

Platen presses perform the bonding process that affixes the friction paper to the steel-disc backing.



Friction Niches

“We’ve expanded to take a position in a number of niche markets,” says David Landa, president of Alto Products. “Some of those niches have become quite important to us, but the transmission aftermarket remains the driving force behind our company.”

Since *Transmission Digest* last featured Alto and its founder, David’s father, Sandy Landa (*Transmission Digest*, February 1993), the company has relocated and has undergone considerable growth. Landa goes on to say that the company specializes in manufacturing with friction materials, everything from automatic bands and clutches to heavy-duty brakes and industrial products. Alto supplies both OEM and aftermarket customers in a variety of market segments including automotive, on-road and off-road heavy-duty applications, marine, industrial and motorcycle.

The company’s main manufacturing complex is just north of the Florida panhandle in Atmore, Ala. Construction is now under way to increase space from the current 275,000 square feet of product-develop-

ment, office, engineering and manufacturing space. Another Alto plant in Connecticut performs metal-stamping operations, some for the company’s use but primarily as a contract supplier to other businesses. There also is a sales, distribution and packaging center in Mexico.

“About five years ago we mapped a course of growth for ourselves, identifying areas that held the potential for increasing business,” Landa says. “One of those areas was to increase our international presence; the other was to increase OE business. We had plenty of potential to grow with sales to OE customers because we started out with very little.”

OE contracts now include GM, Renault and Hyundai for automotive application as well as sup-



Alto President David Landa is following in the footsteps of his father, the company founder Sandy Landa.



Various rolls of friction papers are easily changed to feed into the die-cutting process that makes the friction-paper component of a clutch. Alto has about eight active formulations for friction characteristics. Variations of those basic formulations result in several dozen different papers being used.

plying sub-components to Dana for use in differentials. In the heavy-duty marketplace, Caterpillar, Volvo, John Deere, Yale, Grove, Hyster, Blue Giant and Eaton use Alto components. The company also fulfills OE contracts in motorcycle with Harley-Davidson, power-takeoff and winch, marine and industrial applications including forklifts.

Expanding Alto's presence in international markets gave rise to opening offices for sales and distribution in Los Angeles; North Brunswick, N.J.; Dubai; The Netherlands; and China. Additionally, Alto sales offices have opened in Brazil, India and Australia.

Industry veteran Mike Halston, vice president of product development, discusses the company's international missions: "A little more than half of our business is to export marketplaces. There's a good bit of growth for automatics outside the U.S. The automatic transmission has been dominant here for many, many years. In 2007, for the first time, there were more automatic passenger cars worldwide than manuals.



Mike Halston is Alto's vice president of product development.

"Before these past several years, the world of the automatic-transmission aftermarket was here, Australia, Taiwan, Venezuela and the Middle East. The rest of the world was predominantly standards. But, the use of automatics has vastly increased in Europe and in China and the Asian markets. We're growing globally with the increase in automatic-transmission-equipped vehicles.

"Look at Germany, where only 11% of vehicles are equipped with automatics. New-car production there, however, is now up to 25% automatics. That's a market where there's going to be growing demand for parts to repair that growing segment.



Alto tools and dies for production lines are made and maintained in-house. Here one of the large stamping dies is undergoing periodic maintenance.

"Russia has an interesting aftermarket too, because there aren't very many older cars with automatics there. Suddenly everything's turning into automatics there, automatics with very up-to-date technology."

Landa explains the Alto philosophy: "There are pros and cons to being an entrepreneurial manufacturer. It's sometimes tough to lack the resources that larger companies have. On the other hand, we can make unilateral decisions without having to go through a long process. That means we can be very flexible and very responsive to the needs of our customers.

"There's also a people aspect to our decisions, a concern for our employees. In the corporate sector those people often get lost behind a concentration on 'what's the bottom line today?' I think we can look at things in a more long-term fashion than companies that have stakeholders demanding profits today. Many problems we're seeing in corporate America come down to that very weakness. There has to be some concern about today's profitability, but there needs to be context, a plan of where a manufacturer is going to be several years down the line. If you can't plan for several years into the future, there likely won't be a future.

"Change too is inevitable. Something that stays 'same-old, same-old' won't ever become old. Constant improvements are part of the planning for a manufacturer's longevity. We have



Derrick Martin, gear-cell team leader, grinds shafts in the gearing department.



One of a number of stamping machines used to cut out metal discs for clutch-pack steels or frictions and for forming metal bands.



The customer-support team includes (from left): Marlene Rubi, vice president of sales; Amie English, domestic customer-service manager; Stephanie Barnes; Angela Mays; Conny Williamson; and Claudia Lewis, export customer-service manager.

re-invented ourselves many times in the past 50 years. We focus on supplying products to a number of niche markets. For instance, diesel performance applications have been a rapid-growth area for us over the past couple of years. As a growing, entrepreneurial company we will flourish in those areas where a larger company would have a difficult time matching the relatively low manufacturing volumes.

"I remember a time when our business consisted of making something like 50 different clutch plates. Today we're pushing about 4,000 individual clutch plates. Once you start combining the plates into modules or kits, those 4,000 become something in the neighborhood of 20,000 products."

In fact, Landa's staff finds that constant customer demand for development of new parts is a task well suited to their abilities. Also important to the Alto customer base are the company's certifications, which include ISO 9001-2000 and ISO/TS 16949-2002, soon to be followed by the ISO 14001 certification.

Claude Hall, vice president of engineering, is responsible for development of products the company manufactures. "There are three ways our product-development job can begin," he says. "If we get a print diagram from the customers, it's a relatively easy process for us to source materials and create process plans for manufacturing.

