

CROWN-CRIER

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Crown International, Inc. Employee Newsletter

April/May 1996

Bar-Coding is In

by Ed Collins

In the first two months of the Parts Replenishment System (PRS) pilot project Crown has reduced inventory by \$13,657.90. Inventory quantities were reduced an average of 60%. The pilot project started September 6, 1995 with nine parts. Since that time Crown has added 401 parts to the system with another 215 coming in the near future. If this system performs at or above the 60% average for inventory reduction realized on the pilot project, this could mean a reduction of between three and four million dollars in raw inventory for the future.

Crown is a trading partner with Advacom, a major electronic supply distributor, and is using Trading Partners PC for our electronic data interchange (E.D.I.) software. The system involves Stockroom personnel moving a magnetic label from the part stock location to a centralized "order board" when quantities fall below a specified replenishment quantity. The bar-coded information on these labels is then scanned daily. This information is sent directly to Advacom, who processes our order within 24 hours. In one to four days, depending on shipping times, we have our parts.

This system eliminates the necessity for a purchasing agent or buyer to order regular consumable items, freeing their time for unique technical or urgent purchases.

The MRP system is set to signal reorder of parts based on minimums and order multiples. This can, and does cause problems multiplied over various levels, lines, departments, and divisions. With a visual system, Crown has minimized the chance of stocking excessive amounts of inventory. If the inventory is not used as

quickly as anticipated, the label will not be moved to the order board. Our goal is to stock two weeks of inventory with the PRS. Before starting the PRS, there were two to four months of inventory on some of the pilot project parts.

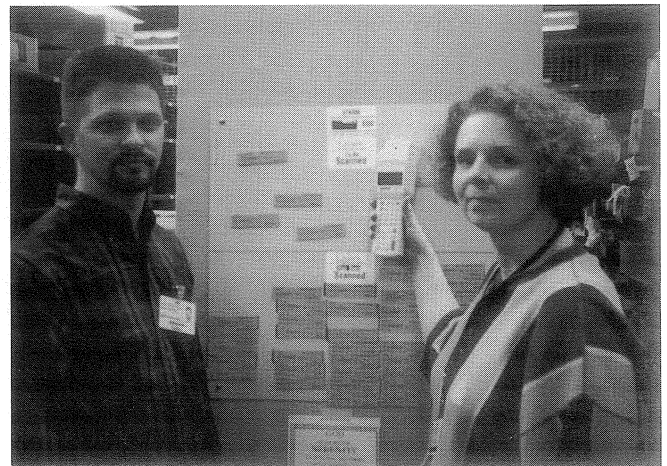
As long as the people pulling the parts follow the system of using the magnetic labels, there should be a smooth flow of parts from the vendor to the assembly lines. The likelihood of out-of-parts situations with parts on the PRS is minimal.

When parts arrive at the receiving dock from the vendor, the receiver puts labels back on the shelves with the parts. Then the process starts again.

Recently the PRS has expanded from Stockroom to Magnetics and Modules departments. Order boards are located in each of these departments.

Marcia Putz checks all the boards daily, and scans the order information on the labels. Patt Johnson usually sets up the PRS parts on shelves. Cathy Lehman and Lauri Chupp in the manufacturing office maintain the parts/barcode database and produce all the labels needed for the system.

We plan to have another vendor on-line in the next month or so. The next step will involve the use of a Value Added Network (VAN) which will allow us to do E.D.I. with multiple trading partners. Further reduction in inventory will result. In the mean-



Ed Collins and Marcia Putz holding the scanner in front of the "order board."

time, we work with division purchasing people to get more Advacom parts on the system. ☺

PC Users Group

If you use a personal computer (PC) the PC Users Group has something for you. The group meets at 7:00 pm, the fourth Thursday of every month in the Plant 1 Assembly Area.

From beginners to professionals, participants share news and announcements, ask questions and get answers. Programs feature such things as hardware and software demonstrations, how to service your computer, how to set up a network, genealogy searches, telecommunications and Internet. A resource center provides books and tapes. Membership is free. ☺

Board Room Phase-out

by Libby Marshall

The "Board Room" closed April 8, 1996. Wayne Blakesley, Corporate Manufacturing Engineer, designed the Board Room in 1967, and he recommended and handled the closing. The Board Room

employees shown here have transferred to other positions.

A printed circuit board (PCB) provides the base for all the components used in electronic power modules in amplifiers,

microphones, computers and other electronic equipment. The Crown Board Room started making PCBs in 1967. Larry Dennison, now a CAD technician, etched and processed boards by himself for more than ten years.

The plastic boards are covered in copper which is etched away except for the solder-covered traces. These provide electrical connections between components.

The price of the boards we purchased doubled in 1967, and delivery lead time tripled. Now, 30 years later, the reverse is true: we can buy them quickly for less cost than making them.

