

# Patented rotary system rolls over market

By KATHLEEN MORAN

Sitting in the small conference room of Bernal Rotary Systems Inc. it is not unusual to be interrupted regularly by telephone calls from General Motors, Kimberly-Clark, Johnson & Johnson or ITT. From Bernal's nondescript building on

Industrial Row in Troy comes a rotary die system which is revolutionizing some areas of manufacturing. And as the manufacturers catch wind of the Troy company's operation, the phone begins to ring. Although rotary dies aren't new, a West

Bloomfield man has designed and patented a process which uses dies of hardened steel capable of cutting any non-metallic materials.

Alan R. Plaff, Bernal's founder, says the system is attractive because it offers some manufacturers a capability for speeding

up production of an item while others can use it to produce an item with fewer pieces of equipment.

POTLATCH FOREST Products, for example, saved 75 per cent in capital expenditures for equipment by using Bernal's continuous web processing system

Potlatch now uses fewer pieces of equipment to cut print crease and fold cartons.

The same happens with cigarette packages which were produced at the rate of 20 linear feet per minute but now are produced at 800 feet per minute.

An electrical circuit system had been produced at the rate of eight feet per minute until Bernal designed a system which increases production to 80 feet per minute.

**IN JUST 10 YEARS** Plaff has built an operation which expects to do more than \$2 million in business this year and which has numerous existing developments to its credit.

Among those is the rotary die which produces the Pringle potato chip. Extruding from wire matrices for cars to sanitary napkins, diapers, plastic ranges for six packs of pop and hospital supplies are being produced at a cost savings to manufacturers and consumers alike.

"We have opened a manufacturing application process which has never been done before," said William Bollinger of Bernal-Hills Bernal's marketing manager.

Although the company has advertised its trade page's means of its business is generated by word-of-mouth, said Plaff.

"We've done fairly extensive advertising but many of our customers contact us after hearing about us from someone else," he said.

The Bernal operation is still small, with 35 employees, but growing fast. Last year it employed 30 persons and four years ago it employed just three persons, including Paul Madill. Madill, executive vice president and Jerry Bice of Hester's, was testing supervisor.

Plaff's executives include Sterling Gordon of Birmingham, sales manager; George Miner Jr. of Bloomfield Hills, vice president and attorney; and William Hunt of Mt. Clemens, shop supervisor.

Almost half the company's employees work at testing and producing the dies and equipment designed by the people at the top.

**OUR GROWTH** possibilities are unlimited, said Plaff, noting that the company

has international prospects with one German customer. Mobilize a diaper manufacturer, for one.

Before putting his rotary die on the market, Plaff said he studied the market area thoroughly to determine whether it would be accepted.

"If we had received negative market information, we would have held off," he said. "But our study indicated a positive response which seemed to justify the process."

**'Our growth possibilities are unlimited.'**

—Alan R. Plaff, president and founder of Bernal Rotary Systems

He then stepped down from the president's office at Bernal Inc., his father's business, and started Bernal Rotary Systems. Since that time he has developed rotary die manufacturing systems for flexible printed circuits, automatic wire harness systems, folding cartons and mechanical material handling and system systems.

The company has completed a flexible circuit investigative program for Ford Motor Co. a system for crimping applicators parts for Foster-Bell, a method for producing fuel pump parts for AC Spark Plug and a flat business card for International Telephone & Telegraph.

A wire harness system for General Motors may soon be in response of the how many under the hood of an automobile.

**BU NOT EVERYTHING** has been a complete success, Bice noted.

Bernal developed a system for producing the seat belt retractors, alarm systems and General Motors at 10 times its original production speed. However, the federal government dropped the alarm regulation after it was seen as the cost-saving system had been designed.

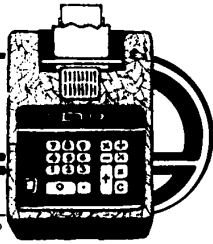
Yet the young company isn't worried about its future.

"We're still the new guy," said Bice. "We're not ready to close in on competing with our ultimate bounds, though."

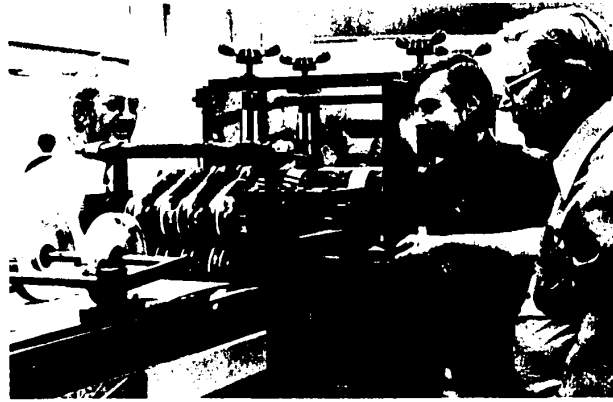


Paul Madill (left) and Alan Plaff examine a rotary die before it is released to a customer. (Staff photos by Charlie Kidd)

business



Product No. H-105      SF4CB4C-03D



Sterling Gordon (left), William Bollinger and William Hunt (right) test a piece of equipment which will speed up production of cartons.

