Guest Column by John R. Popovich

A disastrous shortage of skills

The following remarks are excerpted with the permission of John R. Popovich, vice president of the Freeway Corporation, and are from his inaugural address as the president of the American Metal Stamping Association.

The problem is a disastrous shortage of skilled people—machinists and tool and diemakers; welders and sheet metal workers ... In short, skilled people of every description. All of you have been touched by the problem, but you may not be aware of its magnitude. I am by no means an alarmist, but the cold facts are these:

We are already in deep, deep trouble and unless we do something about it immediately there may be no need for an AMSA in the year 1990 because there won't be a metal stamping industry.

Consider these statistics: across the board, the average journeyman level craftsman is 55 years old. If you check your own personnel records, I believe you will be shocked at what you will find.

More than half of all journeyman level craftsmen will be retiring in seven or eight years.

According to Labor Department figures, we need machinists to fill 22,000 jobs each year. Last year, only about 2,300 machinists completed apprenticeships. Again, according to the Department of Labor we will have job openings for 8,700 tool and diemakers each year through the foreseeable future. Last year only 2,400 tool and diemakers completed registered apprenticeships.

Perhaps you distrust statistics. Ask yourself these questions.

Have I lost jobs that I could have had if I could have gotten the tooling?

Have I been late with deliveries because the tooling was late or because it could not produce the part when I did get it?

Is my toolroom (or suppliers toolroom) overloaded; the toolmakers jaded with overtime?

Am I refusing to quote on jobs because I cannot produce or buy the tooling?

These conditions are chronic across the industry and they are the symptoms of a deep-seated illness.

There are other symptoms, equally disturbing. Quality is one. As a toolmaker myself, I look at an appliance attachment made up of stampings and I see burrs, poor alignment, sloppy fit. Lousy craftsmanship, I think to myself. Here's a chilling thought. Maybe it isn't just lousy craftsmanship. Maybe it's the best they can do....

The shortage of skilled people and the root causes of that shortage present a different sort of problem: a basic problem. A gut problem, if you will. We can survive the incompetence of government and bureaucracies. We will survive the drying up of the last oil well. But on the day the last diemaker or the last skilled machinist turns in his tools and hangs up his shop apron—that day we face Apocalypse.

Too strong a statement? I wish it were. I sincerely wish it were. But the history of mankind proves otherwise. As civilization evolved from the Stone Age through the Bronze Age through the Iron Age, progress was an absolute function of man's increasing ability to make metals do his bidding. It still is.

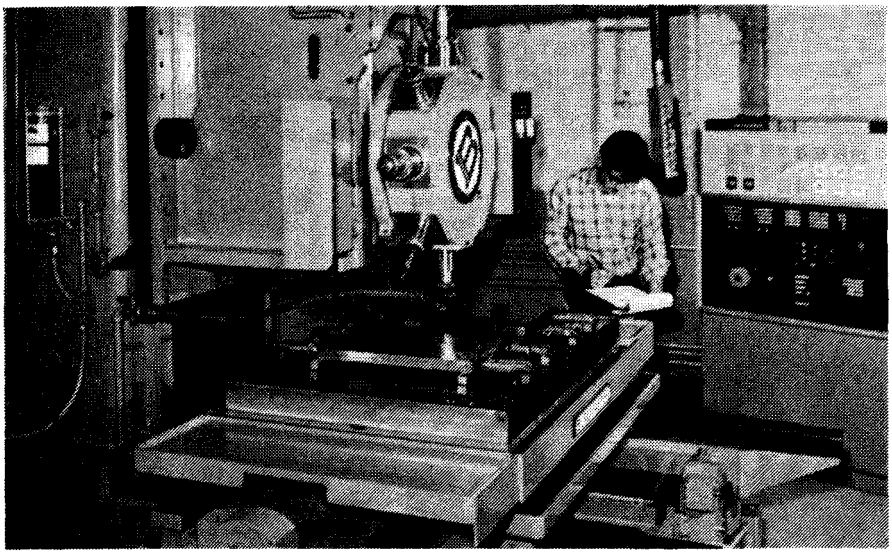
The economy of this country as well as that of any industrialized country is dependent on the ready availability of metal components in an endless variety. A typical, furnished, six-room house will contain about 200,000 stampings—and large quantities of die castings and screw machined parts.