Another reason for buying the boards is that instead of single-sided boards, we now use mostly double-sided, plated-through hole boards. Set-up and processing for double-sided boards requires more complicated equipment and processes.

We built our own equipment in the 60s. It is all sold now, or transferred to other departments. The UV oven, for example, will be used in the screen-printing process in the Powder Coat department.

Another milestone reached! ☺



Left to right, back row: Ed Collins, Jr.; Bob Caprarotta; Supervisor; Ron Taylor, Audio General Manager; Scott Funkhouser; John Crume; 2nd row: John Youngworth, Dorothy Hill, Tamela Coburn; front: Tammy Hart, Mary Alice Johnson.

D.A.R.E. Sound

On Thursday, April 18th, Mark Chapman and Chris Vice, with the help of two Elkhart school employees and vehicles, packed up the Crown sound system, set it up and engineered the D.A.R.E. Rally at the Elco theatre.

Drug Abuse Resistance Education was organized by the Elkhart City Police Department to combat drug use among children. The rally makes kids aware of drug dangers and offers an upbeat way to approach life, drug free.

Comedian Doug Wanser, got everyone laughing before he launched into the serious information the kids took with them. This letter was received by Terry Hammond:

Dear Mr. Hammond:

On behalf of the D.A.R.E. Board of Directors and the over 1200 kids that attended our annual D.A.R.E. Rally, we want to express our sincere thanks for the sound system that you provided. This was an outstanding contribution toward our efforts and made the Rally a tremendous success - they were very impressed!

... I sincerely appreciate your commitment to the community by providing the time and materials to help organizations such as D.A.R.E. be successful.

- Kurt Myers, Chairman
Vice President, Human Resources
Elkhart General Hospital ☺

Thank you for your "Direct Line" notes. It gives us a chance to respond directly to you about your concerns. However, if you do not sign your name, we cannot respond to you. Unsigned notes may not be effective because we cannot get additional facts, if needed.

-Terry Hammond

Employee Committee Financial Report

Balance as of 5/22/96:

Savings	\$1,235.93
Checking	3,321.71
Total	\$4,557.64

"Guaranteed Excellence,"

...a 10-minute video about Crown, can be ordered from Debbie Sherwood, Audio Marketing office, extension 8208. Price: \$3.50

New positions, new challenges

Kim Clingenpeel
Modules Supervisor,
Night Shifts



Building up and maintaining daily kanban quantities, moving modules stock and keeping production up present major challenges for Modules night shift Supervisor Kim Clingenpeel. One might even say "overwhelming," but Kim is quick to say, "We are doing it!"

She appreciates the help received from Stockroom, whose employees have worked overtime helping to organize Modules stock in one area.

Kim meets daily with the day shift supervisors so that they can all oversee production and quality. She has interviewed and hired new employees, increasing the number from 30 to nearly 50 employees on the night shifts. Training employees in quality and component identification is on-going.

An eight-year Crown employee, Kim was an assembler of amps on the first ComTech series line, operated the first axial insertion machine (Amistar), and was a functional tester, team leader and coordinator in Modules.

For outside fun, Kim likes to do crafts, and has a portrait photography business in her home studio. ☺

Susan VanOrman
Training and Development
Instructor, Manufacturing



After three weeks on the job, Susan is already teaching a solder class and has scheduled and provided hand-outs and equipment for component identification training being taught by Dorothy Kissel, a retired Chipco employee.

Susan will work toward IPC certification by taking "Train the Trainer" classes and studying different solder techniques. Her approach to this new position reflects six years' experience teaching in a Christian school.

She has a B.A. in Education from Calvin College in Grand Rapids, Michigan and is within two classes of completing a Masters in Elementary Education. This new job may change her direction, however.

Susan has worked on Line 2 for three years as an assembler and Quality Specialist.

Susan and husband Randy, who is a Crown Audio Factory Service Technician, are remodeling a farmhouse with a barn. Their outside interests are there and include three goats, some bunnies and a garden. ☺

Cheryl Deak
Stockroom Supervisor,
Night Shifts



The stockroom night crew picks up where the day shift leaves off, according to Cheryl Deak, new night-time supervisor. The day and night supervisors interface at 3:30 pm, and then the night crew works through until 2 am.

Ten people fulfill night roles, including receiving, bulk picking and cycle counting.

For the supervisor working nights the challenge of the adjustment in lifestyle is added to responsibility for handling interviewing, hiring, performance reviews and scheduling work assignments.

She relates to "Moses moving the Israelites" when it comes to coordinating the Stockroom move to plant 2B. Dan Cripe and Cheryl work together to plan the move. On Friday nights and Saturdays, full crews are moving.

Cheryl completes 20 years at Crown in July. She previously was Acting Supervisor and Coordinator for Lines 4 & 5, the mic and amp lines. She worked in Specialty, especially on the TEF12Plus, and then became Supervisor for TEF production. More recently she has conducted inspection on the night Modules line and served as Quality Specialist.

