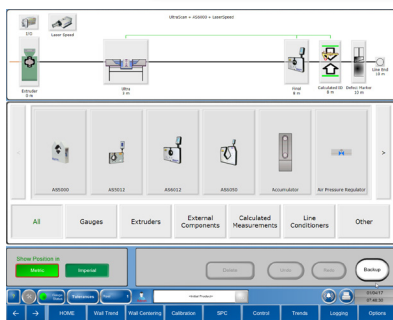
Closed-Loop Control provides up to 4 control loops: Control 1 & 2 are Analog or Relay, Control 3 & 4 are Relay only. Use control outputs to control line equipment such as Puller, Extruder, Air Pressure, Take-Up and other devices.



Real-Time Trend Charts allow you to simply select, track and record the desired data set. Program and display up to eight tiles and/or up to four trends of dimensional data.



SPC Data Analysis feature collects and displays process data on 8 individual channels. View real-time SPC charts, display real-time SPC statistics and generate SPC reports to improve your production process and ensure repeatable product quality while advancing the effectiveness of your quality documentation.

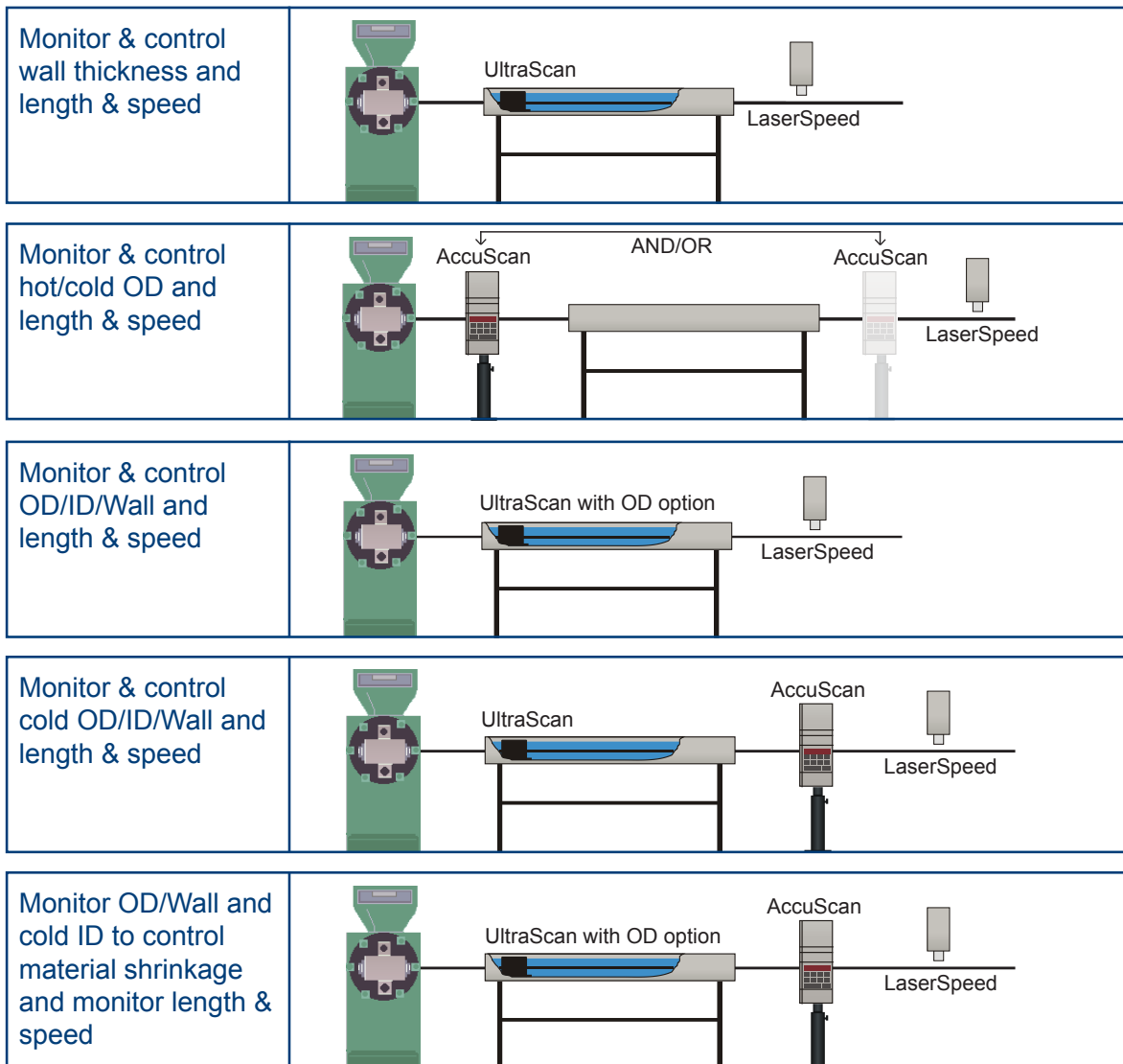


Configuration Editor lets you easily visualize the current extrusion line configuration. Add or modify product and process parameters. Set up and adjust hardware, communication protocols, production line layout and I/O settings without any special technical knowledge.

Product / Process

Control Configurations

InControl lets you control up to 5 AccuScan 5000 and/or AccuScan 6000 diameter and ovality gauges, as well as 1 UltraScan DSP wall thickness gauge and a LaserSpeed length and speed gauge at the same time. Using the Configuration Editor, you can easily position these gauges anywhere on the extrusion line. The following illustrates some example configurations you can set up.



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