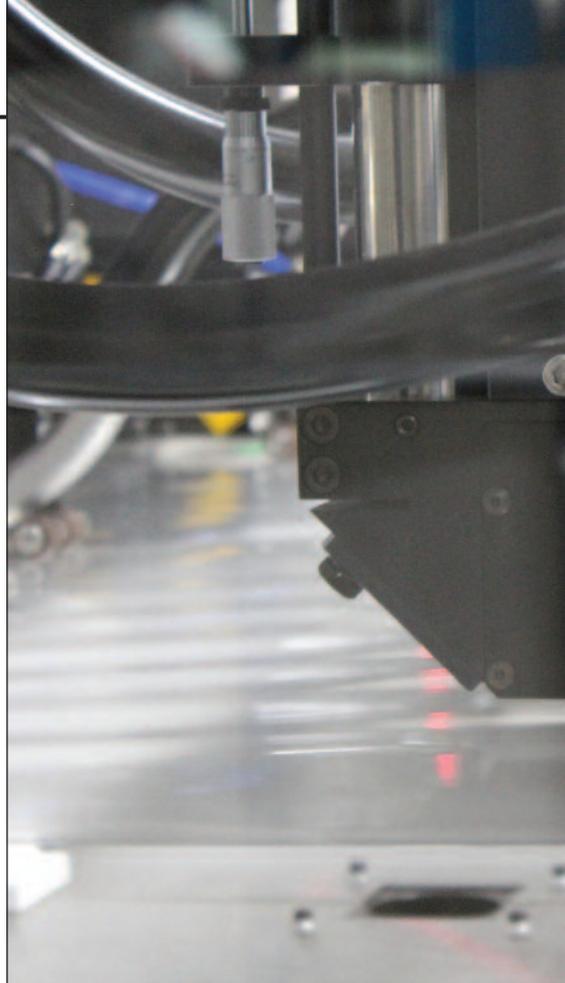


# A game of inches

Flexible packaging has become a real family affair in southern Arizona. **Steven Pacitti** sheds some light on a converter based in Optics Valley



**D**rive down the Interstate-10 of pet-loving Arizona and you end up in what has affectionately become known as Optics Valley, a region in the southern part of the US state that has become home to a large number of optics companies spawned by research at the University of Arizona. Ron Genova embarked on this journey from his home in California back in 1992 to purchase assets and inventory from a group of investors that operated a 25,000 sq ft flexographic printing facility.

Instead, with the support of his wife Elsie, they purchased the whole kit and caboodle, renamed the operation Poly Print, and moved the family to Tucson. Their son Joe was ten at the time and set to work sweeping the floors of the plant. Here, Joe learned about the intricacies of the manufacturing process and he worked his way through the different departments. Fast-forward 27 years and Joe is now vice president of operations, running the business alongside his father and his mother. He's still making 'sweeping changes', but in a different sense of the word now. The business has evolved as a successful flexographic printer and laminator, with reach across the entire US.

"We deliver millions of pounds of products a year into diverse markets, but mostly food and beverage packaging, including coffee and tea, and bottle labels. In the last four years we have more than doubled our shipments and tripled our capacities," explained Joe Genova.

He had just returned from a trip to approve the company's fourth flexographic press from Italian machinery maker Uteco, which will be installed in the first quarter of 2020. It is the company's second new printing press in just three years and represents a considerable investment. It will replace an older machine that has about five times less production capacity.

In fact, the machine that is retiring is the six-colour flexographic Schiavi press that the Genovas purchased a year after the inception of Poly Print in 1992 (the company later moved into the current 80,000 sq ft Tucson facility in 2006), and represents a little bit of history as it features the hand-print of Joe from when he was a boy.

The decision back in 2006 to move from Schiavi printing presses to Uteco was not

done lightly, explained Genova: "We first had a six-colour Central Impression (CI) Schiavi press but Bobst did not have a 10-colour press at the time we were in the market for a new one. The only option was to buy an 8-colour and upgrade it, which was complicated, so it was decided that we would buy a Uteco 10-colour press and laminator."

Genova recalls walking around the new facility in 2006. "I wondered how we'd fill the plant back then, but we have," he said. "And we have the ability to add another 30,000 sq ft to our current building for future expansion when necessary."

