

EDITORIAL

A STEP IN THE RIGHT DIRECTION

At the time I'm writing this editorial, the new year is barely two weeks old. The air and the papers are still full of those inevitable end-of-the-year estimates of how far we've come in one area or another and how far we have to go. Analyses of the future, both grim and humorous, abound. There are even more of these laundry lists of PROBLEMS TO BE SOLVED IMMEDIATELY than usual, since a new president will be inaugurated in a week or so. Everyone has advice for George Bush on what to do first and how to do it. Some of the advice is sound, and I hope he's listening; however, reading all these position papers can be a depressing exercise.

If one believed everything the pundits say, it would seem as though the sky really were falling. The world is full of intractable problems that have no easy solutions. A host of difficult issues need attention RIGHT NOW, and it's easy to despair. After all, what can any one of us, no matter how well-informed and well-intentioned, do about the national debt, world hunger, terrorism, acid rain or the shambles that is our public education system? But to just throw up our hands and say, "What's the use?" is to insure that whatever the problem is will only get worse and worse. The solutions to even the toughest problems frequently begin with simple steps by a few people, and if all we can do at the moment is to point out the steps and applaud, then that's what we should do.

A problem that is of immediate concern to the gear industry is the decline in the number of *trained* machinists and engineers out there to do the work we will need done in the next two decades. The number of students studying science and engineering is declining. Young men and women are not exactly beating down the doors of schools to be taught gearing. At the same time, the tough economic times of the last few years have forced gear manufacturers to cut back sharply or eliminate entirely their apprenticeship training programs. According to *Industry Week*, the average age of trained machine tool operators is now 58, and the projected supply over the next decades is only one fourth of the projected demand. Are these figures another example of the sky falling?

Not everyone sees them that way. Caterpillar Incorporated and AGMA have announced a program that, while it will not solve our engineering shortage, is a good step in the right direction. And it's the kind of step that can be taken by any gear manufacturer with the will to do it.

AGMA has announced that Caterpillar is donating a Barber Coleman hobber to both Mississippi State University and to the University of Alberta. The machines are from Caterpillar's surplus inventory and ordinarily would have been scrapped or sold on the used machinery market. Instead they will be used as an important part of the undergraduate and graduate mechanical engineering curricula at these schools. They will provide engineering students at these schools with invaluable hands-on experience.



Mississippi State and Alberta were chosen from a larger field of universities, community colleges and vocational schools that applied for the grant of the machinery. AGMA and Caterpillar have been gratified by the response to the program so far and hope to expand it to include other companies and other academic institutions.

The idea is beautiful in its simplicity. Companies donate good, working used machinery that they otherwise would dispose of in the course of modernization. Schools that wish such machines plan undergraduate and graduate programs using them to train future engineers. They apply for one of the machines through AGMA, who administers the grant. The only restrictions are that the machines not be used for manufacture or for research. The idea is to make the machines available for training the largest number of students possible. Schools also have to arrange and pay for shipping and installation of the machinery, but AGMA will provide technical advice, and lack of funds to cover these expenses will not necessarily disqualify a school for one of these grants.

Several factors have led to a serious decline in the number of well-trained people to populate our shop floors in the future, but the time is past for hand-wringing, finger-pointing and "ain't-it-terrible" whining about the future. The fact is without skilled employees, no amount of business acumen or "lean and mean" bottom line thinking will keep U.S. companies competitive.

Caterpillar and AGMA have come up with a dynamite first step toward a solution.

It's the kind of idea that any company with the will to do so can adopt. It's the kind of idea that any educational institution with the willingness to spend the time it takes to plan for such a grant can take advantage of. It's easy to talk in generalities about how business must work in partnership with schools to insure the trained labor force it needs for the future. Here's a chance to take some very specific steps to see that it happens.

A phone call to AGMA to find out how your company can participate in this program is the only first step required. Perhaps a second phone call to your local college, university or vocational school to inform its engineering faculty that such a program is available is a good second step.

Maybe the sky isn't falling after all. There are things we can do as an industry to work for a better future for all of us. All it takes is the will to think ahead and the vision to recognize a good idea when we see one.

I say congratulations to both AGMA and Caterpillar for bringing a good idea to reality. To the rest of the gear industry I suggest that this is a case where imitation is not only the sincerest form of flattery, but also a way to work for the betterment of the industry as a whole.

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