innovation INCUBATOR

Wenger's Technical Center combines R&D and processing expertise.

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While many processing facilities were slowing or even halting production when the pandemic first surfaced in early 2020, Wenger Manufacturing in Sabetha, Kan., was moving ahead with plans to construct its new \$13 million Technical Center. The Center, which houses full-scale extruders, dryers and ancillary equipment to provide a real-world, scalable environment for researching and developing extrusion-based products and processes, got a much-needed facelift and upgrade to become a state-of-the-art facility.

"The Technical Center had been around since 1954, and it's always been a key resource for the industries we serve," said Brend King, vice president and Technical Center director. "But it was worn out. It had some structural limitations on what we could do from a food safety standpoint, and it wasn't well segregated between the human food side and companion animal food side. Plus, it wasn't big enough so we added 60%."

The decision to renovate the existing facility rather than build a brand new one came from the company's desire to keep the Technical Center close to its main manufacturing plant in Sabetha. It has been highly convenient for the company, and for its clients and partners, King said.

The construction process to expand the existing 28,000-square-foot technical center began in November

2019, and while it did experience some delays in 2020 thanks to COVID-19, construction was underway by July 2022. From the start of construction in November 2019 to its completion in July 2021, the Technical Center remained operational.

In order to keep the center up and running during renovations, the new building was constructed on top of the existing facility.

"A unique feature of our new tech center is that it was built on top of the old one," King said. "We did not shut down the tech center when we built the new one. We built the new one, and then tore down the old one, and during that time, we were still conducting test runs for our customers."

In fact, more than 140 customer test run days were held during the construction timeframe. In addition, 10 Wenger equipment R&D projects were tested and verified, and seven new Wenger process and continuous improvement projects were completed, tested and verified.

Wenger's Technical Center is a complete agrifood laboratory with full-scale equipment designed to simulate a real-world pet food and treat production environment. Customers are invited to test new systems, product formulations and processing methods. In addition to demonstrations and training sessions hosted by Wenger at the center, The Wenger Technical Center underwent a renovation during the pandemic to upgrade its capabilities and offerings to existing and future customers. Photos by Nicole Kerwin / Sosland Publishing Co.





The extruders, dryers and ancillary hardware featured in the tech center are fullscale, commercially available pieces of equipment. clients, academia and other industry partners visit the Technical Center for their own needs.

Visitors include potential Wenger customers interested in seeing the equipment capabilities firsthand. These companies have the chance to work with Wenger R&D experts and process engineers to see if the company's equipment suits their production needs.

> Existing Wenger customers also utilize the tech center to take advantage of in-house expertise and processing capabilities.

"Our existing customers come to us to work on their own R&D. Maybe they're working on a new product and they want to see how it will work on the equipment, maybe they're changing ingredients or exploring a new market," King said. "They can use the tech center for a period of time to run these tests without having to shut down operations at their own facilities. That's a big benefit to a processor."

Even though the Technical Center features the opportunity for equipment demonstrations, King said its capabilities go far beyond that of a "demo center."

"Equipment demonstrations are important, but that's only maybe one-quarter of what we do," he added. "Most of

The new Wenger Technical Center features updated technology, including cameras throughout the production room to provide off-site clients with views of the equipment in action. what we do is R&D work — innovation work. We are kind of an innovation incubator for our customers."

Unlike some other technical centers that demonstrate industry equipment, Wenger's Technical Center features real-time scalable testing. The equipment in the center represents full-scale, commercial versions of nearly every piece of equipment Wenger manufactures.

Aside from having access to Wenger equipment, visitors also have access to the company's engineering experts. The staff process engineers have the knowledge to test, analyze and produce product prototypes, and can help visitors develop processes to manufacture that product.

"We have the best process engineers in the world and that knowledge really gives us a better opportunity to help clients with their trials and, in a lot of cases, develop their products," said Justin Moore, Technical Center manager. "We're a step above everybody else when it comes to our process technology people."

Upgraded technology

The biggest upgrade the tech center saw was to its digital communications technology. It now features a state-ofthe-art media center, The Galen J. Rokey Education and Outreach Center, which provides visitors with the capability to be more interactive during demonstrations and product test runs.

"We took a hard look at what our digital capabilities were not only from the tech center but also from a marketing standpoint," King said. "We knew our video technology was limited, but then when COVID hit, it really pushed us to upgrade so that we could provide customers high resolution remote viewing of trials."

The tech center features 20 mobile cameras located throughout the production floor. While production runs are being tested, the cameras can provide a live stream to members of the visiting company not in attendance. The live stream has interactive capabilities, including the ability to zoom in and out of equipment in operation, and to switch from one view of the operating equipment to another. Test runs are also recorded and archived for future use.

Additional technology provides the opportunity for customers to see more than what the standard production cameras display. Drones are used to get a bird's eye view of the equipment in action, and the addition of a 3D camera also provides the tech crew members with the ability to show customers a more complete view of the operation and the equipment.

The upgraded Wenger Technical Center delivers on the company's promise to provide state-of-the-art equipment, technology and expertise to its current and future clients.

"It's a place where innovation can grow in real time, on real-sized equipment," King concluded.