Partnerships Help Plas-Tech Tooling Grow

Much has changed in the years since Dean and Marcia Sonquist launched Plas-Tech Tooling in 1993.

The business long ago moved from the couple’s garage into a building in Garner. The company’s labor force has grown from 1 employee to nearly 30 full-time workers, and the focus of the business has broadened significantly. The Sonquists started Plas-Tech Tooling to provide injection mold building and repair. Today, the company is a full-service machine shop with 16 machining centers and 4 turning centers with live tooling and sub spindles. This has allowed the production machining part of the business to grow. Modeling software and manufacturing optimization tools have also improved the injection mold side of the company. In addition, Plas-Tech offers value-added services like drafting, assembly, kitting, welding, and inventory management.

Dean Sonquist credits the company’s impressive growth and success to hard work, a good team, determination, and partnerships like the one he has with CIRAS. As they have grown, CIRAS has supported manufacturing improvements, including ISO 9001:2015 certification and now the transition into robotics. In addition, CIRAS and partners have helped with the business side, including new products and marketing.

“We knew we wanted to continue to grow, and we knew there were steps we needed to take to make that happen,” Dean said. “We tried doing several things on our own, like marketing. But it took too much time away from our core business. We decided to stick to what we do best...”
and leave other things to experts. That’s where CIRAS came in.”

Derek Thompson, CIRAS strategic advisor, first connected with Plas-Tech in 2013, when the company needed assistance with product design and access to a 3D printer as part of a collaborative project with the North Iowa Area Community College Pappajohn Entrepreneurial Center, a CIRAS partner. CIRAS was also instrumental in helping the company prepare for ISO 9001:2015 certification, which opened the door to new markets like government contracts. Certification also enables a small company like Plas-Tech to enter the supply chain of large manufacturers.

Additionally, CIRAS has been involved in helping Plas-Tech with an expansion project that will double the footprint of its plant. An Industry 4.0 assessment, part of the IEDA Manufacturing 4.0 Technology Investment Grants program, helped the company implement a collaborative robot (cobot), partially funded by a grant of $50,000.

“Right now, we’re using the cobot to machine plastic and drill/tap holes in steel components. It’s running unattended for 80 to 100 hours a week on some jobs,” said Dean. “It’s freed up workers to do other, higher-level tasks. It’s been a real win-win for us but, to be honest, we would never have purchased it at this point without the grant.”

While the ISO 9001:2015 certification and addition of a cobot helped get the company ready for growth, CIRAS was also helping them build a system to grow their sales. Andrew Sonquist, who had recently joined the company founded by his parents, knew achieving that goal meant developing a stronger digital presence. Once again, Plas-Tech called on CIRAS to help.

Paul Gormley, a CIRAS project manager, brought together a team of experts to help Plas-Tech develop both strategic marketing and digital marketing strategies. The strategic marketing plan helped the company understand their target markets and the messages that would resonate with customers. The digital marketing strategy was developed next and focused on the best way to deliver those messages, including a new website with targeted keywords, relevant content, and enhanced ease-of-use to draw in and convert more website visitors into clients.

Gormley said the digital marketing team helped create the site, its content, and a customized analytics dashboard that provides answers to business questions,
not just “random metrics nobody understands.”

Throughout the process, the CIRAS team worked side by side with and trained key Plas-Tech employees on how to implement the plan and keep it running well into the future. The project ended with six months of coaching from each of the experts.

“We could’ve easily paid another business to set things up for us and walk away when they’d finished,” said Sonquist. “But the behind-the-scenes work that we did with Paul—looking at who we are, the markets we want to target, and how we can reach them—that really helped us focus on where we want to go and the best way to get there.”

According to Sonquist, the website is already bringing in leads for new customers. Plas-Tech estimates additional sales of more than $1.7 million and four new jobs in the first year of the new marketing plan’s implementation.

“The behind-the-scenes work that we did … really helped us focus on where we want to go and the best way to get there.”

Plas-Tech’s partnership with CIRAS continues today with the recent completion of cybersecurity training.

“We’re in the process of evaluating where we are and what we need to do next, and I’m guessing we’ll reach out to CIRAS again for more information and direction,” Sonquist said. “And looking down the road, when other things come up, we’ll probably touch base with CIRAS again. They’ve been a great partner.”

