University Technical Assistance Program
Montana Manufacturing Extension Center

Montana’s University Center is led by Montana State University (MSU) and strives to foster the creation and retention of high-wage jobs and enhance the competitiveness of Montana manufacturing and science and technology firms in the state, nation, and globally. The consortium combines the expertise of three leading Montana University System programs: (1) University Technical Assistance Program (UTAP), an MSU center specializing in engineering and management assistance for manufacturers; (2) TechLink, an MSU center specializing in technology transfer and the commercialization of leading-edge new technology through Small Business Innovation Research (SBIR) assistance; and (3) the Montana World Trade Center (MWTC), a School of Business Administration center at the University of Montana specializing in strategic business marketing assistance. The Center is supported by the grant, the University, and program fees.

Activities
The Center provides engineering technical assistance, marketing support and SBIR assistance to Montana’s manufacturers and science and technology firms. The Center assists entrepreneurs and small businesses to grow and innovate through commercialization of technologies and process improvements, which help competitiveness and raise employee skills levels. UTAP offers the innovators advice and referrals to experts in research, development and patent protection; testing labs; marketing specialists; export assistance; and funding sources.

The World Trade Center program provides strategic industrial marketing through student teams, who research and develop a plan for Montana companies. Companies are not charged
for this assistance, but are required to invest in the marketing strategy developed by the team.

The Center provides SBIR/STTR assistance to Montana firms by educating clients about the program and about program differences among agencies; by providing technical insight into military and commercial applications of technologies and capabilities; by helping the firms develop viable commercialization strategies; and by helping them partner with both university researchers for better R&D capabilities and with other businesses and large prime contractors for improved commercialization capabilities. In addition, the Center provides proposal review with the help of a national SBIR/STTR consultant.

Leveraging
The Center leverages its long history of providing assistance to Montana firms. From that history, the Center has developed a close working relationship with the Northern Rocky Mountain EDD and the NIST program. In addition, graduate students supervised by faulty assist in a lot of client work, especially in the marketing assistance program. The Center also leverages university resources such as data sources, analytical expertise, and the labs and machine shops for assistant to clients.

Business support aids move when garage no longer cuts it

Headwaters Seat Covers LLC started in the family garage but experienced more demand than its manual fabric cutting system could handle. Its owner began exploring commercial space that would successfully accommodate a large CNC cutting table enabling automation of fabric cutting processes. The University Technical Assistance Program initially referred the business for no-cost Break Even Analysis provided by the Montana State University College of Business (MSU-COB) student program. During the next phase of expansion, the owner sought the expertise of the student engineers at UTAP for an efficient plant layout that would optimize flow and output from a new cutting table that would use about a third of the 1,200 square feet of floor space. Space for materials handling, a restroom, and an office were included in the design. Center staff reemphasized the importance of Lean Manufacturing concepts in the facility layout.

Two-pronged approach transitions technology company

A blend of technical and marketing assistance builds a strong foundation for business growth as companies move from start-up to robust role in economic development.

Along with learning to actively market its highly specialized laboratory instrument, the concepts from Lean Manufacturing were very beneficial when Montana Instruments transitioned from research and development to steady production. In a two-pronged approach, the Center’s assistance helped make the transition smoother. Technical assistance cut management hours needed to analyze, locate job problems, and expedite orders. It also cut lead times by two-thirds and reduced the cost of goods sold. UTAP’s marketing B2B service brought customer perspectives to marketing in the technology company. It also assisted with writing a selling script for cold calling, segmenting (defining and categorizing) potential customers by specialty, and characterizing the best customer. The company’s tag line, “Cold Science Made Simple,” is an outcome of UTAP/B2B marketing meetings.