Marilyn Fitchett editor/591-2300

INCLUDES CLASSIFIED









a 35-mph test, a belted dummy receives protection from a driver's side air bag

_ocal companies eye air bag business

By Gerald Frawley staff writer

Air bag manufacturers and sup-pliers expect the 1990s to be a busy decade now that automotive com-panies worldwide have announced plans to use air bags more exten-

pants wortowice have announced it would instreet, announced it would instreet, announced it would install driver-lede air bags in all of
its vehicles in the early 1998; Ford
will install driver and passengerside air bags as standard equipment by 1994. Only General Motors
has yet to announce when air bags
will be standard equipment on all
models, GM now offers driver side
air bags as standard equipment on
almost half of its automobiles with
plans to add them to more models
throughout the 1990s.
Charles L. Miller, executive vice
president and general manager of
Tharles L. Miller, executive vice
president and general manager of
the stall of the passent
and air bags will become as popular as sont belts. "If the 1990s will
surely be the decade of the
safety belt, then the 1990s will
bag;"

TRW, with facilities in Rochester
TRW, with facilities in Rochester

surely be the decade of the air bag."

TRW, with facilities in Rochester Hills, is the world's largest supplier of automotive safety restraint products. It is the sole supplier air bags to Ford and also supplies air bags to Ford and also supplies also supplies and General Motors.

iotors. In 1989, the North American air In 1989, the North American air bag market was worth \$360 million in sales. TRW estimates the market will have a compound annual growth of 85 percent through 1994 when it will reach \$3 billion in an-nual sales, Miller sald.

"WE ARE ACTUALLY even more optimistic than that," TRW communications director Claude Gianino said, "Those are conserva-tive (estimates)."

in North America will be equipped with air bags.

The main impediment to air bag technology is cost, but he believes a solid activation system is solid activation system is solid activation. Current prices for air bags range from \$400 to \$1,500 depending on the automobile and equipment configuration, but costs have continued to fall, according to THW ligures.

"In the last two years, we've in the last two years, we've half thanks to advances in technology," Gianlio said. He believes production increases mandated by fed-

crai law will enable suppliers to bring costs down further.

This will help ensure product compatibility price stability and successful and developments of the suppliers and successful and developments of the suppliers and sutomotive manufacturers because they will need to be designed into automotive manufacturers because they will need to be designed into automotibles years before production, Glanino said.

Federal law requires that all automotibles be equipped with drivers side passive restraint systems by 1994. "Air bags are not the only

type of passive passenger restraint, but they are becoming the restraint system of cholce," he said.

TIP ENGINEERING Group of Farmington Hills is an example of a small local company poised to take advantage of the coming air bag market explosion. Vice president of sales and marketing Dick Marchese said the firm holds 40 patents dealing exclusively with air bag technology.

With almost 40 milliog vehicles built worldwide each year, the market for air bag equipment is

immense, he said. TIP is a dedicat-

immense, he said. TIP is a dedicated interior trim occupant safety company, working solely in safety improvements to the inside of automobiles, Marchese said.

"We're the only people in the world doing what we're doing. We're the only people in the world doapable of doing what we're doing."

TIP Engineering designs a patented seamless air bag deployment door that will improve the interior aestheties of air bag-equipped automobiles, Marchese said. (See related story.)

The deployment doors will also be less expensive than current technology, and material developed for the doors will lead to other advances in interior trim, Marchese said.

SIEMENS-AUTOMOTIVE, an international electronics automotive electronics firm with headquarters in Germany, is also ready to capitalize on the exploding air bag market, according to directed of communications Paul Klapproth. Siemens has sales offices in Troy, research and development facility in the control of the contro

content in auto safety niche



RANDY BORST/staff p

David Bauer (left), engineering director of TIP Engineering Group, and Dick Marchese, vice president of sales and mar-keting, examine a model of TIP's seamless air bag door that will fit in the instrument panel on the passenger side of the vehicle. TIP specializes in air bag trim pieces.