Those formative years in the current building were challenging, as the company took a while to adjust to the new space, which was around the time that the financial crisis hit hard in 2008. Once industry emerged from those tough years and to the present day, Poly Print embarked on a series of new capital investments to further its capabilities. This included three new slitters, a solventless laminator from Nordmeccanica, two moulder proofer from JM Heaford, a 44-inch wide, 10-colour Uteco Onyx press in 2015, a Totani pouch machine, and upgrades to existing equipment. More recent investments include a press mirroring the Uteco Onyx, a laser perforator and a laser anilox cleaner from Paper Converting Machine Company (part of Barry-Wehmiller). There is room for more, says Genova, pointing to a spot for another pouch machine.

"Pouches have been a real growth area for us, whether it be the emerging trend for refillables, pet food, or the replacement of rigid containers," he said. "People love pets here in Arizona! Pouches use considerably less material than other packaging solutions, particularly as e-commerce grows, and so will the need for pouches."

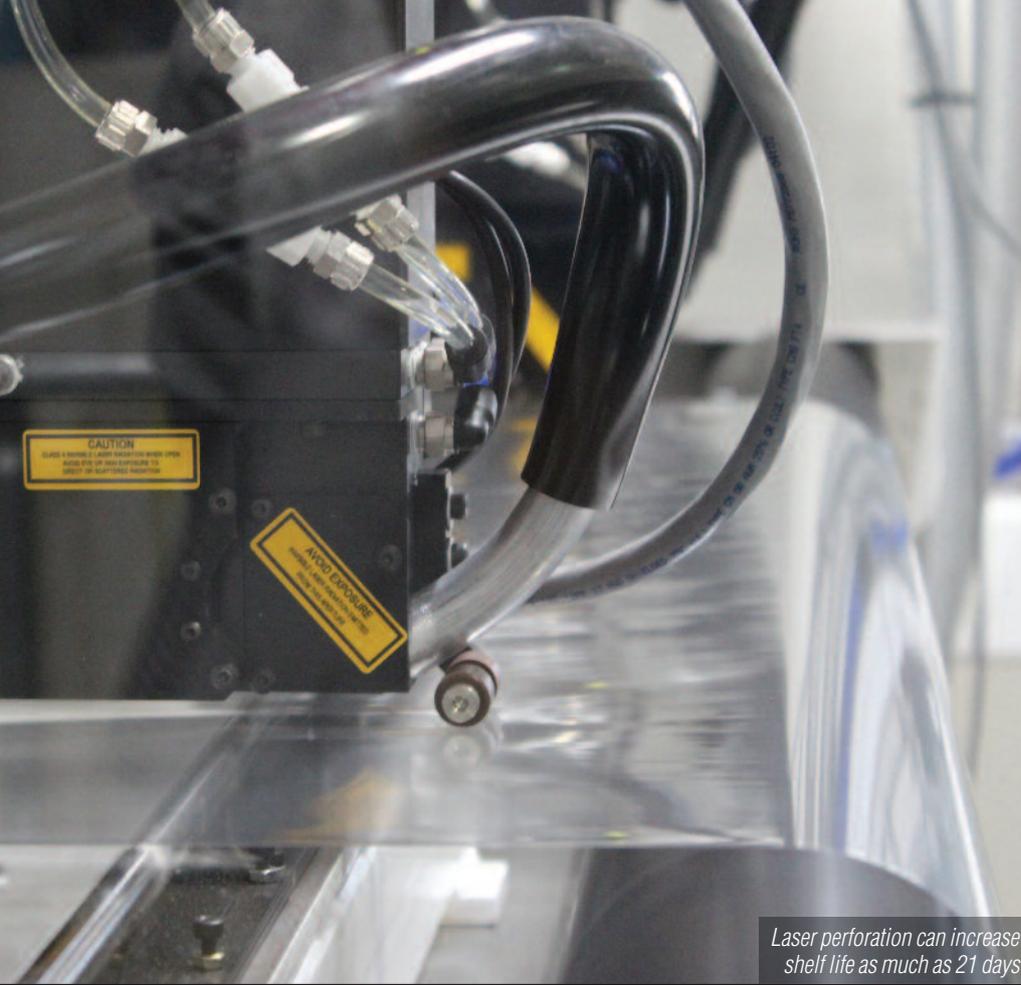
The issue of Asia is an interesting one, explained Genova, as a lot of flexible pouches come from China, but at such a low price that it is almost as if the companies are not charging for the conversion of the pouch. Even with the tariffs that have been implemented, China remains cheap and hard to compete with on price. The uncertainty in the relationship between the US and China is changing the landscape somewhat though, with a lot of

enquiries from US companies that previously sourced their pouches overseas.

