



newsletter

The management
Newsletter for all
industries involved
with bar-code
scanning and
related
technologies.

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1978 MATERIALS HANDLING SHOW



First, some general comments:

The Materials Handling Show in Detroit's Cobo Hall, June 12-15, was a large and impressive exposition. There were 382 exhibitors of cranes, trucks, fork lifts, conveyors, components, monorail systems, racks, shelving and other types of heavy equipment. Buried among these companies, some of whom had exhibits 3 stories high on what looked like 1/4 acre, were about a dozen exhibitors with products classified under Automatic Identification Manufacturers.

Without exception, the AIM companies are small firms, or small divisions of larger, somewhat unrelated companies. Annual sales do not exceed a few million dollars for each, and none is in a dominating position.

But these are the intelligence gatherers, the thinking portion of the larger systems. Or so it seemed to us.

There was nothing spectacular, in the sense of revolutionary new equipment or applications, but there was much of interest. A number of the larger systems/equipment people had incorporated scanning into their presentations, and scanners and imprinters were to be seen in the context of the larger applications.

For the most part the visual material in the AIM booths was low-key and ordinary. The operating systems were simulations, with glued down cans or boxes going round and round on a belt.

The lack of bar code standardization is not helping. It tends to confuse the users, fragment the industry, and leads to hardware gimmickry, rather than solid application and system engineering and marketing.

One can't help but wonder how much longer before the larger systems companies decide to build an in-house scanning capability by acquiring the technology or the actual AIM companies. This type of vertical integration may be a logical next step, as they find scanning used in more and more of their systems sales. Many customers are already looking for single source suppliers when systems are installed.

The following covers most of the scanning, coding and automation exhibits at the show. They are presented in no particular order or sequence of importance.

3M Company

3M was featuring new imprinting technology for machine-readable bar code symbols and man-readable information. Called "Magnestylus," the non-impact process uses toner powder attracted to a drum by multiple fine wires, and then fused to the label stock. The unit, priced at \$4980, is programmable to produce various label configurations, and 3M is already installing units for various applications.



For UPC random weight labeling, the bar code and the variable man-readable information were printed simultaneously. In another application, TWA has been conducting tests using bar code labeling of luggage in St. Louis. The Sky Caps key-in the destination which produces a bar coded and printed label. The label is slapped on the luggage and as it passes through the sortation system the bar code is read and the luggage diverted to its correct destinations. The next scheduled installation is at JFK in New York.

3M's marketing arrangements vary. The random weight imprinters are OEM'd to the scale manufacturers (such as Toledo and Hobart). The in-store UPC label printers are sold direct, as are the equipment for systems such as the airlines. We suspect 3M will be expanding their interests beyond label imprinters only.

Computer Identics Corp.

Computer Identics used the Detroit show to feature its Engine Component Verification system, now installed at many of the major automotive plants. A hand held pen scanner is used by inspectors to record and verify that correct parts are being assembled for each product's assembly configuration.



Also demonstrated was a Product Sortation System capable of simultaneously tracking 700 cartons and sorting to 31 locations automatically.

Billing itself as "the leading producer of automatic identification products and systems for material handling" C/I had all of their personnel on hand and made the MHI show a major effort. John Hill, C/I's V.P. was everywhere to be seen on the floor of the show and leading some of the scheduled forums and seminars. This company is as aggressive as any in the industry, and will even undertake consulting assignments in related areas. They are trying to build a systems-oriented capability beyond the sale of hardware only.

Accu-Sort Systems, Inc.

Just before the show, Accu-Sort announced a move to new expanded quarters just up the block from their old location.

At the show, we were particularly impressed with their multi-code scanner. This new model is a moving beam laser scanner that has the ability to read several different code patterns simultaneously. They demonstrated this with a carton on which 3 labels with 3 different code configurations were all read during one pass across the scanner. They are anticipating customer system requirements where codes for internal use will be added to containers already coded to meet external needs (such as UPC). Accu-Sort is striving to build its image based on its 20 years experience, broad product line and capabilities, and corporate stability.



Motorola, Inc.