By Gerald Frawley staff writer

By concentrating on only one aspect of automotive design — instrument panel safety — TIP Engineering Group of Farmington Hills has positioned itself to take advantage of the coming air bag demand explosion.

TIP's emphasis on the instrument panel allows them to work more quickly, less expensively and with more innovation than the automakers and its comeetiers, vice

with more innovation than the au-tomakers and its competitors, vice president of marketing Richard Marchese sald.
"We don't design air bag sys-tems — the air bags, the electron-ies, the sensors — we're trim peo-

ies, the sensors — we're trim people.

"When people think air bags, they don't always think of hat goes into designing an air bag system." Marchese said. Years before an automobile ever reaches the showroom, interior trim panelis are designed to accommodate the vehicle's climate controls, elec-

"What we're trying to do is design cars to protect what is called the 'lith ternale.' Not everyone is 5 feet 11 inches tall and weighs the national average. There are hard points that a small woman might be injured on, but an average stred woman would not. You also have to take into account little kids—they are passengers in cars as well."

TIP'S MAJOR achievement has

well."

TIP'S MAJOR achievement has been the development of scamless air bag deployment door technology, Marchese said.

Current air bag deployment doors are seamed; when the bag inflates, the door opens along the scam. In addition to the difficulty of designing attractive instrument

Entrepreneurs make hay retailing used computers

Six years ago, Mike Dolik of Bir-mingham faced a difficult decision, Should he leave a comfortable job with Burroughs Corp. and invest \$2,000 along with a friend to start a business in the highly competitive computer market?

business in the highly competitive computer market?
At the time, Dolik admits he was reluctant, especially with his basement doubling as the company's first office, but with \$12 million in sales last year, the entrepreneur now tinkers inside a \$5,000-square-foot facility in Rochester Hills. Employing 65 people, the Virtual Group, owned by Dolik and D. Mark Ratilif, both \$5, is four companies located in the Rochester Hills Corporate Center.

located in the Rochester Hills Corporate Center.
While working together at Burroughs (now Univsy), Dolik and Ralliff learned the computer manufacturer wasn't always willing to accept oil equipment as trade-in on new systems. By purchasing the equipment sued, they believed they could profit by refurbishing and up-

grading the systems and reselling them as "almost new" products.

"That first year was pretty rough." Dolk recalled from his office. "Mark and I prechased a customer list from Unisys and set out to hay the equipment, arrange to have been been been been been contracted tout.
"In fact, there were times when we used to put the equipment in the back of our ears and deliver it ourselves. It also helped that our strength was in marketing. Neither of us were engineers, but we knew enough about computers to upgrade them, and then turn our efforts to selling them."

Last year Michigan Business mag anine solected the Virtual Group as the 18th tastest growing private comber, Inc. magazine same the company as one of the top 500 fastest growing companies in the nation.

Of THE COMPANY'S 4,500 cus-

OF THE COMPANY'S 4,500 customers in 28 countries, Dolik said 85 percent of sales today are derived

from repeat customers.

"Our customers like an alternative other than purchasing their equipment directly from the manufacturer," Ratliff said. "They like the freedom and flexibility we can receide".

facturer." Ratliff sald. "They like the freedom and flexibility we can provide."

All of the equipment Virtual markets is guaranteed for installation and maintannace by Unisys standards. "When you combine no risk with substantial savings, in most cases, 50 to 60 percent, (the customers) decision is casy."

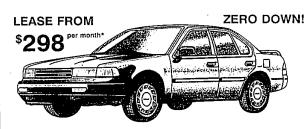
Under the Virtual Group umbrella is Virtual Technology, which buys and sells Unisys equipment; Virtual Soft, a recent addition that writes and sells computer software; Virtual Leasing, a lending and financial services arm; and Virtual Maintenance, which maintains computers throughout the tri-county area.

Clindy Dally, a parish administrator for St. Hugo of the Hills in Bloomfield Hills during the time the parish purchased equipment from Virtual two years ago, said she was surprised by the company's prompt delivery and reliable service.

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