If you trace any one of these parts back far enough, you'll find that somewhere along the line a skilled machinist or diemaker was involved. And the same holds true of plastic injected molded parts.

The very food we eat is similarly dependent. American agriculture is the wonder of the world. The equipment used to plant the crops, the equipment used to cultivate and later to harvest them and the very trucks that carry the crops to the market are made up of stampings, forgings, machine parts and castings. Again, at some point in their manufacture, a skilled machinist or diemaker was required to translate the designer's concept into hard metal.

Without these men, we wouldn't have airplanes, prosthetic devices, computers, television, electric motors....

In this light, let's examine the statistics again. We are producing each year about 25 percent of the skilled journeymen needed to replace those lost through normal



"The problem is a disastrous shortage of skilled people—machinists, tool and diemakers; welders and sheet metal workers... skilled people of every description." At right, a technician examines a tape-controlled machine tool.

Photo: Acushnet

attrition. What will happen when that tidal wave of mass retirement hits us in seven or eight years down the road? The results will be catastrophic....

One thing is certain. There are no quick fixes. Rebuilding the pool of skilled people is going to be a long hard struggle. The federal government cannot do the job although it can ease the burden by providing training grants and tax credit ...

We can't expect to import skilled people from abroad in any significant quantity....

(There) are marvelous advances in technology and they can reduce build-time and increase the productivity of the skilled journeyman— but they do not replace him. If anything, they demonstrate more conclusively how indispensable he is.

Since there are no short-term solutions, we must seek long-term solutions....

We need to pursue an active policy of upgrading the people we already employ. Every employee deserves the opportunity to go as far as his natural abilities will permit him. Not his skills. We must teach him the skills. Many a stamping plant has a reservoir of potential skilled people that it has never tried to exploit.

We must open the doors of the tool room to women and minority groups....

A change in the Apprenticeship Act made in 1978 recognizes the potential of women in the skilled labor force. ...The Department of Labor would like to see women constitute 20 percent of all apprentices....

We must do a better job of educating the vocational and guidance counselors who are the primary link—in many cases the only link—between the stamping company and the young people just getting ready to enter the workforce. ...

Educating these people is the single most productive step we can take in building a skilled work force....

Whatever direction we take; whatever we do, we can be sure of two things. It will cost money and there will be many disappointments. If necessary, we can add the cost of training to the cost of the product as part of the overhead burden. As to the disappointments, we must accept the fact that people will drop out or that they will leave us when their training has been completed.

A young man who had completed a year of training at Freeway left the company to work at a supermarket, stamping prices on groceries for just about the same wages he had been getting with us. I tried to make him see that four years down the road he would have a skilled trade that would support him comfortably for the rest of his life.

I gave it my best shot, but I still think I failed that young man. He will never experience that gut feeling of satisfaction that only those of us who have worked at the bench can appreciate—building a tool and seeing it work.

I will be making the round of the Districts preaching this Gospel. And in various AMSA publications we will be furnishing you with information about apprentice programs, grants, tax incentives and studies of successful training programs.

It is up to the individual company to develop its own training program and this requires very careful planning because of the infinite variety of situations and individual requirements.

I leave you with this thought. Fooling with numbers is tricky, but simple arithmetic tells us that if each manufacturing member of AMSA would start planning now to train one skilled journeyman for each 50 of his present employees— and would do so on a yearly basis, we would create a self-generating pool of skilled people amounting to 1,100 each year.

That would be a very bright candle indeed.