"We've experienced companies either wanting a secondary source or to move their business back entirely. Given that the transition from one supplier to another does not usually happen quickly, we strongly recommend customers start the process sooner rather than later to prevent supply disruptions down the line. Product tends to be inconsistent from countries in Asia, so companies may come to us seeking consistent film quality and shorter lead times," he added. "Most customers do not realise that China will change film structures, or other raw materials, without involving the customers. This compromises the integrity of the packaging and is actually considered a form of food fraud. Poly Print is SQF certified in both quality and food safety with impressive scores of 99 and 98 respectively."

Shorter runs as well as the desire to reduce the number of colours from eight or ten down to six or seven, is most in demand at the moment, said Genova, pointing to a continued initiative among brands to reduce their costs by using fewer colours. But that is where the beauty of modern day flexographic printing presses comes into play, he added.

"The presses now have enhanced safety features and allow us to set up unused decks while the press is running, or even wash-up decks not being used; really reducing downtime between jobs," he said. "You need an extra deck when it comes to processing finishes such as overprint



*Laser perforation can increase shelf life as much as 21 days*



*Joe Genova has indirectly worked at the company for nearly 30 years, having swept the floors as a ten-year-old. Below: Genova plans to change the way the company stores its rolls of film to create more floor-space potentially for additional machinery*

varnishes, soft touch, tactile (Kraft-like feel), spot gloss or reverse side printing.”

This step-up in technology is one of the reasons why Poly Print continues to invest in new equipment. “We’ve seen big technology shifts over the years, from stack to CI, to gearless. The next shift may be digital, EB, or both but we’re not there yet.”

Genova has looked at digital presses and concedes that it is likely to be the future for flexo, given the ability to eliminate printing

plates, shorten setups, and virtually remove setup waste, but there are still limitations in terms of speed and web width.

“The quality from digital is phenomenal, which actually poses a challenge when trying to transition jobs to a flexo press,” he admitted. “From what we see, digital is poised for small runs and fast turnaround. While that is the name of the game, it’s still an expensive piece of equipment and will require quite a lot of small runs to justify the cost. Aside from plates and

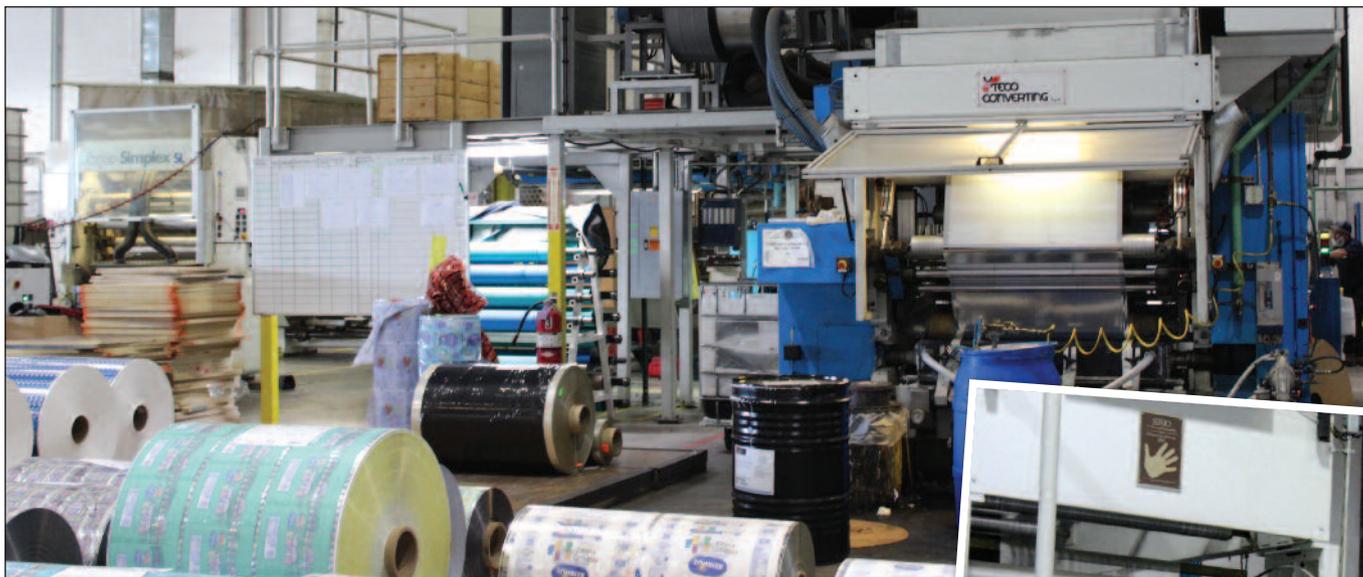
mounting, the supporting equipment is still required with a digital press such as laminators, slitters, and a pouch machine.”