## Design Center houses array of fine furniture

A quiet building in Troy will soon be the last of a major American case study in a design center for the furniture people.

The center will house the goods of the furniture industry's best minds in a 240,000-sq-ft facility set on 133 acres of land north of Maple between Cass and Chokas.

It is the vision and dream of Marvin Danto, a Bloomfield Hills man who has spent most of his working life in the furniture industry.

Head of his own investment company, former owner of Englewood Triangle Furniture and a holder of other impressive credentials, Danto has always been a moving force in the furniture industry.

center has received favorable response from people in the trade.

"They love it," said Danto. "They can't wait for it to get started."

When that first building opens, its 44,000

square feet will contain the products of more than 100 manufacturers of wall covering, fabrics and architectural fixtures.

The second building is scheduled to begin shortly and when finished will be

completely stocked with furniture.

The two remaining buildings will house lamps and accessories and contract furnishings.

Build on the shipping mall concept, the

center will provide one-stop shopping in an area filled with the finest fabrics, furniture and accessories.

It is the easiest way to get the most up-to-date things in the industry," said Danto.

affine. There are showrooms around here, but they are scattered all over.

That's one of the biggest problems with the industry, it is so fragmented.

The center will contract that problem, he said.

**MOVING WITH THE** new center, he is moving in a somewhat different direction but he is eyes getting somewhere all the same.

"I was thinking about what was happening to the industry," he said. "And this area had a tremendous need. It hasn't been here for the last 15 years."

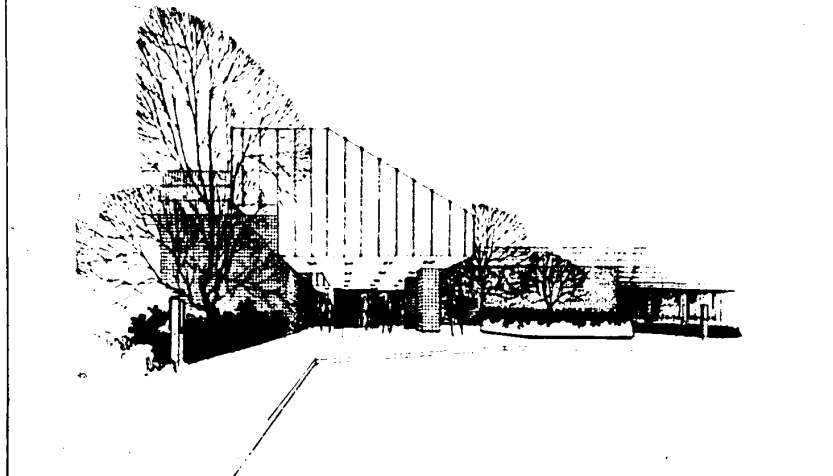
What has happened, he explained, is that many furniture operations and department stores carry some fine lines of furniture but they don't carry a preponderance of it as they had in the past.

That past marketing method, he said, is what kind the Detroit area's first and only last design center.

A bad location and competition from stores carrying the finer furniture lines combined to make the old center fold 15 years ago. At the time, it wasn't really needed," said Danto.

The new center, he said, is

"What we are trying to do is make this as convenient as possible for the designer," he said. "He can come in and shop and find everything he wants. It will allow designers to get their time efficiently."



The face of the Robert Alpern designed Design Center in Troy.

**AS TO ITS FEASIBILITY**, Danto tosses out facts and figures on the buying power in the Detroit area, average income, population, projected baby starts and more. He points to the success of similar centers in Boston, Philadelphia, Dallas and San Francisco and then notes that Detroit ranks higher than many of those cities in available income.

For example, the Detroit area is fourth in the country on the buying power index. However, it ranks fifth in sales of home furnishings and appliances.

"We lose a lot of sales to other cities," contends Danto, "because we do not have a design center."

He also said that as incomes rise, people become more interested not only in decorating their homes but using fine furniture, good fabrics and advice from a decorator.

That doesn't mean however that a couple just setting up house can trip over to the center to pick up a trunk for the living room. It is open to the public because it is a wholesale operation.

"We are appealing to the designers, architects and contract specifiers," said Danto. "It will be closed to the public and only open to members of the trade."

**DANTO ESTIMATES** that from start to finish the project will take four years at a cost of at least \$10 million.

By the time it is done, there will be the four buildings, along with landscaping, sculpture, courtyards, a restaurant and countless manufacturers displaying countless items, he said.

"The entire thing is dedicated to design and good taste," he said. "No one has ever done it in a one purpose building. I'm kind of proud about doing something unique."

**A YEAR AND A HALF** in the making, one of the four proposed buildings should be done by early December. Already, the O&E