

- Products: Diagraph PA/4010
- Industry: Consumer Goods

## Glowing results

*Light bulb maker improves product ID marking with label printer/applicators*



*Diagraph PA/4000 prints and tamp-applies a 3"x 5" thermal transfer, pressure sensitive label onto one side of the corrugate shippers. The labels are marked with an SCC-14 bar code and product identification such as quantity, description, wattage, voltage, and a graphic showing the shape of the light bulb enclosed.*

One of North America's leading manufacturer's of incandescent lamps has a new method for for placing bar codes on the secondary packaging in which its light bulbs are stored while in transit. In fact, Osram Sylvania has greatly improved its product ID marking thaks to a new labeling solution.

The ink-jet system that had been employed was messy; it marked illegibly; it was labor intnesive; and the printheads kept depriming.

The end result: out-of-spec bar codes. "These units gave us readability problems with bar codes due to 'fade' and 'bleed' issues," recalls Andy Lenze, Senior Industrial Engineer at the Osram

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Sylvania plant in St. Mary's, PA (Sylvania was purchased by Osram in 1993 and renamed Osram Sylvania).

Anxious to find a new solution, Osram Sylvania turned to Diagraph Corporation to automate five of it's production lines with label printer/applicators. Even though Diagraph could offer either ink jet or labeling, labeling became the preferred choice and Osram Sylvania had five PA/4000 Label Printer/Applicators installed.

Diagraph provided a complete package, including components from Welch Allyn and Allen Bradley. On each production line is a PA/4000 Label Printer/Applicator. For a cost efficient and highly productive solution, each stand has been modified to hold a Welch Allyn 1350 Intelligent Remote Bar Code Terminal. Instead of having a PC

on each line, these remote terminals all connect to one host PC through the Welch Allyn 1500 Network Controller. During production, the line operator selects the label needed by typing in the label name on the terminal. This information travels to the host PC, and is confirmed as a "label" from the database. Then, the information is sent to the printer/applicator on that particular production line.

Watt About The Label? The Diagraph PA/4000 prints and tamp-applies a 3" x 5" thermal transfer pressure sensitive label onto one side of the corrugate shippers that hold the light bulbs. A standard auto-retract feature of the PA/4000,

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with sensors located on the tamp pad assembly, assures that once contact is made to the carton, the tamp arm retracts to the home position. It is designed for precise, accurate label placement and adhesion, yet gentle enough not to brake or ruin a fragile product, such as light bulbs. The labels are marked with a SCC-14 bar code and product identification such as quantity, description, wattage, voltage, and a graphic showing the shape of the light bulb enclosed. After the labels are auto-applied, an Allen Bradley VLD (Visible Laser Diode) Scanner on each production line, reads every SCC-14 bar code printed.

At Osram Sylvania, the scanners measure for a "read" or "no read". If the bar code is read, product continues on the conveyor where the packaged light bulbs are palletized. If the bar code is not read, the conveyor shuts down automatically, and the line operator resolves the problem. This is done as a measure of quality control, ensuring that every bar coded package that leaves the plant meets SCC-14 bar code compliance standards.

Compact, easily portable, yet durable, Osram Sylvania's new labeling system is built for demanding industrial environments. The PA/4000 units run "three shifts, five to seven days per week," according to

Lenze. The system is designed for simple set up, ease of operation, low maintenance, and efficiencies of process, all of which are critical at Osram Sylvania.

Along with having a more reliable bar coding solution, the light bulb manufacturer enjoys the label itself. It has provided a better looking, more appealing package with the clean-cut look of the label, as well as offered a place for more product information. More text is being printed on the label, than with the previous ink jet system coding the cases. And if information needs to vary from one label to the next, the PA/4000's next-label-out system assures that the next label printed is the next label applied.

What kind of impact have the new label printer/applicators had at Osram Sylvania? Lenze says that, "the Diagraph system gives us flexibility to make changes as needed very easily. The system also gives us 'insurance' that all product leaving the plant has labels with readable bar codes that won't fade or deteriorate during their life in the field." Sounds like a bright future for Osram Sylvania.‡

*by Bill Myers*

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