That’s not to say that the quality is markedly different, because a film for cold brew coffee was being produced in the Tucson factory during our visit, that was running at 175lpi on a wide flexo press at more than 1,000 fpm.

“Compostable and recyclable films are the next big market push,” said Genova. “The largest brands in the world as well as mid-size ▶



# FLEXIBLE PACKAGING



Above: The company has just purchased its fourth flexographic press from Uteco Converting. Right: Young Joe's handprint adorns the printing press that is soon to be retired from service



and smaller brands are feeling the pressure from the media and consumers to address plastics waste. We completely agree that the proper waste handling infrastructure needs to be in place to address plastics waste.

"Aside from the plastics industry being the third largest manufacturing industry in the US and employing millions of people, there are an array of benefits that come from plastics. Agriculture is paramount to human survival, yet that very thing that help keep us alive also warms our planet. Plastics food packaging increases the shelf-life of fresh produce and prevents wastage, which leads to more carbon dioxide in the air.

"There is so much science and technology in food packaging that the average person would have no way of knowing this. The focus needs to be on methods to handle end of use for plastics, for example, recycling, composting or biodegradable options. That being said, waste management needs to be handled at municipal, state, and federal levels in some cases."

Poly Print has delivered recyclable and compostable pouch options to the marketplace. Genova admits one of the challenges right now is the availability of compostable zipper or re-closable options.

"Customers interested in compostable options are now asking for home compostable packaging," he said. "While there's no standard in the US for home composability, California has adopted the EU standard."

In a commodity market like food packaging, cost continues to be a differentiator. Recyclable and compostable options are substantially more expensive, and each option has its benefits and challenges.

"The large brands will eventually be the ones leading the way with this," he said. "It is certainly one of the main topics of conversation we have with them.

These issues are not new. Flexible packaging is very economical and mono-web solutions are now eliminating more plastics as well as downgauging when possible."

Another new development by Poly Print was the installation a laser perforator from Preco and the company was running trials on this system during our visit. Said Genova: "There is a desire to increase the shelf-life of fresh produce through packaging technology and laser perforation allows us to accomplish this. Although this technology is not new, we have had demand from our customer base to offer the capabilities. This system creates holes as small as 70-micron, which cannot be seen with the naked eye. Laser perforation can increase shelf life as much as 21 days or more, depending on the product."

The Tucson factory retains an abundant inventory of raw materials, which allows it to react to changing customer demands.

"Like football, it's a game of inches," Genova explained. "We may not always have the exact size, but usually we are within inches of what a customer needs. We pride ourselves on 98 per cent on-time delivery as one of our key advantages. There are a few ways we achieve this, including managing machine capacities and inventories, and working very close with the customer."

Poly Print has developed its own software system to manage this process for the customer and the internal art team. In addition, its customer can go online to the portal and see real

time the status of their jobs. The company also has EDI capabilities for those customers that are using it.

"We know what we're good at," said Genova, explaining why the company focuses on its core sectors rather than branching out into areas like stretch wrap, corrugated or narrow web markets. "We can potentially double our output with our current assets, including the new press due to arrive, as well the ability to expand on the current building. Maybe we will acquire another facility or purchase in a strategic location."

He is clearly planning for the future, which is in line with the mantra proudly displayed on the production room wall, quoting legendary basketball coach John Wooden: 'A failure to plan is a plan to fail'.

With an increase in staffing from 40 three years ago to more than 100 today, and more than \$10 million in capital investments, there are more creative people on-hand to deliver alley-oops in the years ahead as Poly Print invests in emerging technologies to satisfy changing consumer needs.

More information from Poly Print, 2300 W. Wetmore Road, Tucson, AZ 85705, USA. Tel: 1 520 792 1061. Email: sales@polyprint.com. Web: polyprint.com

