

Purchase doubles revenues

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Sydor Instruments LLC has acquired a British company that will nearly double the Chili firm's sales and add to its offerings in the ballistics market.

The deal to buy Sabre Ballistics, which closed last week, will increase Sydor's workforce and roughly double its annual sales, CEO Michael Pavia said. Financial details of the acquisition were not disclosed.

Sydor Instruments now will be able to supply customers with a range of imaging products used in making protective armor and military tanks safer and in helping law enforcement officials determine how a bullet was fired at a crime scene, officials said.

Sydor Instruments, which is celebrating its 10th year in business, manufactures ultrafast imaging systems. The firm has 15 employees and will add roughly 10 with the acquisition. The new employees will remain in Britain, but some products made there may be shifted here, depending on where demand is greatest.

Sydor Instruments does business with many government agencies, including the U.S. departments of Defense, Energy and Justice. It has expanded its business overseas, mainly in the United Kingdom and France.

Sabre expands Sydor Instruments' market geographically, Pavia said. The ballistics test equipment manufacturer has customers in 33 countries.

Sabre's equipment is used in weapons and ammunition testing, armor testing and forensic and medical science. Another field where there could be interest in the technology is impact testing, evaluations of collisions such as when something hits an aircraft or a rock hits a vehicle's windshield.

The two companies previously had a partnership agreement in which Sydor was Sabre's applications and sales partner in the United States. When the British company's owners decided it was time to retire, Pavia said, acquiring the company was a natural move for Sydor Instruments.

David Balfour, managing director at Sabre Ballistics, has said the firm's relationship with Sydor Instruments has strengthened Sabre's ability to deliver customized, fully integrated products to its customers.

The addition of Sabre's offerings gives Sydor more options for customers, Pavia said. It also can provide greater protection for soldiers and law enforcement personnel.

"The main application is survivability," Pavia said.

Sydor Instruments got involved in the arena in 2011 when it unveiled a ballistics imaging system that could determine the velocity and trajectory of a bullet, including the tilt of the bullet on impact.

The firm, whose products are aimed at slowing fast-moving events, began designing the system after the U.S. Army asked Sydor Instruments to work on the project with diagnostic imaging technology the military had been working on. The system can help determine a bullet's point of impact and understand the physics of how it got there, Pavia said.

Sydor Instruments, a division of Sydor Optics Inc., was founded in 2004 to commercialize technology licensed from the University of Rochester Laboratory for Laser Energetics. The result was a self-calibrating streak camera, dubbed Ross, short for Rochester Optical Streak System, which can provide a snapshot in less than a billionth of a second.

The firm's equipment is developed and built at its 16,000-square-foot plant. Sydor Instruments is able to draw from technological resources at Rochester Institute of Technology and UR when developing a product, and it sources most of what it needs locally.

While UR is its only local customer, Pavia said the optics knowledge in the area makes it advantageous to have his firm here.

"If we weren't here, it would be very hard to do what we do," he said.

Thomas Battley, executive director of the Rochester Regional Photonics Cluster, said Sydor has been able to take advantage of the services provided by the area's optics companies.

"We have the most robust, highly integrated supply chain in the country for this type of equipment," Battley said. "If more people knew about (the capabilities here), we'd have more foreign investment and more companies moving to the area."

In addition to the ballistics market and its streak cameras, Sydor Instruments is expanding its business in other areas. The firm is working with scientists at Brookhaven National Laboratory on Long Island on an X-ray camera to be used in data collection for materials at the atomic scale. The imaging technology has since been sold to other research laboratories around the world.

Sydor Instruments has received federal funding through the Small Business Innovation and Research program to develop equipment for use at Brookhaven, which conducts research in physical, biomedical and environmental sciences as well as in energy technologies and national security.

Pavia is also eyeing another acquisition he expects to be completed by year-end. The out-of-area electronics company could be relocated to Sydor's facility and would provide additional complimentary services for the firm. He declined to identify it.

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