



Central Industrial Manufacturing Reduces Programming Time by 50% with CAM Software

The Organization

Michigan-based **Central Industrial Manufacturing** (CIM) is a precision computerized numerical control (CNC) machine shop that specializes in manufacturing complex components via turning, milling, electrical discharge machining, 3D printing, and grinding. They attribute their longevity, which spans more than 55 years, to a highly skilled workforce and cutting-edge technologies in machines, tooling, and inspection equipment that enable them to deliver high-quality products on time and at competitive prices.



The Challenge

In order to build the business with existing and new customers, the challenge was to find a cost-effective computer aided manufacturing (CAM) solution that would ensure accurate part files were used in manufacturing and help them reduce programming time and meet delivery timelines. CIM needed to:

1. Transform their part design and manufacturing programming from manual to digital
2. Expand their capabilities to include more complex parts
3. Decrease the time spent getting machines programmed and running

CIM had one seat of Autodesk FeatureCAM software which had been recently acquired, that they were not using to its full potential.

"From what we understood about FeatureCAM, it could help us take our manufacturing forward, but we needed to make sure it was the right solution for us," said Howard Walls, owner at CIM. "We also needed to work with a company that could train our machinists on how to use the software, keep us current on software updates, let us know about new features relevant to our business, and provide support as needed."

The Solution

While looking into how to find a company that could deliver everything CIM needed, Howard reached out to a colleague. "I told him that in addition to determining the right technology solutions and providing training and support, I needed a company that would be responsive, so my team could focus on meeting our customers' needs. He highly recommended that I contact IMAGINIT. I'm so happy that I did."

Howard and Abby Rice, office manager at CIM, met with CAM specialists from IMAGINiT, who learned about CIM's existing processes, their team members' familiarity with digital technologies, and the company's plans for continued growth. With a full understanding, IMAGINiT recommended moving to Autodesk Fusion 360 which is a 3D CAD, CAM, CAE, and PCB software platform that connects the entire product development process into one cloud-based software. They developed a solution that included:

1. The addition of a seat of Autodesk Fusion 360 with FeatureCAM software, so machinists can program more complex 4 and 5-axis milling
2. Standardized on Autodesk Fusion 360 CAM software for efficient and accurate programming of 3-axis milling and turning
3. Customization and implementation of post processors for each machine to ensure the programs run optimally
4. Instructor-led, virtual, dedicated training for all six machinists
5. Ongoing phone and email support, so the team can get questions answered quickly



The Results

"We are certain we have the right solution," said Abby. "The IMAGINiT team listened to us, asked questions that demonstrated their knowledge of the technologies available, and showed us how every piece of their recommendation addressed our challenges."

Howard said, "By moving from manual processes to automation and getting our team the skills they need to program the machines faster and for more complex parts, we are positioned to expand our capabilities, save time, and save money."

He continued, "By standardizing on Fusion 360 CAM, we now have everyone utilizing best industry practices and unified processes, **reducing our programming time by 50%, reducing errors by 15%, and improving our delivery times by 10%**. All of this is leading to us to the goal of improving customer satisfaction."

[Contact us](#) to learn how IMAGINiT can help your organization leverage the latest manufacturing technologies to advance your business.

Solutions Beyond Software

IMAGINiT Technologies, a division of Rand Worldwide, helps architects and engineers become more proficient in the use of 3D technologies to design, develop and manage complex engineering projects faster and more cost-effectively.