VOLUME 23, NO. 12

AUGUST 2004

TRANS/ISSION B

The Automotive Powertrain Industry Journal





In 1972 John Maynard, the owner of three transmission shops in Dayton, Ohio, decided to focus his attention on remanufacturing torque converters, founding MAMCO converters. The Maynard family has been in the converter business here for more than three decades, most recently having created Consolidated Vehicle Converters (CVC).

CVC came to be in the aftermath of MAMCO's acquisition in 1994 by ATC Corp. The younger of John's two daughters, Julie Maynard-Turner, says she missed all the responsibilities and joys that come with business ownership; she missed the type of business she'd grown up knowing. In 1996 she sold her car and her condo and moved back home with her mother to come up with the initial capital to start CVC.



Tim Prugh joined CVC early in 2000.

"My goal," she said, "was to come down here and have a little converter shop. I wanted a place where I could do what I knew how to do and what I enjoyed doing in my own way."

From the onset CVC has experienced rapid growth. Just a few months after Julie opened the



With two trailers, the CVC tractor unit is kept busy continually delivering converters to the company's network of distributors. John Maynard Jr., Tim Prugh and Chris Edwards are in the foreground, Marcia Maynard-Prugh and Julie Maynard-Turner behind.

doors, her sister Marcia Maynard-Prugh left her position at ATC to help with things at CVC. Marcia says she felt right at home because CVC located in a building that the Maynards owned in Dayton, a building that previously had served as the plant for MAMCO. "Over the years, there were a total of three buildings occupied by MAMCO as its space requirements grew over the years. This CVC facility served as the last of those three."

Marcia's husband, Tim Prugh, was employed in the auto-parts business when the two married in 1980. As Tim explains, "That time period was a growing-pain stage at MAMCO. John needed to get a 'right-hand man,' if you will, and that was where I fit in. My duties included cataloging and administrative work as opposed to actually building converters in the shop."

When John Maynard sold the business to ATC, Tim went to work for that corporation and stayed until January 2000, when he followed his wife and sister-in-law back to a family business. Later

that year, after an announcement that ATC would close operations in Dayton, CVC had a large number of experienced former MAMCO employees apply for work.

CVC's 22,000-square-foot facility houses offices, production, warehousing and core-storage functions. "We have plenty of room for the main production area," Tim said, "but some of the sub-process stations are cramped. The clutch bonding department, core area, warehouse and repair areas are all getting too small to keep up with the number of converters we are building here. If we maintain the current rate of growth, we're going to need some more space very soon.

"At some point we're probably going to have to add some people to the office as well. I handle most of the administrative and sales work, but we all have some overlap. Julie and Marcia are in the shop throughout the entire day. They oversee every detail of the remanufacturing operation, check finished products, monitor the progress the line is making and



Julie Maynard-Turner discusses a process with employees in the bonding area.

look for difficulties. Julie oversees all the production scheduling; Marcia will actually get her hands on the converters at the end of the production line and does all the purchasing of cores, supplies, components etc."

Tim added that there's much more to making a successful business out of converter rebuilding than just achieving a production figure of so many a day. "When a shop needs a converter, his needs are specific. We, through one of our distributors, have to be able to deliver that unit to that shop very quickly. One of the challenges of this business is maintaining enough inventory to support the distributors and the distributors' customers without having so

continues next page



Pistons are processed and prepared before the crucial bonding step.

arcia, Tim and Julie rely on the advice of a father who was one of the industry's pioneers in taking on the challenge of rebuilding sealed torque converters. John Maynard spent a few minutes filling us in on the early days of attempting to build converters on the bench in transmission



John Maynard (left) consults with the CVC team, sharing 30 years of converter-building experience.

shops and how converter rebuilding evolved into its own specialty. "In 1972 I was a transmission builder. I owned three transmission shops where, in addition to transmissions, we rebuilt the common converters of the day, those that were bolted together. A member of the Shrine, I was working one weekend at the Dayton Shrine Circus. There was another member I knew, Don Mumma, who owned a machine shop. The machine shop wasn't keeping his interest and he was looking for something to do. Well, I had an idea and asked him to come by the shop the following Monday morning.

"When he came in I showed him a sealed torque converter and told him that we wanted to open it up, rebuild the insides and then put it back together. He took it to his machine shop and gave it to Al Allen, one of his employees. That's how we started MAMCO (Maynard, Allen, Mumma Co.). Our goal at the time was to build converters for our own shops and maybe a few others around town. There was another transmission rebuilder in town, and he got into the converter business a couple of years before we did. Later, he, Jim Hall, relocated his Dacco Converters to Tennessee.

"About 1973, I bought Mumma's interest and continued on with Al, acquiring his interest in the company in 1984. Al stayed with the company and continued to do all the work he had done before.

"In 1976 I got a call from a fellow in Louisville, Ky., named Kenny Hester. Kenny had a transmission shop and wanted to buy converters from us. I remember his first order was for 50 converters. Kenny and I became acquainted, and his business was growing quickly. By 1979 he was buying 1,000 converters a month and had a semi delivering all around, as far as St. Louis and even Kansas City. Selling the converters, Kenny saw the opportunity to sell transmission parts, too. We talked and decided to go into that business together. Kenny and I owned HTP and he ran it, and it grew quite quickly. In 1994 we sold both businesses, MAMCO and HTP, to ATC. I retired to Florida.

