

Makers & Manufacturers Innovator of the Year 2022: Tektronix

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Reinventing the wheel is not easy. Unless you happen to have invented it in the first place.

In the case of Tektronix's oscilloscope, the reinvention involves a more complex tool.

"The oscilloscope is effectively like a Swiss army knife for an engineer," said Mehmet Aslan, Tektronix vice president of engineering.

In electrical engineering the device is used for testing circuits and measuring signals and ensuring that systems are sound. Aspiring engineering learn their way around an oscilloscope early and use versions of them throughout their careers.

"An oscilloscope is basically the tool that we use predominantly to measure those intermediate signals or the end signals to make sure that they're doing exactly what we want," Aslan said.

The Beaverton-based company is the recipient of the Innovator of the Year Award presented by the Shiley-Marcos Center for Design & Innovation at the University of Portland for its new 2 Series Mixed Signal Oscilloscope that it unveiled in June.

The company's history with the oscilloscope goes back to the beginning. Its founder, Howard Vollum, developed key innovations for the device as it is today. According to Aslan, Tektronix wanted to update the tool for the needs of contemporary engineers and engineering students.

Aslan calls the new oscilloscope an entry-level model. It is portable, battery-powered, hand-held and designed like a tablet. Its design matches the needs of engineers in training, a group Tektronix wants to serve.

"We want this to be really intuitive, really aligned with current generation, especially so it's easy to use. And that way they get a good experience and hopefully stay as engineers and become engineers in the future," he said. "And then when they graduate, they can continue using these tools seamlessly."

Tektronix may be Portland's foundational tech company. Before Intel had a workforce of 20,000 producing semiconductors in Washington County, the 77-year-old company was producing hardware engineers and innovators could harness to create their own technology breakthroughs.

Despite its influence, Tektronix is below the radar of people outside the tech world and built its reputation on hardware. Its products are probably more familiar to movie buffs though, particularly sci fi fans, as its instruments were adopted for space age control panels on Hollywood sets.

Closer to earth, its engineers still strive to make innovations for the current space age.

Despite being its venerable status as Pacific Northwest tech pioneer, Tektronix does not stay in one place. Aslan said the company encourages its engineering talent, including interns and 40-year veterans, to keep searching for new problems to solve, including through an annual challenge in which engineers choose a problem, research it and present solutions.

"This can be really creative, from maybe a new user interface ... to sometimes fun things like how to chase geese away from from a lake," he said.

Tektronix also relies on its customers to provide them with new ways to improve their products or present new problems to solve.

"We strongly believe that what we call voice of customer is the biggest driver in our innovation," Aslan said. "Understanding truly what the customers want and making sure that after you do all that development, there isn't one little thing that prevented them from using it. To avoid that, that VOC or voice of customer is really critical for us."

Company name: Tektronix

Where: 14200 S.W. Karl Braun Drive, Beaverton

No. of employees: 3,500-plus

What they do: Manufactures analytical testing devices and hardware technology