



Ultima Process Control Systems



Welex Ultima Process Control

Welex Ultima process control systems are designed specifically for Welex extrusion systems, to give precise, efficient control over any number of extruders, gear pumps, and associated downstream equipment. They are built for factory floor operation with multilingual displays, and equipped with task-specific software, preprogrammed by Welex.

Each Ultima system includes:

- Flat screen TFT color display
- Line overview display, with status of machine speeds, loads, melt temperatures and pressures.
- Product recipe storage, including description and all operating parameters
- Alarm logging to printer and disk
- Data point logging and storage for off-line analysis
- Real-time and historical trending of any data point in the system
- Coextruded product layer structure display
- Diagnostic displays of all parameters in the system to aid in problem isolation and correction
- Temperature control loops:
 - Actual, setpoint, deviation
 - Percentage of heat/cool
 - High/low deviation alarms
 - Thermocouple break alarm
- Pressure control loops:
 - Actual, setpoint, deviation
 - High/low pressure alarms with drive interlocks
- Input functions:
 - Motor speeds and loads
 - Pressure monitors with alarms
 - Melt temperature monitors with alarms
- Hard copy printer
- Standard interfaces to machinery
- Simple plug-in connection to all components
- Multiple access level security settings

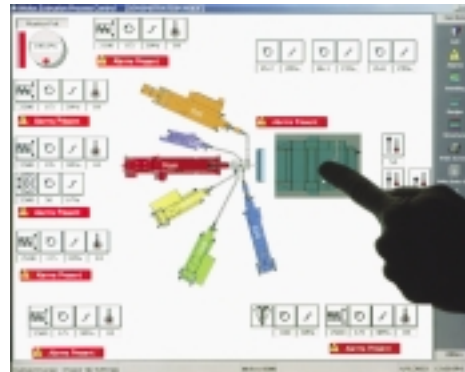
Multiple extruder systems are built with individual power panels on each machine for cable plug-in connection to the central Ultima operator console.

Self-diagnostics, plug-in replaceable components and Welex lifetime factory service assure long and trouble-free operation.



Line overview display

Complete line status at a glance. Allows operator to quickly confirm running conditions, including machine speeds, loads, melt temperatures and pressures in an easy to read format.



Selected touch screen

(The display changes to indicate item selected)

Individual parts of line may be touched to zoom into detailed information.



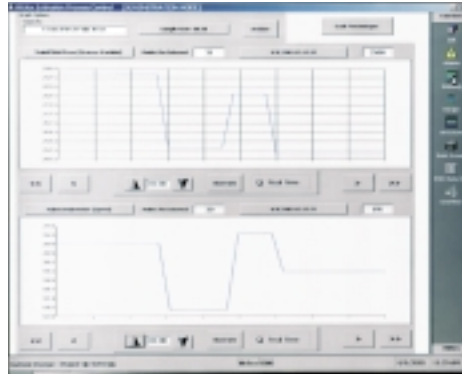
Take-off detail screen

Polishing roll temperatures, speeds, motor loads.
Pull roll speeds and motor loads.



Extruder and tooling detail screen

Extruder and gear pump speeds, motor loads, melt temperatures and pressures.



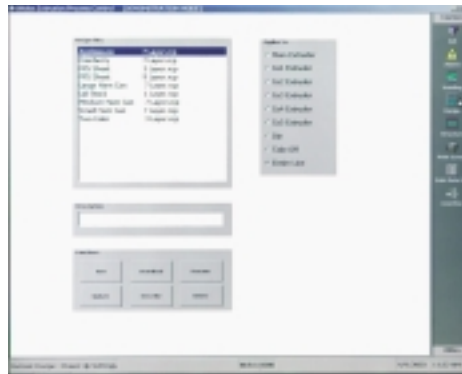
Trending

Graphing of multiple device values. Either real-time or historical data can be displayed. All data points are stored to disk at an interval specified by the user. Provides auto-scaling to fit the data within the display without operator assistance to select proper scaling values.



Setpoint adjustment

Increases or decreases can be made by percentages to setpoint, changing multiple zones instantaneously.



Recipe storage

Each recipe is a complete set of stored data assigned to a specific product. Recipes include all temperature and pressure setpoints, PID settings and high/low alarm settings. A complete product recipe can be installed with a few simple entries onto the touch screen.

Adding, deleting, or updating recipes is achieved by a few simple entries onto the touch screen (requires supervisor access level).



Coextruded product layer distribution

Automatic setting of extruder/gear pump speeds to produce desired structure.



Profitably operating a complex coextrusion line is easy for Welex customers with the inclusion of a Welex Ultima supervisory process control system. The Welex Ultima's modular approach to expansion allows precise, efficient, centralized control of any number of extruders, gear pumps, and associated downstream equipment.

Welex service and support

Welex extrusion systems are backed by a worldwide sales and service organization that you can call on for help at any time. We employ the most qualified field service staff and maintain the most complete spare parts inventory in the industry, so that we can always provide whatever support you need.

Whether you're near us or half a world away, we understand your needs and we'd like to work with you to meet them—in your language and measurement system. Our equipment meets the **CE**, ANSI and NFPA standards—plus other certifications on request.

Call your local Welex representative (listed on our home page on the Internet), or contact us directly.



Welex Incorporated

850 Jolly Road, Blue Bell, PA 19422 U.S.A.
www.welex.com • E-mail: welex@welex.com
Tel: 215-542-8000 • Fax: 215-542-9841