

What I Wish I Knew Then That I Know Now

I had no idea that we need experts. That I could become an expert. That my passion to be the best helped make it so. What do you know now?



When I started my career in manufacturing, it was a decision born out of necessity. Out of economics. Out of a desire to be independent. But what I have learned is that while economics and a desire for more and better choices in my life were important, they paled compared to the real joy of operating at my highest and best use. Of continuously growing my knowledge and capabilities and by doing my job, making things that made a difference in the lives of millions of people. Manufacturing became my success space, my community and my expertise. This is because I did the work.

Why is doing the work important? Let me share a quote from Dorothy Sayers: “Work is not, primarily, a thing one does to live, but a thing one lives to do. is, or should be, the full expression of the worker’s faculties.” - Dorothy Sayers

Our work is not just a job, what we make literally touches the lives of thousands each day, millions each year. We were deemed essential workers. Be essential.

How essential? You are — I am — all are — the customer. A precision machinist made the parts that you and I come into contact with every day: the breakaway hose fittings at the gas station, the nozzles and fittings on the coffee machines and soda fountains, parts on our appliances, HVAC, not to mention our cars (gas, electric or diesel) or the nozzles that glued the boxes and packages for food.

I didn’t know then but learned on the job that my safety comes first. Safety of others comes second. Put on my own PPE before worrying about others. That business about putting on your own oxygen mask on an airplane before helping someone else makes perfect sense. Call for assistance before trying to make a rescue. Call backup first improves everyone’s odds.

Maintaining identification of materials and lot control

of production comes after other’s safety. Then comes everything else. Maintaining material and lot identification is your greatest responsibility. Even if the part is perfectly machined, if it is of the wrong material the part is unusable. We cannot detect material differences with our senses — we can’t see, taste, smell, hear or feel differences in grades of metals. So, when we lose material identity and apply the incorrect material, perhaps it won’t weld, crimp or withstand the forces for which it was designed. That opens up the possibility of injury or even death for the end user.



There really aren’t any shortcuts. College doesn’t make you an expert at manufacturing. Manufacturing makes you an expert at manufacturing. Community college is a great place to first learn, and grow the skills that will help you become the go-to expert on your shop floor.

There is more to a job than just doing the job. Learning more about materials, methods, tools, geometry, quality, safety — all these will combine to give you greater problem-solving abilities. Don’t be a one-note performer. Do find an area where you can become the expert. Maybe it’s regrinding a tool, 5-S, GD&T, quality, estimating, maintaining fluids, software, machines or G- and M-codes. We need experts. Become an expert. Bring your passion to be the best.

Learning is a process. Find your process to retain knowledge. I used a notebook for recording things as they came up about suppliers and processes. I also put brochures into binders by subject — steel, non-steel materials, tools, coatings, drills, fluids, etc. People always came to me because I had the answer. Actually, they came to me because I had a process for knowledge retention.

The last of the baby boomers will be out of the industry by 2030 — that’s just five years from now. When boomers are gone, it will be up to you. What do they know that you will need?

A second pair of safety shoes will keep you comfortable and less distracted. You are spending over 40 hours a week, 2000 hours a year on your feet, give your feet a break.

Pay yourself first. Younger me invested in my employer-sponsored savings plan. Today I am all set for a comfortable retirement. Social Security will be extra, not the base.

Quality is the absence of waste. This applies to you. Don't waste your time. Don't waste your talent. Precision machinists see the value that they create with each and every part, each and every day.

Our lives today are increasingly revolving around

technology. Technology requires our talent to produce the functionality to make that technology work. Precision machinists hold a commanding position of advantage — we make the things that make a difference. That's what I know now and what I wish I knew then. Welcome to precision manufacturing! **P**

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What's good separately but even Better Together?

PMPA and You.

(Oh, and cake and ice cream)



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