ILLINOIS MANUFACTURING EXCELLENCE CENTER (IMEC)

IMEC is a team of improvement specialists and technicians dedicated to providing organizations in Illinois with the tools and techniques to create sustainable competitive futures. The experienced hands-on team at IMEC works closely with its clients to plan critical business improvements in the areas of Leadership, Strategy, Customer, Operations, and Workforce.

With more than 50 full-time staff and partners positioned statewide, IMEC delivers the local expertise to not only plan and strategize, but to implement and evaluate the effectiveness of client improvements. In fact, IMEC assists more than 500 companies each year with successful business improvement projects. As a result, IMEC has demonstrated a return on investment that exceeds 19:1. This is made possible as organizations become more effective and efficient - and together with IMEC - excel toward enterprise excellence.
CHICAGO MANUFACTURER LEVERAGES ILLINOIS MANUFACTURING INNOVATION VOUCHER TO DEVELOP AND LAUNCH A GROUND-BREAKING NEW PRODUCT LOCALLY AND INTERNATIONALLY.

ABOUT PEDALCELL. Staying charged is a common problem among cyclists, especially bikepackers (people who go on remote bike trips for days or weeks at a time). When PedalCell co-founders Adam Hokin and Vishaal Mali launched the company in 2015, a major part of their mission was to encourage sustainability by “getting more butts on bikes and less in cars.” The two observed that a barrier for bicycle adoption was access to power for charging mobile devices. Unlike in an office, home, or car, access to a continuous and stable power source is limited for cyclists. Located in Chicago with a team of 5 employees, PedalCell now manufactures a unique, patented power source for cyclists. The PedalCell device uses the rotation of the front wheel to power smartphones, lights, GPS, and other USB devices.

THE CHALLENGE. The larger part of the bikepacking market is located in Europe, Canada, and Australia. With COVID-19 added to the mix bike sales in this segment grew by 144% due to more people seeking safe and fun ways to exercise. With such an excellent market opportunity, the PedalCell team needed to go through steps to optimize their processes for mass production and ensure their intellectual property was protected. This meant optimizing cost of goods sold, sourcing suppliers, tasking new components to make sure they are scalable, and filing more patents, but the PedalCell team needed help. PedalCell learned about the IMEC Illinois Manufacturing Innovation Voucher program and applied in January 2020 for a multifaceted project centered around intellectual property and product development. IMEC is the Illinois MEP Center and part of the MEP National Network™.

MEP CENTER’S ROLE. For Hokin and his team, the IMEC solution came at the right time. Much to the team’s satisfaction, they were able to secure the capital needed for three additional patents, personnel to test equipment and fixtures, and ultimately manufacture and launch the product. “IMEC allowed us to move forward in our decision and made our company more appealing to investors. We have raised capital before and had one patent pending. Since working with IMEC, we now have four patents with one granted and three others pending. The program catalyzed our success,” said Hokin.

“When you have an electromechanical product, you need to ensure that your systems integration is covered- IMEC allowed us to do that by assisting with product development and protecting our intellectual property. The work was a pivotal component of our launch strategy.”

-Adam Hokin, CO-Founder

RESULTS

- 5 jobs created or retained
- $1,700,000 in new and retained sales
- $570,000 in anticipated inventory savings
- $298,600 in labor cost savings
- $23,000 in reduced capital spending