The RDX Portable Terminal System made by the company's Communications & Electronics subsidiary combines scanning and communications technology into a powerful system. The data can be captured by scanning, voice or keyboard input, and can then be transmitted via the built in FM radio transmitter to a base station -- and 2-way communication can be maintained. Potential applications include inventory control, freight traffic management, cargo scheduling, load distribution and others.

Identicon Corp.



Now calling itself Ferranti-Identicon, the company demonstrated various applications of its bar code readers. The Series 600 alpha-numeric scanner was shown as a fixed beam card reader adapted for security and time/attendance systems. There was also an inner core reader for reading bar code labels placed inside tubes such as those used for textiles. The 90 degree reader is inserted and rotated to scan the code. Their Series 400 moving beam reader was demonstrated to read at a distance of 36" or more.

MRC Corp.



This subsidiary of Scope, Inc. presents itself as "Engineers and builders of control systems." MRC manufactures bar code readers and concentrates on its edge code, claiming it to be much more easily read, even when poorly printed. The company will design, install and service complete turn-key systems, even though it only manufactures a small number of the components of the system.

Sterling Scale Co.



Sterling demonstrated an inventory counting and recording system based on a weigh count scale. A Markem label printer converted the piece count into a bar code and a Computer Identics' reader read the label and processed the data. It was a well presented and interesting application presentation.

Mekontrol, Inc.



Basically a producer of electronic sensors, this aggressive company is growing rapidly (Sales: 1977, \$2 million; anticipating close to \$3 million this year.) Although not a producer of bar code readers, per se, their fixed beam scanner does recognize the presence of identification marking on a go-no-go basis. Sales are through reps only.

Dennison Manufacturing Co.



The Identification Systems Division was demonstrating a new label imprinter using a dot matrix. Major applications include OCR-A and other human readable fonts, with a great deal of built-in flexibility. The imprinter, INTACS 2100, also has the capability to print bar codes of any widths, but the company has not had many calls for bar code applications.

Sick Optik Elektronik



This European-based company has a broad range of photo-electric equipment intended for many sensing and control applications. Included in this array of products are bar code readers used for packaging control in the pharmaceutical

industry, and an address reader installed on conveyors. This last application involves the use of punched cards mounted over reflective material on the sides of containers such as moving tote boxes. The moving beam scanner recognizes the code address and directs the unit to its proper destination. There have been no installations of these systems in the U.S. as yet, but they are widely used in Europe.

Weber Marking Systems



The Weber in-house label printers can print bar code labels from rubber printing plates. Depending on the label's size, equipment prices run from \$900 to \$3300 and print at a speed of up to 105 labels per minute. Since printing plates are used, any code configuration can be printed. Weber does not emphasize this capability in their presentation, and may be missing a number of sales applications -- particularly companies with problem packages wanting to produce UPC coded labels on demand.

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In the first major communication....

....since establishing their in-house administrative arrangement Jan. 1, 1978, the Uniform Product Code Council sent out a letter to UPC Coordinators on June 19. The letter reviewed the reasons for dropping DCI and setting up the Dayton, Ohio facility to provide direct administrative support services for the UPCC. It then went on to describe some of the recent changes and events affecting UPC:

- Number System 4 for in-store marking of general merchandise will also enable stores to include the item price in the code reducing their data bank storage requirements.
- The European Article Numbering system and its compatible relationship to UPC.
- Retailer problems with out-of-spec symbols, caused mainly by coding errors, printing errors (mostly insufficient color contrast) and symbol location problems. The news here is that the Code Council Board of Governors has taken official notice of these problems and "established a project to review this entire area and consider revisions in procedures or practices."
- The slow progress of coupon coding due to the limited number of scanning stores. There is also a problem with a patent held by Walter Kaslow which applies to the use of UPC on coupons. The Board has decided to institute legal proceedings to resolve this situation after unsuccessful attempts to buy the patent.
- A review of the Shipping Container Symbol. The UPCC sounds anxious to resolve this so they can move quickly to adopt a symbol for this application.
- An announcement that the minimum fee for UPCC membership (to obtain a manufacturer's number) will be increased from \$250 to \$300 effective 7/1/78. The remainder of the graduated fee schedule will be unchanged.

The Wall Street Journal's 6/13/78 article....