For more information, contact Derek Thompson at thompson@iastate.edu or 515-419-2163.
TransAgra International expects to more than double its global sales in the next year, and strategies learned at ExporTech will help the Storm Lake company achieve that goal.

“We learned a great deal about building our global presence and making contacts, as well as the details of exporting and registrations in each country,” said Dr. Rebecca Quesnell, vice president of operations and research/product development director. “These are strategies that will help us approach our goals in a realistic and effective way.” TransAgra manufactures all-natural products for animal health. The company recently completed the CIRAS-driven ExporTech 2.0 program. ExporTech is a national export assistance program that helps companies develop customized plans for growing their level of exports. It is a joint effort of CIRAS, the Manufacturing Extension Partnership, the Iowa Economic Development Authority (IEDA), and the U.S. Department of Commerce.

“Most Iowa companies want to increase overseas sales, but it’s hard to get started if you don’t know where to begin,” said Marc Schneider, CIRAS project manager. “We form a cohort of four to eight companies per offering that participate in a mix of sessions in Ames and online. Ultimately, they develop a customized international growth plan.”

The program is open to all companies, including those who have not yet ventured into global markets.

“We participated in ExporTech to learn how to position our company to excel in this area,” said Teresa Quirante, sales and marketing executive with Cedar Falls-based Z&Z Medical, a provider of medical imaging supplies and accessories. “We haven’t exported many products before and felt we needed to have a firm foundation before we fully jumped in. We feel we now have the tools in our toolbox to grow and succeed worldwide.”

When ExporTech was first introduced by CIRAS in 2014, participants attended three full-day events scheduled about a month apart. Content experts covered topics like sales and distribution strategies, pricing and payment practices, logistics, regulations and certifications, and marketing messages. The same topics are covered in the new hybrid model.

A unique feature of ExporTech is the customized plan that each company develops. The plan is presented to a review panel of experienced exporters, who provide feedback to each presenter.

The final piece of ExporTech is a follow-up meeting about three months later to see how the company is progressing with their plan, help resolve any new issues, and provide connections within the Iowa “export village.”

“Companies are surprised there are so many resources to help them on both the state and federal sides,” Schneider said.

ExporTech 2.0 will be offered again next year with weekly sessions January 10–March 21, 2023.

For more information, contact Marc Schneider at maschn@iastate.edu or 563-221-1596.
Partnerships Support Company Growth

Leveraging resources available through CIRAS and its partners is one key to the unprecedented growth of Brava Roof Tile. Over the past two years, the southeast Iowa manufacturer moved into a new facility, tripled its workforce, and significantly increased its sales.

Founded in 2008 in Washington, Iowa, Brava makes high-quality synthetic roof tiles from recycled and recyclable materials. Their products have received third-party certification for the highest levels of wind, fire, and hail protection, and they have a 50-year warranty.

“Initially, they looked to us for assistance in testing and validating the materials they use,” said Jeff White, CIRAS strategic advisor. “We also conducted an in-depth business assessment that assisted them in creating a roadmap for moving forward. In addition, we made them aware of various financial opportunities through our partners to further assist their growth and expansion.”

CIRAS connected company leadership with the Iowa Area Development Group, which helped facilitate an application for Rural Economic Development Loan (REDL) funds. REDL is a U.S. Department of Agriculture program designed to assist business expansion in rural areas. Funding is provided through local utility companies. Brava received a $1 million loan to purchase new equipment that would increase production to meet the growing demand for its product. Another CIRAS partner, the Iowa Economic Development Authority, awarded Brava a $500,000 Manufacturing 4.0 Workforce Innovations Grant to address workforce issues exacerbated by COVID-19.

“CIRAS continues to be a valuable partner for Brava,” said Andrew Ahrens, head of manufacturing at Brava. “Jeff and the team have assisted on numerous engineering and technical projects over the years, helping support Brava’s growth and efficiency. The CIRAS team also had a key part in educating us on opportunities to finance the projects through the 4.0 Grant and REDL program. We appreciate the breadth and depth of assistance CIRAS can provide a high-growth Iowa-based manufacturing operation.” White added, “Working collaboratively with our clients to provide services and resources that make a difference for their business, employees, and community is very gratifying. It’s what we do!”

For more information, contact Jeff White at jwhite5@iastate.edu or 515-231-8691.
Healthy Communities through Business Prosperity

Since 1963, CIRAS has provided customized services to help Iowa companies prosper and grow. More than 4,400 businesses representing every Iowa county have shown an economic impact of more than $2.8 billion in the last five years.

