

CASE STUDY

Electronics Clean Room

One northern Illinois circuit board manufacturer is highly regarded in the industry for its advancements into new, faster, more accurate manufacturing technologies. Due in large part to the president's vision, this company is now considered by many to be the nation's best board shop for the manufacture of circuit boards for today's ever-miniaturizing electronics industry.

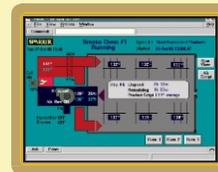
A circuit board plant relies on a number of critical systems, such as process chilled water, temperature and humidity control, compressed air, and others. Recognizing the importance of controlling these systems to close tolerances and monitoring them for potential failures that would jeopardize production, this company invested in an Andover Control System that would make global operating strategies a functional reality for the plant's operators.

This included three Clean Rooms at the heart of the manufacturing process, in which critical photographic and imaging functions are housed. One result has been to reduce down-time and lost production to near-zero levels. This translates into tremendous savings for the company, not to mention enhancing the quality on which its customers have come to depend.



The redundant cooling systems in this Image Room are held to within 1°F and 1% RH.

PC User Interface



A variety of methods are available to communicate with the Andover system. Issue commands, check status, view reports, receive alarms, all with the familiarity of your friendly PC.

Pro ven Benefits

- globally-coordinated control of inter-related equipment
- reduced energy consumption
- automated reporting for Quality Control analysis
- greatly reduced down-time, through comprehensive alarm strategies
- a single user interface for all equipment control
- tighter control over critical temperatures and humidities



A typical controller (Image Room, left) is connected to a wider network of controllers serving the entire circuit board plant in an Integrated Control System.

The control strategy centers around providing feedback from critical control points, for instant confirmation that mechanical systems are operating correctly.

Data from all the other related systems (e.g. chillers), broaden the control system's ability to safeguard the highly valuable film inventory kept in this room, as well as to reduce production down-time.

