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Bright 707 & MCOSMOS software

We use that piece of equipment for our machine shop and we use it for receiving inspection, in-process inspection and final inspection.

We're a job shop so we do all kinds of different parts for mining industry, off-road type vehicles, automotive, but not a lot, like the truck industry. And we do some for defense, also. For example for Osh Gosh Truck-their defense division.

Examples of parts.

Some of it is fairly small meaning the smallest we probably we have is 3/8 inch by 3/8 inch. And then it can go all the way up to 2 feet by 2 feet.

We do it for turning work and we also do it for milling work. Most of the parts we do it for are fairly simple parts. There's nothing too complex.

TO be honest, we use that machine, but sometimes we don't use it every day. It all depends on how complicated the part is. Like I said, most of our parts are simple. It's faster to check them right at the machine. But there are some more complex parts with real tight tolerances that we do check on that machine.

I'd never used a CMM before. So if I never used one, I never programmed one. I'd never used one at all. I've seen them run before, but I never did anything with a CMM.

John has a lot of patience. That's what it takes. One of the things he did was spend a lot of time with me. And he was very patient because when I'm learning sometimes it takes me a little additional time because my vision isn't as good as somebody who has 20/20 vision. So it sometimes takes me longer to locate things on the screen. And to read things so he had to wait sometimes because I would say wait a minute. Wait a minute. I've got to take a look at this. I've got to find this icon or whatever on the screen. Then I would have questions and I would ask him. A few times he took some paper and marked it up with a nice fancy marker so I could see it better. He helped me out that. He's a really easy guy to work with. He understood that it was going to take me a little extra time and he didn't appear to get frustrated, which helped, and answered all of the questions that I had.

Voiceman speech boxes on gages. Do you use it on the CMM?

No, we don't have that on the CMM. Actually, we run a program that we have that we run for the visually impaired. I don't use it. I can still read the screen. I just change the size of the letters and stuff like that on the screen. The resolution. One thing we found is when we do use that piece of software, it slows down the CMM so much that we can't really use it because it's a screen reader. And so we don't use it for that purpose. And you really have to have some useful vision to work with a CMM. You can't put a person who's totally blind on it or to try to program a CMM. They can always put a part on it and bring up the file and run it that way, but as far as programming it, it would be extremely difficult for a person with very low vision or totally blind to program it because they have to physically see where that machines is moving while they're programming it.

\How long ago was John there?

It was December 2014. It might even have been 13. I can't remember.

Been using CMM for some time now.

I feel I'm using it the way it's meant to be used. Do I have a complete understanding of what goes on, and how to program all of the different applications to it? There's so much that unless you use it every day there's no way you're going to learn all of that different stuff because there's so much that's available there and our parts are pretty simple, so I'm never going to use a good portion of those features that are on the machine.

I will tell you that as more complex jobs come online for us, it forces me to try to learn those things. And if I run into problems, I will call Mitutoyo and ask questions and try to get through it. John has helped me out in that fashion also. He's helped me out as far as any questions that I've had. He's already given me a little bit of literature that he uses for his training class, which got me through some spots where I was having some difficulties.

Hoped to train other people?

I'm the only person that's programming right now, but I'm training another legally blind individual on how to use the machine and he's inspecting parts on the machine. We do have a lead person, or supervisor, in the machine shop who does know how to use the machine also but he doesn't program it so we have two other people besides myself who use the machine.

Brought in more business?

It's given us the ability to bring in new business. IT's brought in additional business because now we can check those parts. It haven't brought in a lot of new stuff because most of our parts are pretty simples. We have some things in the mining industry that we wouldn't be able to check unless we had a CMM. We could check them if we made templates to measure the radiuses but for how small some of these runs are, we wouldn't invest that kind of money. 7:20 FINISH

I pretty much exclusively purchases Mitutoyo gages. We use micrometers, calipers, indicators, height stands. If we have a totally blind individually on one of our machining or turning centers, then we also hook up the Mitutoyo talking box, which unfortunately you guys have discontinued. The VoiceMan.

The Bright machine we inherited. We didn't have a CMM and they felt that if we had a CMM it would give us some additional opportunities, which it has, but we're not a high-volume production shop. Most of our runs are under 2,000 pieces. So there isn't a lot of volume going through there. There's a lot of work but it's a small volume.

I'm hoping John's going to be around while. I hope he sticks around a while, at least until I retire. John is a great guy. He's a very patient man and he helped me out tremendously to learn the machine. And once he left here, I was able to work with it. And John is extremely knowledgeable with the machines and the software.