In 2014, CIRAS began working with the Quad Cities Chamber to build results throughout southeast Iowa. Here is a look at how CIRAS has helped several Quad City-area businesses meet their needs.

GROWTH
CIRAS assisted Lewis Machine and Tool (LMT Defense) in Eldridge to grow their business with the U.S. Department of Defense by overcoming a barrier related to facility clearances.

LEADERSHIP
Selina Schumacher, CEO of Group Schumacher/Schumacher Company, engaged CIRAS to conduct a SWOT analysis, develop a strategic implementation plan, and support the leadership team with the plan’s execution. As a result, the company realized significant growth in new sales and modernized its systems and facilities for greater efficiency.

PRODUCTIVITY
Companies across the state of Iowa can take advantage of a lean assessment with CIRAS. The Waste Commission of Scott County completed a Lean assessment, which led to $10,000 in cost savings and $25,000 in increased sales. There are 11 Iowa Lean Consortium members in the Quad Cities region.

TECHNOLOGY
CIRAS helped MoboTrex overcome a supply chain issue that was impacting sales and growth. The company needed design and process support to move a production component back to the United States. CIRAS provided recommendations for part and process design as well as testing options. CIRAS also suggested Iowa-based supplier options for production. MoboTrex retained key sales and positioned themselves as a major supplier for future federal infrastructure programs.

WORKFORCE
Eaton’s Davenport location sponsored a capstone project with the Iowa State Department of Mechanical Engineering. Students worked directly with Eaton employees to design a process to test the performance of a compressor. The project resulted in approximately $75,000 in cost savings through reduced materials and labor.

For more information, contact Jeff White at jwhite5@iastate.edu or 515-231-8691.
New Targeted Small Business Wins First Contract

A Cedar Rapids-based lawn care company was awarded a small initial contract that has since led to more than $100,000 in work after CIRAS helped prepare the business owner for the government contracting process.

Rupert Ellis, owner of Crew Cut Lawn Care, contacted Julie Fagle, a government contracting specialist with the CIRAS Procurement Technical Assistance Center, to learn how to leverage his recently earned Iowa Targeted Small Business (TSB) certification. As part of their work together, they reviewed past government procurements to help Ellis see which agencies have a need for the services he provides. Fagle also showed Ellis how to search for current work using the Bid Match program, a system that aggregates bid opportunities for city, county, state, and federal work. A subscription to the service, which updates daily, is available to all CIRAS clients.

“Through our Bid Match program, he found an opportunity with the National Guard,” Fagle said. “We worked with him on that proposal as well as his capability statement, which he can use to market his business to other government customers.”

Ellis was awarded the National Guard contract to do mowing at the Army Aviation Support Facility in Davenport. It was his first government contract.

The paperwork involved in a government bid is extensive, and Ellis admits he would have been lost in the shuffle without the help of CIRAS.

“You really need someone who knows the ropes to get you through the process,” he said. “Julie didn’t just show me what to do, she educated me on how to complete the paperwork, who to contact, and which websites contain useful information.”

Ellis also attended TSB events and a Meet the Buyers gathering, which he called “valuable networking opportunities.”

The assistance Ellis received has given him confidence to compete for larger projects.

“If I decide to move forward and go after larger projects, Julie will be my first call because working with CIRAS really makes a difference.”

For more information, contact Julie Fagle at jafagle@iastate.edu or 319-310-8612.
Q&A with Retiring CIRAS Director Ron Cox

CIRAS Director Ron Cox is retiring after more than 25 years at CIRAS. We sat down with him to discuss what he has seen develop over the past quarter of a century and where he thinks things might be headed.

Q: How did you get your start at CIRAS?
A: I was returning to Iowa and just happened to see a Des Moines Register ad. The job intrigued me since CIRAS provided education to companies and I had both been an educator and worked in industry. I thought I’d take the job for five years and then go back to industry, but I was hooked.

Q: How did your experience in the aerospace industry support your work with Iowa companies?
A: The diversity of business needs means there are lots of opportunities to help. I just needed to change my view from fighter aircraft to more traditional Midwest manufacturing. Fluid flow, thermodynamics, and data analytics are foundational sciences that can be applied to a wide variety of products and problems.

