

# Investing in Ourselves is the Key to Revitalizing American Manufacturing.

David Goodfellow

**P**opular wisdom has it that manufacturing in the United States is no longer a viable entity. We are told that quality is poor, skilled labor is difficult to obtain, if not impossible, demand is low, and the government is helping to discourage business. So what should we do, give up?

That, of course, is the worst possible thing to do. We have several manufacturing models today which should encourage us to rebuild our manufacturing base; models such as Motorola, Inc., a Chicago-based company building electronic communication devices. Through a combination of aggressive marketing, commitment to quality manufacturing, employee education, and savvy investment, Motorola has been successful in becoming a world leader in its field, even in Japan. None of Motorola's techniques for success are patented. They could be implemented by other companies as well.

We also have the teachings of Dr. Deming, who is travelling tirelessly around America, trying to convince

American businessmen to reorganize and restructure their companies to increase the quality of their products, the skills of their people, and to advance their competitiveness in the world marketplace today.

He - and others - have taught that TQM (Total Quality Management) is a key to success in improving the quality of our products, as well as in the reduction of production costs of those products, in order to be more price competitive in the marketplace. Quality does not cost more; it costs less.

Dr. Deming has been something of a folk hero in other countries for years. One wonders why he has had such a hard sell here at home.

Marketing strategies and quality control questions are matters under individual company control. The question of the government's role, if any, in the success of the economy is a more complicated one, and it is necessary to remember that frequently government action does more harm than good. There are, however, several areas in which government can assist business in America to be-



## VIEWPOINT

come more competitive.

First, we need a revamping of the workers' compensation laws. Recent legislation and court rulings have favored the employee to the detriment of the employer. It's very easy for the employee to claim he or she is "hurt"; this translates into added costs for the employer. Second, and perhaps most important, is the revitalization of the education process in America. That will involve not only retraining existing workers, but also better educating and training those young people who will first enter the work force.

Approximately 75-80% of the jobs in industry do not require a baccalaureate degree. What they do require is a high level of competency in basic skills and adequate training in technical areas.

We need to rebuild the apprenticeship programs, vocational schools, and technical training institutions to help educate those young students who are not necessarily college bound.

We also have to convince the high school students today and their parents that there are good jobs for those

### David Goodfellow

*is the president and CEO of American Pfauter, Limited Partnership and of Pfauter-Maag Cutting Tools, Limited Partnership, of Loves Park, IL.*

who follow the path of apprenticeship or other technical programs. Industry can be a good place to work, and we need to get that message across.

Third, we need a complete restructuring of the product liability laws. These laws are costing American business millions of dollars per year for insurance rates, legal representation, and frivolous law suits - money that could be much better spent elsewhere.

Finally, American businessman must have the courage and the dedication to invest in new equipment

industrial leaders of our community, and I asked the question, "If we now had an investment tax credit of 10%, how many of you would go out and buy new machine tools because of that investment tax credit?"

Not one person raised his or her hand.

In the end, reviving America's manufacturing base is a matter of individual responsibility. If we don't do things for ourselves, no one else is going to do them for us. Businesses must have the confidence in themselves and their products and the stay-

## VIEWPOINT

### Government can help by revamping workers' comp laws, by upgrading education, and by restructuring product liability laws.

and facilities to improve the quality and the productivity of the products they produce. America has the oldest inventory of machine tools in the industrial world today. No wonder we have trouble keeping up with our competitors from overseas.

But many seem reluctant to make the investments necessary. We hear many businesspeople say, "If only we had the investment tax credit back, we would invest." But I wonder. A few weeks ago I was in a meeting with approximately 100

ing power to invest in new equipment, technology, techniques, and education to stay competitive in the marketplace today.

We can rebuild our industrial base. The problems are tough, but not unsolvable. But we - both government and business - must get moving. At present we are handicapped by several circumstances that give great advantages to our competitors. We must change these circumstances and change them quickly if we are to be competitive in the world economy. ■

## WHERE TO FIND THE "TOP TEN GEAR BOOKS"

Bob Errichello's "Shop Floor" column in our last issue, "The Top Ten Books For Gear Engineers," evoked a great deal of reader response. As a service to all our readers who called wanting to know where to find these books, we provide the following information:

*Dudley's Gear Handbook*, 2nd ed., Dennis P. Townsend, ed. and *Machinery Vibration - Measurement and Analysis* by V. Wouk are both published by McGraw-Hill, NY. The *Handbook* is priced at \$75.00 and *Machinery Vibration* is \$49.50. They can be ordered from the publisher by calling 800-2-MCGRAW.

Drago's *Fundamentals of Gear Design* is published by Butterworth-Heinemann of Stoneham, MA. The price is \$85.00, and it can be ordered from the publisher at (800) 366-2665.

Lynwander's *Gear Drive Systems* is priced at \$89.75 and can be ordered from the publisher, Marcel Dekker, NY, by calling the customer service number, (800) 228-1160.

*The Maag Gear Book* can be ordered from the Publication Department at AGMA Headquarters. Call (703) 684-0211. The price is \$95.00.

John Colbourne's *The Geometry of Involute Gears* is \$73.00 and can be purchased from the Order Dept. at Springer-Verlag, NY, by calling (212) 460-1500.

A limited number of copies of *Steel Selection - A Guide for Improving Performance and Profits* by Kern and Seuss can be purchased from Kreiger Publishing, Inc., in Melbourne, FL, by calling (407) 724-9542. The price is \$54.50.

The following three books are out of print and no longer available: *Gears for Small Mechanisms* by W. O. Davis (N.A.G. Press, Ltd., London); *The Exact Over-Wire Measurement of Screws, Gears, Splines, and Worms* by W. F. Vogel (Wayne State U. Press, Detroit, MI); and *The Influence of Microstructure on the Properties of Case-Carburized Components*. (American Society for Metals, Materials Park, OH.) The best chance of locating copies of them would be through a used book dealer or book search service. ■