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## Document Imaging Speeds up Product Distribution:

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Moving millions of dollars worth of fastener inventory, including nuts, bolts and rivets, in one year is no easy task. But United Fastener Company, Inc. does just that. The company, located in Bayshore, NY, is a distributor of fasteners to the aerospace industry.

More than 2,500 different vendors ship products to United Fastener's 45,000 square foot warehouse. The company ships 60 to 70 orders daily, with each order consisting of several hundred items. The company has 5,000 customers in the United States. Established in 1972, United Fastener has 71 employees. Its annual gross sales are \$30 million.

### **Handling the Flow Of Government-Required Documents**

Because the aerospace industry requires government-standard parts, United Fastener must provide certification or "certs" to its customers for each part it ships. Certs are documents from United Fastener's vendors that state the specifications of a particular product, such as its size, weight, finish and mechanical properties. The certs also state that the products were manufactured to government standards. Certs are one or more pages in length, depending upon the products they describe.

The certs for each shipment sent to United Fastener are routed to the shipping and receiving department. Two clerks handle between 100 and 200 documents, including certs and purchase orders, every day. "Managing the flow of these documents through the company's sales and distribution process was inefficient," says Gerard Placa, former MIS director for the company. He is currently acting as an MIS consultant to the company. Anthony Maratta is vice president of operations. He oversees United Fastener's MIS department.

### **Pulling Files Is Inefficient**

Placa explains that the certs were filed by date and by a tracking number. When parts were sold, a clerk pulled the cert from the file cabinet, photocopied it and refiled it. The photocopy of the cert was sent with the order to the customer. One cert could be pulled several times.

For example, a shipment of 5,000 screws arrives with one cert. Ten customers may buy screws from that shipment. The cert for the screws would be pulled, copied and refiled ten times. "Too much time was spent pulling paperwork and looking for misfiled documents," he explains. Not only was managing the paperwork becoming a problem, but storing it was as well. "It seemed as though we had a warehouse full of file cabinets," says Placa.

### **Searching For A Scanning Solution**

United Fastener's president charged Placa with finding a solution to what was becoming a paperwork nightmare. "I started out with the idea of using a Lotus Notes-type system," says Placa. (Lotus Notes is a groupware program that allows multiple users within an organization to share and edit documents.) Placa contacted a local VAR, **ISG** (Hauppauge, NY), for a proposal. "ISG suggested we try a scanning system and brought in [ARvee Systems](#) (Bohemia, NY) and its **millennium::OMS**™ software" explains Placa.

Placa also investigated several other document-imaging vendors. He narrowed his search to two software packages, millennium and a package from another large, document-imaging software developer. "We brought both systems in-house for a demonstration," says Placa. "I was looking for an easy-to-use system that included a scanner, software and some type of search engine," says Placa. He chose ARvee Systems' millennium:OMS software. The software stores, indexes and manages scanned images and electronic documents, as well as video and voice recordings.

One reason Placa chose the ARvee software was because of its **Windows 95/98/NT** "look and feel." "We were already using Windows-based software, so our employees were familiar with it," explains Placa. An NT server runs the **Oracle** database and millennium software. ISG installed the hardware, including an Intel-based computer and **HP Netserver**s. ARvee installed the millennium software and the **Panasonic** scanner.

All the scanned documents are saved to a hard disk and archived to an **HP Surestore Optical 40FX** storage jukebox [run by **InveStore Storage Management Software** for Windows NT from Pegasus Disk Technologies]. "We wanted unlimited storage space for documents, and we've achieved that," says Placa. He also considered price when he chose the scanning solution. The total cost of the system was under \$15,000. "Other systems were double or triple the price," he explains.

Placa set up the index fields (identifiers) for retrieving the scanned documents. Documents are indexed by date received, product and vendor. The certs that United Fastener receives are not standardized; each vendor presents the information differently. Despite this, after one half-day of training, the data entry clerks were able to use the system.

"We picked a starting date to begin scanning all new certs," explains Placa. A backlog of certs from before the "start" date are also being scanned. Placa admits this will take some time. Eventually, after all the old documents are scanned, only one clerk, instead of two, will be needed to work in that area. The company is required to store the original documents for 10 years for quality assurance purposes.

### **Tying Scanning and Distribution Systems Together**

While the ARvee system manages certification documents, United Fastener runs the bulk of its operations using Global Logistics 2000 distribution software from **Dymax Systems**. The distribution software runs on a **DEC Alpha** CPU. "The distribution system manages United Fastener's inventory, price quoting, invoicing and accounting," says Placa. The millennium::OMS integrated document management system currently stands alone from United Fastener's computerized distribution system. There are plans to tie the two systems together in the near future, says Placa.

United Fastener receives customer orders by phone, fax and **EDI** (electronic data interchange; see related sidebar, below). Orders received by phone or fax are manually entered into the Global Logistics system, which generates the sales orders. The sales orders generate pick tickets in the shipping department. For example, a sales order is entered into the system with a ship date of March 1, 1999. On that date, a pick ticket is printed. Shipping clerks fill and ship orders from the pick tickets.

United Fastener assigns bar codes to all of its inventory. The bar codes indicate what the product is, the manufacturer, and the product's location in the warehouse. Items are scanned as they are picked to fill orders. "Texlogix handheld terminals are replacing the pick tickets. The handheld terminals will display the orders, scan the bar codes and delete items from inventory in the Global Logistics system," comments Placa.

If a part is not in stock, the system generates a purchase order (PO). The PO is scanned into the millennium system. According to Placa, there are no plans to change this process. The scanned POs are stored with the scanned certs by vendor when the product is received.

Tying the millennium system with the Global Logistics system will make retrieving certs for shipments more efficient, says Placa. United Fastener plans to use bar codes on the scanned certs. The bar codes will match the bar codes of items in inventory. When the items are scanned for shipment, the certs will be retrieved and printed automatically by the matching bar code. According to Placa, integrating the two systems to take full advantage of both will not be difficult. "Our scanning solution was designed with integration in mind," concludes Placa.

Written By: Lisa Kerner of *Integrated Solutions Magazine* (January/February 1999)