Q: What were some of your favorite projects from the past 25 years?
A: The variety of topics that CIRAS staff help with is remarkable. One project I helped with was a wind tunnel test of several versions of a product to see which held up best under wind loads. The tests showed that one of their designs was significantly better than what was on the market at the time. Testing projects is a great fit for CIRAS because there are so many world-class labs at Iowa State that we can make available to small companies.

Q: What about CIRAS hooked you?
A: The diversity of products and services in Iowa companies is just amazing. You can help companies that have household names like Winnebago, Delta Dental, and John Deere; but also wonderful, sometimes hidden gems like Stellar Industries, Life Line Emergency Vehicles, Story Construction, Metalcraft, and so many more.
Another involved the development of a simple code to predict how a food item cooled after leaving an oven. We were able to develop a model to predict the conduction and convection of heat from the food as it flowed through a cooling mechanism. In the process, we pinpointed an area of the mechanism that could be significantly improved with a simple modification.

More recently, I took the foundational approach used in aircraft optimization to study Iowa’s workforce challenges and design a more holistic approach to helping companies improve their attraction and retention of employees.

Q: How has CIRAS changed over your career?

A: In 1963, the year the center was created, CIRAS had about a half dozen men who counseled companies. Center directors after that moved CIRAS more into technology projects and small grants. The main changes I saw in my career were the growth of grants, an increase in staff and staff diversity as we merged other programs into CIRAS, and significantly more partnerships, both on and off campus. As a result, we now offer Iowa companies a much greater diversity and depth of services. Just one example is our partnerships with Iowa State departments to bring more than 100 company projects to student classes. That was a great win-win for the students and Iowa businesses.

Q: What does your crystal ball say about the next quarter century for CIRAS and Iowa businesses?

A: I believe labor shortages will affect Iowa businesses for the next several decades, but I remain bullish on the state because I’ve seen so many companies fight the odds and continue to grow because of dedicated leaders with big visions. I see lots more automation, maybe in unexpected ways, and I hope more companies embrace a continuous improvement mindset. Larger, more competitive, and more profitable companies paying higher wages will hopefully be the result.

Q: What advice do you have for the next CIRAS director?

A: My advice would be the same as I would give to any business owner—start with a big vision; surround yourself with smart, hardworking, and caring individuals; develop innovative strategies; and be relentless in the pursuit of operational excellence. And have fun!

Q: So what does your future look like?

A: Hopefully fewer meetings, the same amount of data analysis, and a lot more family, 14ers, furniture design, and air shows. And I hope I still get invited to tour Iowa businesses!
Persistence Pays Off

Landing a government contract isn’t an easy task, but it is possible—especially if you have someone knowledgeable to guide you through the process. Just ask Cinnamon Rost.

Rost, who owns and operates 1809 Design in Clive, submitted her first government request for proposal (RFP) in 2020.

“It was daunting, but CIRAS made it more manageable,” she said. “I’m not sure I would’ve been successful without their help.”

Rost connected with the CIRAS Procurement Technical Assistance Center after becoming certified as an Iowa Targeted Small Business (TSB). Certification gave her access to TSB-exclusive events where she learned more about services provided by CIRAS and also met Justin Niceswanger, a CIRAS government contracting specialist.

Rost turned to Niceswanger for guidance when she was ready to compete for her first government contract. He reviewed her documents, made several suggestions, and reviewed the proposal once more before it was submitted.

“Government contracts are highly detailed and can be difficult to navigate,” Niceswanger said. “Working with someone who understands what the agencies are looking for can be the difference between having your proposal rejected and moving along in the process.”

While Rost didn’t win that award, she did come in a close second.

“Taking into account how new I was to the process and how much I learned, I considered it a success,” she said.

Last summer, Niceswanger found another opportunity that seemed like a good fit for Rost. The Des Moines Area Regional Transit Authority (DART) was looking for on-call marketing assistance.

Rost, whose business offers marketing and graphic design services, prepared a draft RFP, which she sent to Niceswanger for review. Her proposal led to an interview with the DART in-house marketing team, and ultimately her company was chosen as an awardee.

“Our contract was finalized in June,” Rost said. “Since this was a general call for contractors, it might be some time before I receive any work. But at least I have the assurance of knowing that work will eventually come my way.”

Rost said she will continue seeking support from CIRAS as she competes for other government work.

“Having this type of support—someone who can explain the nuances of the RFP, answer my questions, and then read my proposal and make suggestions—is amazing. Working with CIRAS is a win-win,” she said.

