

ACCELERATING PRODUCTION WITH ADDITIVE MANUFACTURING

ABOUT SEAT CONCEPTS. Seat Concepts, located in Caldwell, Idaho, develops and manufactures seat foam and cover products for dual-sport, adventure, and street motorcycles at an affordable price. Seat Concepts employs 50, offering seats and seat kits, with each seat model specially designed to increase comfort without compromising rideability. The more aggressive the bike, the more aggressive the seat kit, which can be either self or professionally installed. They supply a full line of OEM replacement seats designed to match the OEM specs of width and height but incorporate their high-quality covers and adjustable density foam.

THE CHALLENGE. Seat Concepts' ownership aimed to explore the potential of integrating industrial 3D printing technology into their production process. The primary focus was on automating the creation of seat molds and developing a streamlined method for scanning existing foams or molds to accelerate the replication process. Ownership reached out to the engineering team at TechHelp, a member of the MEP National Network™, to help pinpoint opportunities for integrating 3D printing within Seat Concepts' manufacturing workflow.

MEP CENTER'S ROLE. The primary initiative aimed at automating the production of custom motorcycle seats by integrating cutting-edge 3D scanning technology and an industrial-grade 3D printer to fabricate molds for both current and legacy seat designs. This forward-thinking approach yielded remarkable results, with turnaround times improved by over 200%, marking a significant leap in efficiency. Leveraging state-of-the-art additive manufacturing capabilities, high-quality molds with exceptional precision were produced, revolutionizing the manufacturing process. By automating mold creation through 3D scanning and printing, production workflows were streamlined, eliminating the need for manual mold fabrication. This breakthrough resulted in a more agile and responsive manufacturing process, enabling Seat Concepts to meet customer demands with unparalleled speed and efficiency.

In addition to the company's engineering endeavors, TechHelp graphic designers significantly impacted Seat Concepts' digital presence. Through strategic interventions on social media and the website, Seat Concepts' branding and engagement were enhanced, ensuring a cohesive and captivating online experience for their audience. This comprehensive approach not only transformed manufacturing processes but also elevated Seat Concepts' brand visibility and customer interaction, reinforcing their commitment to excellence and innovation across all facets of the project.

"Aligning ourselves with TechHelp has been one of the best decisions we've made as an organization simply because they helped us change our most vital process (moving away from handmade fiberglass molds to 3D printing molds) for the better. I'm not sure where we'd be right now if it weren't for working with Tech Help. We are definitely looking forward to working with Tech Help more in the future."

-Chad Zulian, Owner

RESULTS



40% increase in jobs



80% increase in cost savings



20% increase in sales revenue



Hired the first TechHelp intern as an industry partner benefit

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TECHHELP
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