Cheryl devotes as many hours as possible outside of Crown with her three daughters' and son's families. She has five grandsons and two granddaughters. ☺

Customer Comments

Dear customer service folks,

It is hard to believe. I sent my rather old D-60 to you for repair and you actually repaired it. Will wonders never cease? It is such a relief to find a company that still believes in service the old way, that still looks after its customers and its equipment. You did the work quickly, did it well,

sent me all the little parts you replaced, and the amplifier sounds great.

[We'll omit comments about three well-known companies who did *not* serve this customer satisfactorily. Editor]

May you prosper and be around for years and years. And pat your technicians

on the back for me. You are an island in an ocean of disposable garbage. You made my day.

- John H. Siple, Seattle, WA
April 18, 1996 ☺

The President's Memo...

An Overview of 1996

Nineteen ninety-six is developing into a record year in terms of total sales, company profits and employee bonuses. While our Audio Division continues to have steady growth, the Techron Division has more than tripled in sales and shipments from 1995 levels, primarily the result of MRI product sales. While the future always contains some degree of uncertainty, there is every indication that we will continue to have strong sales, profits and bonus earnings throughout 1996.

While we are thankful for the good financial results this year, we are faced with several other abnormally large and difficult tasks:

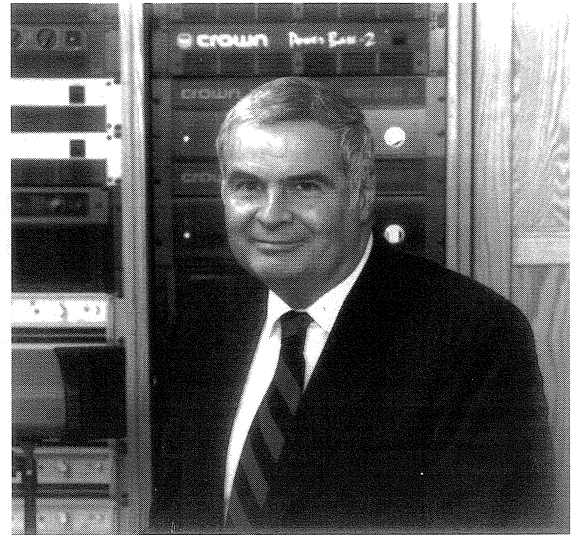
First, we are well underway with a major plant and office rearrangement project. When completed, hopefully sometime this fall, we will have relocated approximately 90% of our entire corporation. This will give us considerable relief from crowded plant conditions, and improve the overall material flow to reduce material handling cost and process time.

Second, we are approaching the final stages of evaluating and selecting a new management information software package. The implementation of this project will likely begin late this year or early 1997 and will, in some way, involve most employees in the corporation. Our objective is to have an integrated system that links all of our major functions together into a single computerized business system.

This means linking everything from order entry, through manufacturing and shipping into a single system, which incorporates all support groups such as accounting and human resources. This project will be a real asset in improving our overhead efficiency and giving us more realtime information on which to make better and timely decisions.

Third, we have accelerated our corporate training and development efforts. As we rapidly change the way we do business, each of us must become more versatile and develop broader job skills to meet the increasingly complex demands that are required for a successful business operation. We must become proficient in managing the resources of people, time, money, technology and information. We encourage education, either inside or outside of the company.

I have touched on three highly visible activities. Obviously there are many other key activities going on. We continue to expand our demand flow manufacturing concepts, utilizing kanban and other demand flow techniques. New product development and recruitment activities, to support our current sales levels and strengthen our professional staff in preparation for future growth, are at record high levels. We are aggressively pursuing ongoing quality improvement inside each



Terry Hammond

division because the marketplace measures us every day with very high expectations.

In summarizing where we are and where we are going in 1996 and beyond, we can clearly say:

1. We are very, very busy.
2. We are having an excellent year financially.
3. We are paving the highway towards the future.

I sincerely appreciate the great effort and teamwork I see demonstrated everyday in making 1996 a record year. Nineteen ninety-six represents the fiftieth year of business for Crown International. It is appropriate that we set sales, profit and bonus records, while we pave a superhighway that leads to the next 50 years of business activity for Crown International.

You, the Crown International workforce, certainly have my respect for what I see you accomplishing this year. If this continues, and I believe it will, you will make a strong statement in 1996 about what Crown can be and will be in the years ahead. God Bless!

Terry Hammond's closing quote to the report to the shareholders May 18th:

"Whatever you do, work at it with all your heart, as working for the Lord, not for men."

- Colossians 3:23

The CROWN CRIER is published monthly or bi-monthly to inform employees of customer, corporate, departmental and employee news and progress. News and ideas are always welcome.

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