....on UPC in the supermarkets, was one of the most objective and accurate we have seen in the "consumer" press to date. Concentrating on the experience of

those chains, like Giant, which are fully committed to the system, as well as A & P and Kroger which have been much more cautious, a good cross-section was presented of the benefits as well as the reasons for the relatively slow development of the system.

Kroger's V.P. John Strubbe made a particularly significant remark: "We wanted to work out the knots, get our people used to it and test it over a period of time before we went hog wild. When you introduce sophisticated equipment to a basically unsophisticated industry, you have a problem learning how to use it." Kroger plans 20 new scanner installations to add to the 4 already in place. A long way to go, with 1100 operating stores in the chain, but a significant step forward.

No reference was made to Safeway, the #1 chain, which is moving along smartly, but at its own pace, to install UPC.

At a recent meeting of the Chicago Chapter....

....of the Packaging Institute, Ron Nuti of Dominick's made a pertinent comment regarding UPC symbol placement on packages. Nuti complains, "Design and color schemes are so cleverly developed that unless you look very carefully, you wouldn't know the symbol was there. The cashier can't find it....and in three years of experience, we've seen no ability by cashiers to develop a sense of where symbols could be located."

Nuti has a good point. The original UPC specifications called for the symbols to be placed on the "natural bottom" of the package. This just didn't work on many packages, and so long lists of exceptions and guide lines were issued. The net result was that the package/graphics designers have positioned the symbol wherever there was some space -- and preferably in the least conspicuous manner. The color manipulations have been adding to the problem.

There has been no news from the....

....Distribution Symbology Study Group because the results are not yet in on the scheduled tests.

Bill Maginnis, Chairman of DSSG, says he will not schedule a meeting until he has the data complete and in hand. (Tentative dates for this important meeting have been cancelled twice.)

The current delay relates to reviewing all of the test results. Samples were analyzed by different people at various locations, and the results are now being formatted for computer input and analysis. These will then be circulated to DSSG members for comment, and a meeting will then be scheduled.

Azurdata has announced....

....two significant marketing changes:

1. TRW Datacom International has been appointed Azurdata's exclusive distributor outside the U.S. TRW Datacom's annual sales of \$125 million are through its subsidiaries in Brazil, Canada, West Germany and Switzerland,

and affiliates in Australia, France, U.K. and Japan.

2. Dennison Eastman will sell Azurdata equipment in 13 Western States for industrial applications only. Dennison Eastman now sells industrial systems for printing bar codes in-plant and the 2 companies anticipate a good "fit."

The company also announced the opening of a new service center in Dallas and the appointment of Michael C. Woodward as Chief Financial Officer.

Azurdata produces special terminals used for sales order entry and inventory control for distribution industries and manufacturing operations. It's been a busy month for Larry Azure.

The latest episode in the long drawn-out saga....

....of Computer Identics' Automatic Car Identification (ACI) system for railroads (SCAN Oct 77 and Nov 77) is just in.

The Association of American Railroads voted last November to end its requirement for bar code labeling of freight cars to track their movement and location using scanners. C/I petitioned the Interstate Commerce Commission to reverse the AAR decision and was turned down. Undaunted, David Collins, C/I's President, is now petitioning the Court of Appeals in Washington, D.C. to reverse that decision and force the ICC order a label maintenance program.

The reason given by the industry for cancelling this very ambitious program, after a \$150 million start up investment, is that the labels cannot be maintained in a scannable condition because of dirt and damage incurred in the normal operation of the rolling stock.

Collins sees a conspiracy by members of the railroad industry who want to install their own proprietary system nationwide. And so C/I is suing the Southern Pacific railroad which, they contend, conspired in restraint of trade to keep ACI from succeeding.

There's much more to the story, and it is all covered in a detailed Wall Street Journal article (5/30/78). The bottom line, for the present anyway, is that C/I sales for 1978 are estimated at \$3.7 million instead of 3 times that amount when ACI revenues were anticipated. It will probably take more than that in legal fees to pursue a suit against these giants to a successful conclusion.

But you must admit it was a beautiful application for bar code scanning while it lasted.

Computer Identics has announced....

....the promotion of Frank C. Goodfinger to OEM Program Manager for Industrial Systems.