

## CALIFORNIA MANUFACTURING TECHNOLOGY CONSULTING (CMTC)

CMTC, a private non-profit corporation, was established in 1992 to provide consulting services to small and medium-sized manufacturers in California. In 2016, The U.S. Commerce Department's National Institute of Standards and Technology (NIST) awarded CMTC a five-year agreement to be California's Manufacturing Extension Partnership (MEP) Center. This agreement makes CMTC the lead organization for delivering services to small and medium-sized manufacturers in California with support of "California's Manufacturing Network" partners throughout the state.

Through its collaboration with these partners, CMTC will enhance operational performance, new product development, market expansion and technology adoption for manufacturers in both urban and rural centers. CMTC is part of the MEP National Network™ which is a unique public-private partnership that delivers comprehensive, proven solutions to U.S. manufacturers, fueling growth and advancing U.S. manufacturing. For more information visit [www.cmtc.com](http://www.cmtc.com).

## ECONOMIC IMPACT

MEP Center impacts are based on clients surveyed in FY2023



**\$580.5 Million**

Total Increased/Retained Sales



**7,574**

Total Increased/Retained Jobs



**\$359.3 Million**

New Client Investments



**\$121.2 Million**

Cost Savings

## CONTACT US



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# CMTC

## PILOT PROJECT PAYS OFF

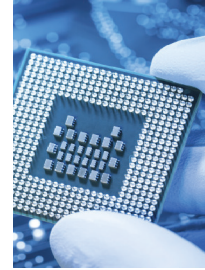
**ABOUT MINI MICRO STENCIL.** Mini Micro Stencil was started in 1994 by Gary Miller and is a veteran-owned, small operation in San Marcos, California. The company provides printed circuit board (PCB) and surface mount technology (SMT) tools as well as contract rework services for the military, aerospace, medical, commercial electronics, and transportation industries. Mini Micro Stencil's contract rework is a major portion of the company's revenues and is growing due to increasing military contracts.

**THE CHALLENGE.** Mini Micro Stencil had a strong expertise in 2D Computer Aided Design (CAD) work, allowing them to perform some design work in-house. However, for 3D design work, Gary and his team sought outside resources. Unfortunately, the lead time for outside contractors to perform this work was several days, and Gary had no control over the timing or quality of the work. Gary realized an opportunity to increase profitability and quality control as well as reduce customer lead times by improving his team's internal 3D design expertise, enabling them to expand their additive manufacturing proficiency for producing tooling needed for their rework services. Mini Micro Stencil turned to CMTC, part of the MEP National Network™, for help.

**MEP CENTER'S ROLE.** In April 2022, Mini Micro Stencil engaged CMTC's Advanced Manufacturing Technology Services (AMTS) program to help its employees become more proficient in using 3D design software and additive manufacturing. CMTC instructors provided classroom instruction on the use of the OnShape program and ensured practical applications of the software by offering opportunities for students to design fixtures. In addition, CMTC provided Design for Additive Manufacturing training to help Mini Micro Stencil understand how to utilize advanced manufacturing tools such as 3D printing to produce tooling and products in-house in less time than traditional manufacturing or outsourced manufacturing. Finally, CMTC provided an evaluation of the financial impact and improvement opportunities by incorporating advanced manufacturing into the company's operations.

**"Our contractors used to take several days to do a 3D design, and now we can do the same work in less than an hour. This project allowed us to do more of our work in-house, saving time and money and making us more competitive."**

-Gary Miller, Owner



## RESULTS



1 new job expected



\$10,000 expected increase in revenue



\$10,000 in retained sales



\$10,000 in new products & processes



\$2,000 in workforce development, \$2,500 expanded advanced manufacturing capabilities

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