



Would you please provide a brief history of your company?

I started my career in the gear industry in 1983, and I created Pentagear in 2005. I had been working in the gauging industry for many years. However, I always felt that there was better way to design the products than what I was using. There was nothing wrong with them, but I felt that there was just a better way to do it. For example, we have a digital display. I developed a digital display that was web-based. You can put data in the digital read out, and you can extract data. I wanted to take that to the next step because everything is about data. The more we collect, the more we can control our process. So, I started developing that product. I was putting it on other machines, but realized that I really didn't like the way they did things because they relied heavily on the operator to mechanically move it in and take a measurement. I thought that I could automate this so that the operator just pushes a button and have it come in to measure the parts. That means consistency and repeatability. It really takes the gauge to an objective position.

We also developed roll testers and double flank systems, again with that same process by looking at what was out there and how we could improve on it. With our double flank systems, many customers have to record the pressure that they're pushing against the two gears. In the past, they would have to use hand gauges to measure that force. So, I found a company in Virginia, and they integrated that into the system so that I could document that information electronically and allow you to change it. It's very accurate and calibrated. It has integrated the system. It's not just something a guy is holding by hand.

In 2012, Process Equipment Company made an offer for me to come run their gear division. Part of that deal was that they purchased my products because they saw the synergies. Process Equipment made an analytical gear machine, and I was making what I call "functional gauges." They're shop gauges. They're in the floor, and they're doing day-to-day operations.

So, I came to Process Equipment, and we continued building my gauges as well as their

own gauges, and we integrated that entire process inside the division at Process Equipment. Then, in June 2014, the owner of Process Equipment decided he didn't want to be in the gear business anymore, and I made him an offer. They accepted, and I purchased that product line from them. I moved to our current location in Ohio, maintained all of my current employees, and we are making products. We are manufacturing new Analytical Gear Inspection machines as well as "REPOWERING," or remanufacturing our competitor's machines.

What made you want to start your own company?

I started my career at John Deere, and I worked there for 10 years. Then, I went to work for Reishauer until 1989, and then Klingelberg hired me, and I became the product manager of the bevel division there. Then, I started my first company, Nicholson Gear, and I started representing big companies. I liked the fact that I worked for myself, and I had the opportunity to develop what I wanted. My two sons work for me now, Joshua and Shaun. One is a service engineer, and the other is a sales engineer. It's a family business, for sure. I treat my 10 employees like family. We sit down and discuss the positives and negatives of what we're doing, and everybody in the company is aware of our overall goal.

What would your customers say about your company, and how can people benefit from doing business with Pentagear?

For me, business is personal. Finding the customers' solution to their specific problem is a quest, and it's what drives me to keep developing improvements and new products. I'm committed to stay with them to insure that they have 100% satisfaction. Being a family company, they know I'm attainable. If my customer brings a good idea to me, he'll benefit from that because I'll incorporate that into our product. The thing that I possess that people really get is that I'm really passionate about my craft. It's a privilege that I've been able to work in this business that challenges me every day to think through a process and



try to develop a better way to analyze and create a solution for a customer. We're also a veteran-owned company. I'm a veteran, my oldest son is a veteran, and so is my wife. My wife and I have been married 37 years, and we have raised eight children. So, we understand the value of family and commitment.

What are some new products you have coming out this year?

We have a new double-flank tester that is extremely robust and is controlled by the digital readout I mentioned before. In the past, this was only done with a computer. The problem with the computer on the floor, environmentally, it is designed to fail. It's got a hard drive, a fan, software, and viruses—anything can happen. So, we use this digital readout where it's all an embedded system. So, when an operator runs this part, he really just needs a pass or a fail. He doesn't need a fancy report every time. Again, we start with a really strong system from the design up. This is a gauge that's going to last 20-30 years, at least.

The REPOWERING of our competitors machine bases has offered an alternative solution to our customers. We are excited to provide the service and solutions our customers require. ☒