



Ricardo Espinoza, CNC machine operator, sets up Transco's new Cyclone-32CS 7-axis CNC Swiss-style turning center. The machine has simultaneous sub-spindle with full C-axis, 32 tools, 7 live stations on the main spindle, 6 stationary turning tools, 5 drill, tap and bore tools for end working, 9 back-working tools on the subspindle (4 Live), 1.25" diameter bar capacity, a Fanuc-compatible PC-based graphical control, sliding head stock without a guide bushing, hydraulic collet chuck, 10-hp main spindle, 5-hp subspindle, programmable parts catcher with part draw, automatic lubrication system, a coolant system with chip filtration, and a chip conveyor system with chip cart.

Earthquake Kickoff

How a Successful San Fernando Valley Job Shop Got Its Start as a Result of an Earthquake.

Story and photos by C. H. Bush, editor

For some people it takes a quick boot in the lower posterior, as they say, to get them up and moving. In the case of Brian Lawhead, president and owner of Chatsworth, CA's Transco Engineering, all it took was the 1994 Northridge earthquake.

"I was working at two jobs when the quake hit," Lawhead says. "I was a contract coordinator for a defense company and, because of my father's health, I was working part-time at his sheetmetal shop, Transco Engineering. I had been thinking about starting my own business for quite a while, but I hadn't accumulated enough money to get going. As it turned out, the earthquake had a silver lining, at least for me."

That silver lining came in the shape of a roof collapse at a nearby meat processing plant.

"All their shafting and conveyors and other equipment

were damaged by the quake," Lawhead says. "I had a friend who had worked there. He said they needed a machine shop to help repair their equipment, so I went over and told them I could do their work for them. Transco Engineering gave me a business presence, so they let me quote on their work."

Something from Nothing

Lawhead's experience as a coordinator let him build a business virtually from nothing.

"I didn't have any machining equipment," he says, "and though I had worked in my father's sheetmetal shop, I wasn't really a machinist. Still, in my job as a contract coordinator, I had come to know a lot of people with small machine shops who could do the work for me. Basically, in the beginning, I became a middle man."

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Brian Lawhead, right, Transco president and Daniel Perez, discuss a radial cutting wheel used to produce sandwiches in the food industry.

Middle man or not, Lawhead was successful.

“I did everything myself, including the machining,” he recalls. “I bought the materials, got the blueprints, did the QC and delivered the parts. The customer was happy with my work, so they gave me as much as I could handle. After about two months, I bought a couple of small machines, a manual mill and a manual lathe. I didn’t know how to run them, but I knew someone who did. A friend of mine had just lost his job and needed work, so he agreed to do it.”

Lawhead didn’t have to go looking for space for his equipment, however.

“I moved the machines into my father’s space,” he says. “At about that same time, he decided to retire, so he left me with a few pieces of sheetmetal equipment. I really wasn’t interested in the sheetmetal business, so I quickly sold off those machines and invested the money in machining equipment. I got my first CNC milling machine the next year in 1995.”

Steady Growth

Lawhead’s first customer was good for a lot of work for the first 6 to 8 months, he recalls.

“It took about that long to finish rebuilding and get the plant up and going again,” he says. “But when that was over, they continued to give me quite a bit of work. I had a good relationship with them, so I redesigned some of their equipment, and I learned Mastercam and how to draw and reverse engineer their parts. But I didn’t put all my eggs in their basket. I was getting the majority of their machining



work, but I also had a couple of other customers lined up. Things were going really well for me.”

Lawhead, who has a degree in business, combined his contract coordination experience with his business management know-how to quickly build Transco.

“It wasn’t easy to do,” he says. “It’s been a lot of hard work and long hours. Once you’re established, it’s not that way, but during the first 5 years of the business I worked 16 hours a day. The kind of customers I had worked on holidays, so I missed birthdays, holidays and anniversaries. It was tough on the family, too.”

From his first CNC, which was a Haas VF4, Lawhead’s business has grown steadily until he now operates 13 CNC machines with 9 employees in a 13,000 sq ft facility.

“I’ve divided our capabilities into three categories,” he says. “Large, medium and small. We do larger parts for the food processing and other industries, things like molds and dies and bakery cutters. Those we do on our Haas machines. The medium and small work we do on Ganesh equipment. At the moment we own a Ganesh VMC and five Ganesh Cyclones, including our latest machine which is a seven-axis, Cyclone CS32. This machine is amazing really. It has opened up a lot of new business possibilities for us.”



Close up inside the new Ganesh Cyclone CS32 7-axis, live-tool Swiss-style turning center. Subspindle is on the right-hand side.



Dan Dasher, left, shop foreman, and machine operator Bartolo Assero discuss a job to be run on Transco's Ganesh VMC-4924 vertical machining center. The machine is one of 6 Ganesh machines operated by Transco. The other 5 are Cyclone, Swiss-style turning centers. The heavy-duty VMC-4924 features a triple linear way system and rapids of 1,181 inches/minute.

New Equipment, New Business

The Cyclone CS32 is a 7-axis CNC turning center with a simultaneous sub-spindle with full C-axis, 6 stationary turning tools, 5 drill, tap and bore tools for end working, 9 back-working tools on the subspindle (4 Live). It has a 1.25" diameter bar capacity, and is driven by a 10-hp main spindle and a 5-hp sub spindle, controlled by a Fanuc-compatible PC-based graphical control.

"Machining small complex parts has turned into a big niche for us," Lawhead says. "Now, with the CS32 we can handle hybrid parts that require holes and milling, as well as turning. A typical turning center can't do that, but we can. Very few shops have 7-axis lathes or even two-axis for that matter. With this machine we can do very complex parts with one setup. This has opened a new world of business to us."

Why Ganesh?

"I spent a lot of time at Westec looking at different brands of machine," Lawhead says. "It sort of boggles your mind at how many different brands there are now. But when I actually looked and examined the different machines, not just from what they're showing off, but looking at the wiring in back and the type of ball screws and bearings and servo motors and the nuts and bolts of the machines, I found that Ganesh offered a lot of capability

for their cost. When I finally got a job that needed a screw machine, I searched the internet for new screw machines and the Ganesh name popped up. Then I remembered what I liked about them, so I gave them a call and bought one. That was three years ago. Since then I've bought five more and I've never been sorry. They're very reliable, highly precise machines that can get out the parts. And when I do need help with something, they're right there for me. Very good service."

Looking to the Future

Although Lawhead got started by grabbing a fleeting opportunity that presented itself, today he is working systematically toward achieving a clear-cut goal.

"I'm going after big customers," he says. "I want customers who can write big checks without blinking an eye. We're looking forward to being ISO 9000 registered within the next 45 days. A year ago I had seven or eight pieces of equipment. Today, I have thirteen. My plan is simple. I'm going to make my shop into a showcase. Make it clean and modern, filled with advanced technology equipment. I intend to hire a sales force and triple my sales in the next year."

Can he really do this?

"You bet," he says, "and this time I won't need an earthquake to make it happen." ■