"Often, we won't have the prints needed for our automated manufacturing process but can reverse-engineer from an existing plate. That requires dimensional checks and frictional-property matching.

"The most complicated job for us is one that arrives from a customer that doesn't

have a starting point other than performance criteria. In those instances we use a set of formulas to turn the criteria into the necessary specifications we need as manufacturers. From there, we can create a product diagram and proceed just as if the customer had provided that print to us in the first place."

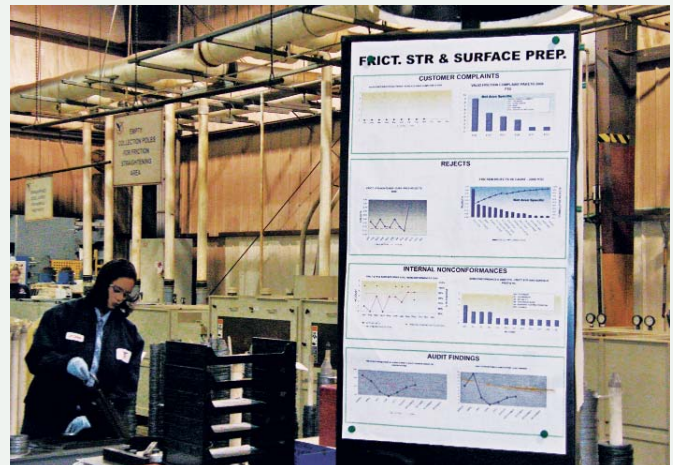
Marlene Rubi, sales vice president, says many of the parts provided for motorcycle applications start with only the performance criteria. "They'll want to design a bike and then want to know what kind of plate we can produce to perform the way they'd like to see," she explains.

Landa emphasizes that, true to its roots, Alto continues to play an important supply role to transmission rebuilders, offering a broad line of OE-replacement clutches and steels. Many other automotive products have been developed to address specific concerns or problems experienced by rebuilders.

"Our band line reflects some of the niche philosophy we use at Alto. We can't be fully effective trying to compete with companies that provide straight replacement bands. Our bands make up what we collectively refer to as the OEI



Claude Hall, vice president of engineering, is responsible for setting materials and processes to make product for the company's varied customer base.



Production statistics are displayed around the plant so that production workers can keep track of quality issues from both customers and internal quality checks.



Laser technology is used to cut discs for limited production runs while the high-volume, massive stamping machines are used for high-volume runs.



Caroline Holt, production-development engineer, performs random quality tests that assure all dimensions and other criteria are being achieved.



Alto Technical Director Robbie Ferguson and Senior Technical Director Roy Baker offer telephone support to Alto distributor and retail-shop customers.

(original-equipment-improvements) line. All of that started with the 4L60/700-R4 band. We developed a wider band with a reinforced lug to address wear problems with the original design. From there we have introduced a number of bands that especially appeal to the performance aftermarket.

"Something like 25 years ago we were the first ones to address wear issues that were unique to aftermarket rebuilders. Sometimes the clutch pack would need to be a little thicker or something to allow for the fact that strict OE replacements required the tolerances found in an OE transmission. Since the rebuilder aftermarket dealt with transmissions that had experienced wear, we created products that would allow for that wear and resulted in the return of the desired performance.

"We've added a lot of improvement items to the clutch line, addressing problems by formulating different friction materials, among other improvements. We developed a line we call "Power Packs" that either use additional clutches or increase the number of heat sinks. We developed the Turbulator technology for our steel plates and were first in the marketplace with Kolene steel plates for performance applications. Also for high-performance applications, we developed the Red Eagle brand that now is considered the industry standard for those applications."

Looking forward, the Alto team sees opportunities for themselves and for the rebuilders who are the ultimate customers for their products. Landa, considering the emergence of dual-clutch technology, comments: "I believe this will eventually replace standard-transmission applications, at least for light-duty vehicles. We've had one apart and looked at the in-



Randy Sowers, senior vice president of sales, concentrates primarily on heavy-duty markets.

sides. We most definitely can make the clutches for one, but the question remains as to whether or not the retail rebuilders in the field will be able or willing to take them apart."

Halston adds: "Those are so new that there haven't been very many showing up for repairs yet. Our experience is they aren't made to be opened easily. They will need to be split and then re-welded back together, much like a torque converter. We know from history that once those start failing the aftermarket will find a way, quite quickly, to get them fixed. And, it probably will be the torque-converter guys who find a way to slice them open and reseal the cases.

"I think that no matter what technology delivers in the coming years we, as an industry, will do what we've always done – develop ways to fix whatever's broken. As entrepreneurs and automotive people, that's what we do best."

Landa concludes: "I look down the road and remain convinced that regardless of the technologies, there's going to be a need for friction materials. That's our specialty, really the specialty of the industry, and there hasn't yet been a system that didn't rely on friction materials. The aftermarket need not worry. If production of every automatic-transmission vehicle ended effective today, we would still have a solid 10 years of replacement. That should be plenty of time to figure out how to make a living from whatever technology was replacing those.

"For us we're looking at a lot of the technological advances as being advantageous. Every time they add another speed to the transmission – today we're looking at six- and seven- and eight-speeds – that's another clutch pack that we have the opportunity to make."

For Alto, Landa observes, each technological advance creates abundant supplier opportunities for the company. Technological advancements are not something to be feared. The people at Alto celebrate, in fact, the challenge of matching their abilities, resources and knowledge to whatever is next in the ever-changing automotive marketplace. **TD**