

JOBBS?

It is a good time to be an engineer. Demand across all disciplines, especially mechanical engineering, is very high as U.S. industries look to ramp up what they hope is a post-pandemic economy. They also may enjoy more relaxed working conditions as employers adapt to over a year of remote operations.

That does not mean engineers are on the move, picking up stakes and moving cross country for a dream job. They don't have to with the number of open positions available. But they might not have to go to the office or the jobsite, at least exclusively, because many employers are continuing remote work.

"We have what is probably starting to be the preferred model, which is hybrid where either a portion of the team is onsite and a portion remote, or the same individuals on the team will spend a part of their work day at the customer's location and a part at another location, usually their home," said Chris Holmes, an executive with Actalent, a recruiting firm dealing primarily with engineers.

"People have gotten a lot smarter with 'must have' and 'nice to have,'" said Angie Keller, executive vice president with recruiting firm Randstad. "We saw customers and engineers make that shift. That hybrid model is what we're seeing."

Although there are exceptions, many engineers work within specific industries and will live at or close to those locations. Bureau of Labor Statistics data shows, for instance, that Texas boasts two of the highest paying positions within the energy and oil and gas industry.

The greater Detroit area, home of the "Big Three" American automakers, has the highest employment level for mechanical engineers, according to BLS. That could mean greater competition for jobs, but recruiters say demand for automotive engineers is soaring.

"We're seeing a lot within mechanical engineering, a lot of jobs being created based on the movement of the car companies offering more electric vehicle options," noted Brett Miller, senior recruiter for Actalent. "A lot of these cars are going to look the same but going to a new propulsion system is completely different. That brings up unique challenges for mechanical engineers in this space."

Many engineers scattered during the pandemic, taking advantage of remote work opportunities to move to vaca-

tion spots or less-populated regions of the country. As the economy develops, "The hot spots don't necessarily line up with where the jobs are," Keller said.

Current geographic hot spots mirror BLS data, with the Northeast, Texas, Great Lakes states, and even Colorado. Bioengineering jobs in Illinois, Michigan, and Minnesota are attractive, and energy remains an opportunity for engineers.

"There's a lot of work happening in the utility space, under the umbrella of aged infrastructure and the need to grow and maintain the power grid," Holmes said. "The material handling sector is actually growing at pretty fast rate. Freight has not slowed down, it actually has increased. These big material handling centers are continuing to [grow] and these systems are pretty complex in sorting thousands of packages per hour and getting them to the right place."

Engineers also must adapt to changing needs at the workplace. Employers are looking to staff multidisciplinary teams and that requires more knowledge and flexibility.

"There's a continued push toward using more software," Miller said. "Mechanical people in mechanical areas used to be purely mechanical. There's a need for them to understand software programs and simulation programs. A lot of engineering was done using physical prototypes. More and more, it is computer simulation."

But there are not enough digital engineers in the pipeline to meet demand. A new study by Everest Group researchers reported a supply crunch in emerging skills such as cloud engineering, artificial intelligence, machine learning, Internet of Things, cybersecurity, and virtual and augmented reality.

Globally, enterprises spent \$1.27 trillion on engineering in 2020, with more than one-third going to software. The report claims the supply crunch in talent is leading to a price war, where firms pay a premium rate for people skilled in emerging software engineering. Cloud engineering has become the biggest area of spending, with "more activity around cloud-native engineering, platformization, carve-outs of legacy products, and verticalized solutions," according to Everest.

Firms may also be getting in their own way in identifying talent. An Actalent report notes that companies are missing good engineers because of automated hiring systems that may reject an applicant because of rigid qualification parameters. When engineers are being asked to do more outside of their disciplines, that presents obstacles to hiring the right people.

"They need to focus on upskilling," said Keller in describing a recent search of a renewable energy firm where the engineering lead noted no one on his team had the needed skills when they came on board. "Why are we asking all of these candidates to have this specific experience? How can we be flexible to industries?"

Such thinking will allow engineers to move between industries, all of which are looking to hire. It is a good time to be an engineer. **ME**

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