

SPOTLIGHT ST. LOUIS BUSINESS LEADERS



Missouri's Rising Manufacturing Industry

To revitalize Missouri's manufacturing industry, Missouri University of Science and Technology (Missouri S&T) is focused on workforce development and advanced technologies through the Kummer Institute's Center for Advanced Manufacturing.

U.S. manufacturing is on the cusp of a resurgence, thanks to technological advancements, domestic production, and shifts in global supply chains. Yet sustaining this momentum requires investments in workforce development and technology—particularly in regions with a history of manufacturing success.

Missouri is one of those places. With factories in the state operated by Boeing, Caterpillar, and other major corporations, this largely rural state boasts a strong manufacturing base—yet substantial levels of poverty in many of the rural counties devastated by the decline of the mining industry are, for many, a barrier to entry. Missouri S&T seeks to change that through the Kummer Institute's Center for Advanced Manufacturing, an innovation hub for companies, educators, and professionals eager to restore Missouri's manufacturing sector.

"This is an opportunity to revitalize manufacturing in the U.S. and bring companies back," says Richard Billo, Ph.D., founding director of the Center. "Workforce development and technology will boost that."



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**Richard Billo, Ph. D.,
Founding Director**

Build It and They Will Learn

When Missouri S&T alumnus Fred Kummer and his wife, June, gifted \$300 million to the university, their vision was clear: Build a manufacturing center that promotes the use of emerging advanced technologies and creates a pipeline of well-educated graduates to fill manufacturing jobs, thus elevating competitiveness in Missouri's manufacturing sector.

Today, that vision is realized in the form of a \$125 million building, where students majoring in engineering and other fields operate \$13 million worth of advanced manufacturing equipment. Advanced students are invited to join the Center's undergraduate internship program and work on major industrial projects spearheaded by regional manufacturing companies.

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Guiding the curricula is an industrial advisory board composed of Missouri's major manufacturing companies. The relationship is symbiotic; the board informs the Center of their companies' critical skills needs, and the University designs curricula and labs around them. "Companies love it," says Dr. Billo. "They get workers who are prepared and skilled at using the same machines found on the job. On a personal level, a company learns about a student's work ethic while that student learns about the company's culture." So committed are these companies to the mission that they're relocating workers to Rolla to work together with the Center on new manufacturing processes and prototypes.

To expand efforts even further, Missouri S&T teamed with several of the state's community colleges to generate a greater number of skilled technicians for Missouri's manufacturers. Set in motion, the Center's initiatives should have a ripple effect throughout Missouri—especially in rural communities where job opportunities are scarce. Should manufacturing jobs return from overseas, young people might have a reason to stay and invest in their hometown communities. It's a vision Dr. Billo hopes to see realized.

"I've been waiting a long time for this," he says. "A sustained commitment to workforce development and emerging technologies is how Missouri's manufacturing sector can finally take back the mantle."

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