

# Intelligent Messaging Application Industrial Automation

### The Applications

Smart Alec®gathers mission-critical, real-time production information and disseminates it to line personnel, supervisors and management. Smart Alec sends this information to the most appropriate output device, including Alpha™ LED displays, alphanumeric pagers and email.

**Production Status** Smart Alec forwards production status to Alpha displays located at each production line and to a centrally located summary display. Messages on the displays include production goals (e.g production count, cycle time), current production statistics, percent of goal, various process parameters (e.g. temperature, pressure), the number of rejected or defective parts, and other pertinent information. Centrally displayed messages provide this information in summary form for each machine number and/or part number.

**Alarm Conditions** Smart Alec watches for and communicates production alarm conditions, as well. For example, when production values fall too low, the color of the value on the display changes to draw attention to it. If the production rate drops, the rate turns from green to amber and, eventually, to red when it is alarmingly low. If the parts count is not on target or reject rates are too high, warning alarm messages scroll across the bottom of production displays, displacing motivational messages that typically scroll across. Audible alarms or strobe lights go off to draw attention to the signs. If material levels drop too low, production is halted in one part of the plant, or a non-production emergency occurs, Smart Alec sends alphanumeric pages or emails to key individuals at the same time that displays show alarm conditions and statistics.

#### The Benefits

- **1. Reduced assessment and reaction time.** Alpha LED displays give line personnel the ability to assess production status at a glance. At the same time, Smart Alec pages problem solvers no matter where they are in the plant. Therefore, alarm conditions are resolved quickly.
- **2. Enhanced coordination within the plant.** Because plant statistics are available on Alpha LED displays located throughout the plant, line employees, materials handling personnel, and shipping staff are able to quickly observe what is happening in other areas of the plant in order to adjust their activities appropriately.
- 3. Increased incentive to maintain and exceed production goals.

Because statistics are displayed clearly production employees can measure their progress vs. production goals at all times, in real time. This motivates employees to improve immediately... and lifts morale when they meet and surpass goals.

- **4. More effective, inexpensive employee communications.** Using the same system installed for production statistics, Smart Alec ensures that employees effectively and immediately know such information as what safety tips to follow, when to attend important meetings, where they rank in the monthly competition for a bonus, how to apply for new benefits, if production schedules have changed, and how to get to the company picnic.
- **5. Faster and broader communications.** Smart Alec allows important information to be quickly distributed to large audiences by communicating to Alpha LED displays that are strategically located for everyone to see.

#### **Implementation**

The diagram on the reverse side illustrates the process by which Smart Alec acquires production information from a Human Machine Interface (HMI) and forwards it to Alpha displays, pagers, and email.

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Printed in U.S.A.





## Smart Alec Application Sheet — Industrial Automation

an example of a manufacturer using HMI software to collect product data