For more information, contact Justin Niceswanger at jnice@iastate.edu or 515-509-9565.

Technical and Workforce Solutions through Iowa State Capstone Program

Connect your company with the future workforce through the College of Engineering’s capstone design program. Typical capstone project areas include product design, machine design, process improvement and modeling, plant layout, new concept exploration, or data analytics.

Iowa companies receive two significant benefits from their involvement in a capstone project:

• Additional technical resources to solve problems and explore ideas.
• Access to students, who also can be assessed as future employees.

For more information, contact Mayra Ramirez at ramirezmr@iastate.edu or 515-520-3101.
Making Safety a Priority

There is no such thing as a one-size-fits-all safety plan for manufacturing facilities, and nobody understands that better than Jack Hasken.

Jack Hasken is president and CEO of Jackson Manufacturing, a custom plastic injection molding facility in Maquoketa. Jack runs the company with his wife, Sarah, who is instrumental in setting the company’s strategic and manufacturing goals. Jack knew that updating and customizing the company’s existing safety program was the surest way to reduce workplace injuries and accidents. He also knew that CIRAS could connect him with an expert to help him meet his goal.

“I’ve worked with CIRAS since 2013, and they’ve always provided sound advice for my small business,” Hasken said. “So when it was time to review our safety program and provide enhancements to it, I turned to them.”

Brian Muff, a CIRAS project manager who connects Iowa State faculty with Iowa industry, called on James Wright, an associate teaching professor and founding director of the Safety Training Instruction and Research Center in the Iowa State Department of Agricultural and Biosystems Engineering. Wright conducted an occupational safety and health optimization review to identify gaps in Jackson’s safety practices, programs, policies, and procedures. His work resulted in a new safety manual written according to Occupational Safety and Health Administration (OSHA) standards and general industry best practices. Some of the manual’s components include a self-inspection safety list, safety handbook, and pocket guides with information on preventing accidents and injuries in the workplace.

The materials Wright provided will help Jackson Manufacturing meet current regulatory standards and allow growth in markets not currently accessible.

In addition to greater safety of its employees, the program has the potential for $10,000 in cost savings and $35,000 in retained sales from fewer work disruptions.

For more information, contact Brian Muff at bmuff@iastate.edu or 515-520-1033.

When it was time to review our safety program... I turned to (CIRAS).

Jack and Sarah Hasken, owners of Jackson Mfg., are both past board chairs of the Iowa Association of Business and Industry. They are the only couple to hold the position (at different times) in the group’s 118-year history.
Building Your Employer Brand to Attract and Keep Talent

With more competition for employees, how your company is perceived as an employer is more important than ever. Businesses become employers of choice through solid leadership, comprehensive total rewards, engaged workers, and a company culture that employees believe in and are excited to be part of.

Three actionable tactics can help your organization to strategically build your employer brand, so you can attract and retain workers.

1. **Invest in your employees’ professional and personal growth.** Research shows that job opportunity and job security are major drivers of retention. Additionally, productivity increases and stress is reduced for workers with higher job security. Strive to create a great work environment that responds to fundamental employee needs. Linking a person’s professional and personal growth to company performance and customer satisfaction will also drive employee engagement.

2. **Pair job security with comprehensive benefits to strengthen your employer brand.** Your company will be viewed more favorably when you help employees manage life’s challenges. You may consider benefits like flexible schedules, childcare, medical insurance, housing needs, and financial benefits. Your team may need to design unique tactics to pay livable wages and tap into these intangibles that motivate workers, but the investment will prove worthwhile.

3. **Build a diverse, equitable, and inclusive culture evidenced in company policies, management philosophies, and procedures.** Employee well-being takes priority in your inclusive environment where all individuals feel welcome, respected, and valued. Train your leadership to actively pursue employee feedback about the company using employee surveys, focus groups, and one-on-one conversations to improve their workplace experience.

When successful organizations create workforce competence strategies, it also motivates investments in continuous improvement and technology. This helps the organization to remove barriers for potential employees, and it ultimately reduces turnover and attracts more job applicants.

Implementing the actionable items above must be done in a way that resonates with your employees and doesn’t just “check the box.” Start today to strengthen your workforce competitive advantage, employer brand, and growth potential.

For more information, contact Brenda Martin at bkmartin@iastate.edu or 515-570-5282.