

JELD-WEN Chair in Wood-based Composites Science Fred Kamke

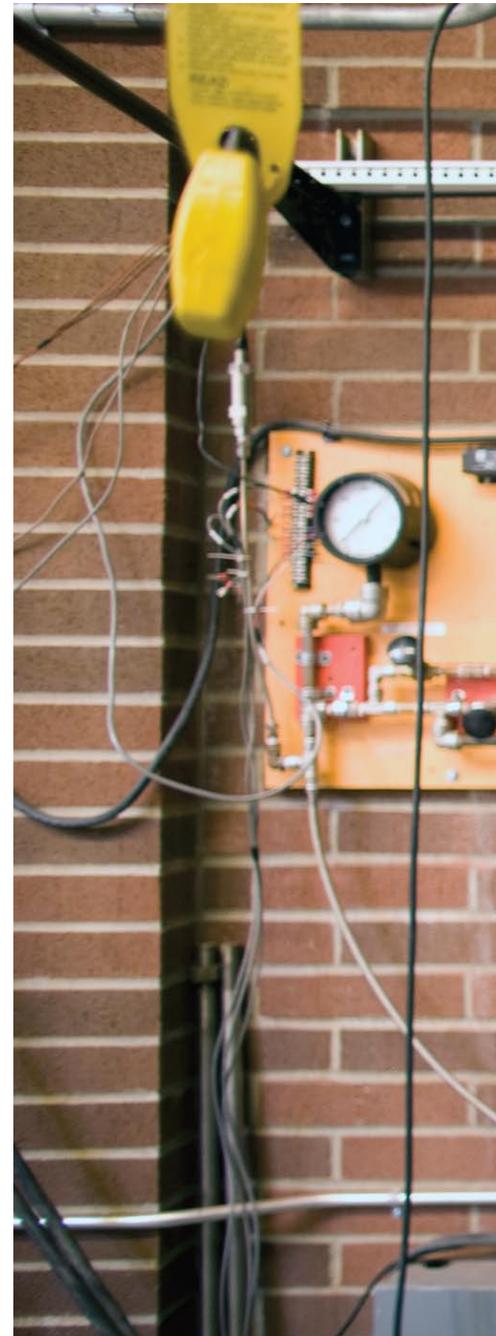
In 2004, the JELD-WEN Foundation donated funds to endow a chair in wood-based composites science, drawing Professor Fred Kamke to OSU from Virginia Tech. “There are only two fully endowed chairs in my discipline in the whole country, and it just so happens that both of them are at Oregon State,” says Kamke. “I feel both honored and fortunate to be here. My faculty position wouldn’t even exist without JELD-WEN’s contribution to our college.”

The JELD-WEN Chair has allowed Kamke to expand his research horizons in the Wood Science and Engineering Department to include interesting and unique projects. “Because of the stability provided by the chaired position, I can write proposals that are larger, higher risk, and potentially greater impact,” he says. “If I were in a tenure-track position, I would be more constrained, and would feel pressure to pursue research that makes, perhaps, less of an impact but has a higher probability of being funded.”

Currently, Kamke is working on a project developing a new type of wood composite product. “In this research, we’re modifying wood by changing its properties before it is even made into a composite,” he explains. “We’re currently in talks with companies about commercializing that technology.” Additional research focuses on improving adhesive bonds in wood products. “If wood composites have a weakness, it is in durability,” Kamke says. “We believe we can understand why some products fail prematurely if we collect data on wood bond lines, reconstructing and studying them in three-dimensions using data collected by x-ray microtomography.”

Although the JELD-WEN Chair position allows Kamke to devote all of his time to conducting research, he chooses to teach as well. He has taught classes for colleagues on sabbatical leaves and is presently working with instructors from OSU, other universities, the federal government, and private companies to develop a series of online courses. “The courses will be offered through OSU’s E-campus program for continuing education, and they all focus on the wood-based composites industry. This series is something that I would not have been able to do if not for the JELD-WEN Chair,” he says.

Kamke hopes that future recipients of the JELD-WEN Chair understand the specialized support that the





Fred Kamke, standing next to a device he developed to manufacture viscoelastic thermal compression (VTC) wood specimens. The device is used to make test specimens for evaluation. Photo courtesy of University Advancement.

position offers. “There are only ten accredited university programs in the entire country that do anything relating to wood science at all, which means that we are working with a limited number of graduate students and professors to carry-on the discipline,” he notes. “Those of us in the wood science area have to make the most of our opportunities, and so having this kind of support is truly phenomenal.”