The MEP National Network™ is a unique public-private partnership that delivers comprehensive, proven solutions to U.S. manufacturers, fueling growth and advancing U.S. manufacturing.

ECONOMIC IMPACT

MEP Center impacts are based on clients surveyed in FY2018

- **$66.4 Million**
  - Total Increased/Retained Sales

- **329**
  - Total Increased/Retained Jobs

- **$49.8 Million**
  - New Client Investments

- **$9.1 Million**
  - Cost Savings

MONTANA MANUFACTURING EXTENSION CENTER (MMEC)

The Montana Manufacturing Extension Center (MMEC) is a statewide manufacturing outreach and assistance center focused on growing Montana’s economy by helping manufacturers succeed in a nationally and globally competitive environment. Part of the NIST MEP National Network, we have access to an extensive network of resources throughout Montana and the U.S.

In today’s rapidly changing business environment, MMEC provides Montana manufacturers with hands-on assistance plus the knowledge and resources needed for growth, innovation and profit enhancement. Staffed by proven professionals with extensive manufacturing and business experience in a variety of industries, our team can help you achieve positive, measurable, and sustainable growth for your top and bottom line. Our areas of expertise include product and market development, strategic and exit planning, workforce/talent development, business financials, food safety and processes, quality management, lean manufacturing, supply chain optimization, and many others.

CONTACT US

PO Box 174255, Montana State University
2310 University Way Bldg 2, Ste 1
Bozeman, MT 59717-4255
(406)994-3812
www.montana.edu/mmec
MINING PROFITS WITH LEAN

ABOUT H-E PARTS INTERNATIONAL, H-E Parts International is a leading independent supplier of parts, remanufactured components, and equipment to the global mining, quarrying, heavy construction, and energy sectors. The Atlanta-based company has a Mining Solutions division in Billings, Montana, with a team of over 70 employees. The Mining Solutions technicians rebuild worn-out mechanical, hydraulic, and other components for a variety of mining trucks, some capable of carrying up to four hundred tons of ore.

THE CHALLENGE. Due to the size and weight of the products and components, simply moving a part across the Mining Solutions facility can take a lot of effort. “This is about 18,000 pounds,” said Shane Pence, the company’s North American Strategic Projects manager, as he stood next to a seven-foot-tall wheel unit in June. That’s one reason why Pence and other H-E Parts leaders sought help from the Montana Manufacturing Extension Center (MMEC), part of the MEP National Network, to improve flow and productivity and create a safer workplace.

MEP CENTER’S ROLE. After listening to their needs, MMEC’s Senior Business Advisor Alistair Stewart hosted an eight-hour class for H-E Parts on Lean Manufacturing, a conceptual framework for improving efficiency. Afterward, Pence and eight other H-E Parts employees decided to attend a 10-week course taught by Stewart as part of the Society of Manufacturing Engineers’ Lean Bronze Program, in which participants apply the principles of Lean Manufacturing to their own businesses.

The course helped H-E Parts to inventory its processes, find the ones that add value, and cut out the rest. The company made changes to its production facility area layouts in order to streamline WIP (work in process), and improved its machining, welding, and mechanical practices to eliminate unnecessary work. It also invested in some equipment upgrades.

“We’ve made those (investments) back ten-fold in a month,” said Mike T.K. Hall, who supervises the crews that use CNC machines to restore old parts as well as produce new ones. The machinists like the new system, too, because their work flows more naturally. The Mining Services division now has the capacity to move more product with the same number of people, which has boosted morale. “It’s an inspirational story,” Stewart said. “Lean is all about engaging people, and once engaged, they are unstoppable.”

"The return on investment for us has been tremendous, and we're continuing to partner with MMEC to improve our overall competitiveness and ensure long-term success.”

-Shane Pence, North American Strategic Projects Manager