"Tim, after joining CVC in 2000, asked me to come in on a consultant basis to help them with what I've learned over the years. Like my friend Kenny Hester, I was lucky enough to get in on the ground floor of the industry. We weren't necessarily the smartest guys in the world, but we started early and survived making our share of mistakes. Learning from those mistakes allows me to help my kids avoid some of the pitfalls of this business. I'm proud of the four of them. I've always demanded work out of my kids, but to see the energy they put into their work makes me proud indeed."



CVC's two production lines run parallel to each other at this point near the center of the factory.

much inventory that costs escalate."

"We have a computer-based inventory program that keeps track of minimum inventory we want to keep on hand," Julie says. "Then we have 13 CVC distributors that we serve with our tractor-trailer on either a weekly or bi-weekly basis. The distributors are sending us orders on a daily basis, and we're adding these to the required numbers for the various units. From those numbers we develop our schedule, pull the cores and start the remanufacturing process."

Marcia adds that the company has found it more efficient to use a production-line approach even for converters that are slow movers. "All of our converters are built on a production line; there aren't any single-station rebuilds. We're working on a third line now that will handle lower-volume units."

Tim pointed out that using the production line adds to CVC's ability to address concerns with

wear and or failure in converters by providing a structured process in which improvements are made during remanufacturing. "To do what we do takes a tremendous dedication and focus on examining failed units, finding improvements that will prolong the converter's life and then including those improvements in the remanufacturing process. Purchasing parts for the wide variety of converter applications is a nearly full-time endeavor all by itself. To stay atop all those changes and keep a topquality product coming off the line takes investment in people and equipment, and that results in an advantage for higher-volume operations like CVC.

"We think that through the purchase experience, our customers have developed an appreciation for the work we do, a realization that what looks alike on the outside isn't necessarily alike on the inside. There are so many improvements that are in the con-



Marcia Maynard-Prugh is capping converters after they have been leak-tested and balanced.



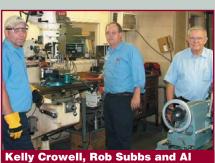
After the converter is rebuilt with all the CVC improvements incorporated, the components are assembled and welded.

verter that the customer is unaware have been made. So where one of our customers may try a small local supplier, in all but the rarest of cases that customer comes quickly back. The reliability of the unit and the willingness of the supplier to stand behind his converter are so important to somebody who's taking the responsibility of warranting a job and has his reputation to consider as well.

"Perhaps our biggest challenge is to develop the ability to inform the customer as to what improvements we are making on his behalf. I think we're doing a better job in that area this year. We've had nearly every distributor salesperson visit us for a four- to sixhour session to cover what we're doing to improve converter relia-



Computer controls help assure work that meets tight tolerances on these lathes.



Kelly Crowell, Rob Subbs and Al Allen in the tool-making section of the CVC plant



bility and to prolong service life. We're reaching the salesperson in this way; to reach the people in the shops we're relying on a combination of the salespeople who have been through that class and our participation at seminars and trade shows.

lines

"Improving a specific converter takes a combination of R&D mixed with trial and error. We track a pattern of failures or worn components when we open up the cores. Then we begin to consider what would make the wear or breakdown less likely to occur and come up with a planned improvement. Often the problems show up as relatively new converters coming in



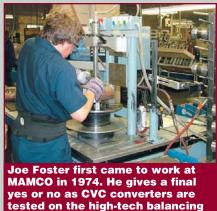
Group leader Ralph Geisel checks the work orders to see whether this boxed converter is headed for a UPS drop shipment, a distributor order being assembled or to the shelves holding finished-units inventory.

with problems and no parts available. That core has to be remanufactured and get back on the street, so it falls to us to figure ways to overcome the original design shortfalls.

"When we make improvements, we don't just release them to our customers without some testing. We use guinea pigs; that is to say, some local shops that will install those for us. Once we get two or three of the improved units on the street, we'll wait several months to make sure everything is performing correctly. During that time we refine the improvement process and, assuming no problems occur, we'll incorporate the improvement into the production-line process for that converter unit."

CVC specializes in stock replacement converters for use in light-, medium- and heavy-duty applications and provides converters for use in industrial applications. Although there have been plenty of chances to chase the performance and racing converter market, Julie, Marcia and Tim say they have found success in keeping centered on what they do best.

"We quit building performance units back in the MAMCO days, and we haven't really done that work here at CVC. We don't mind working through an existing performance unit, but we don't start



equipment.

from scratch to build those anymore. Al Allen used to design and build stall-speed converters, but the time it would take him to build one was more valuable to us in feeding our ability to grow with demand. We still rebuild some of those units, but there we've chosen to direct our efforts - and successfully, I might add - to supplying the CVC stock converters. There are a half dozen performance-converter manufacturers out there doing a good job now. We don't want to, nor do we need to, compete with them given the demand we're trying to satisfy for our stock converters.'

Julie has returned from one of her countless walks through the production processes in the shop. She's moving quickly through the office area and pauses as she hears Tim concluding his explanation of the company's desire to continuously improve converter reliability. He tells us, "I would guess that the transmission specialist who installs converters in vehicles has gained an appreciation for all of the work we do here, and that is why we continue to grow so rapidly."

"You know," Julie adds, "I thought when we started we'd have a small operation where we could take it easy and work 40-hour weeks. It didn't turn out to be that way." And with that statement she was back out the door for another pass through the production facility.