

MONTANA

INNOVATIVE BY
NATURE



FDI INDUSTRY SPOTLIGHT SEMICONDUCTORS & QUANTUM COMPUTING

The US Economic Development Administration designated Montana Headwaters as an official Tech Hub in 2023 in recognition of the state's best-in-class expertise in photonics, optics, and remote and smart-sensing technologies as well as its quantum research. Montana's world-class educational institutions, local access to silicon compounds and critical minerals, and diversified, lower-cost energy sources have also allowed the state to position itself as a destination of choice for research and manufacturing that supports the semiconductor and quantum computing industries. In fact, Montana's two R1 research institutions—the Montana State University and the University of Montana, including Montana Technological University—serve as hubs for pure science and applied engineering at several specialized centers, as exemplified by the groundbreaking MonArk Quantum Foundry. Supported by the National Science Foundation, this cutting-edge foundry accelerates the development of quantum materials and devices. Critical location factors such as these underpin private-sector success at Montana-based firms like Applied Materials, ClassOne Technology, Lattice Materials, and Montana Instruments.



SEMICONDUCTORS & QUANTUM COMPUTING

CASE STUDY: Montana Instruments

“Making the enabling technologies for some of the most high-tech computing systems in the world requires workers, and companies are looking no further than here in Montana, to find them and be the best at what they do.”

-Luke Mauritsen, Founder and CEO of Quantum Strategix and Founder of Montana Instruments

Established in 2010, Montana Instruments champions scientific progress through temperature-control innovations that allow for the development of cutting-edge computer technologies. The firm specializes in cryostats, crucial instruments for research at the extremely low temperatures that are necessary for quantum computing.

Beginning in a modest garage, the company has grown into a prominent force shaping the future of cryogenic technologies that enable high-tech computing. By collaborating with local universities and government agencies, Montana Instruments fosters advancements in applied research and education that support a local labor force of highly skilled workers. Most recently, the firm partnered with Montana State University as part of the MonArk Quantum Foundry to accelerate the development of quantum materials and devices. In 2022, Montana Instruments was acquired by Atlas Copco, a Swedish firm.



ACQUISITION COUNTRY Sweden
MONTANA HOME Bozeman
ACQUIRED 2022

DISCOVER WHAT MANY OTHERS ALREADY HAVE ABOUT MONTANA

- Top five state for shortest average commute time
- No general sales tax, creating one of the best business tax climates in the nation
- Top ten state to start a small business
- Highly trained, loyal workforce keeps recruitment costs low
- Consistently ranked one of the best states to live in



FACTS AT A GLANCE

350,000 ft²
of semiconductor processing technology manufacturing at Applied Materials facilities near Kalispell, MT

50% of Montana's electrical generation is from renewable sources

Top 5
copper-producing state and leader in production and recycling of critical minerals



Montana State University

home to the **MonArk Quantum Foundry**, Montana Microfabrication Facility, and the Montana Nanotechnology Facility

Montana Tech

home to the Montana Tech **Nanotechnology** Laboratory and the Center for Advanced Materials Processing

University of Montana

R1 institution with annual research expenditures of over \$143 million in fields including computer science, physics, and chemistry