

Situation

As a custom job shop serving high-precision markets, Header Die and Tool doesn't mass produce uniform parts, instead, the company manufactures a wide variety of specialized tools with lower volumes. This environment presents unique challenges when applying Lean principles, which are often associated with high-volume manufacturing.

The leadership team at Header Die and Tool saw the value Lean could bring in reducing waste, standardizing work, and boosting productivity. Their journey with Lean began as early as 2010, when the entire team participated in Lean 101 training conducted off-site, led by IMEC. It was one of the first dedicated learning events for the organization, and it quickly became a cornerstone of their improvement efforts.

Over the years, the company put every employee through Lean simulation, continuous improvement skill development training, and even sponsored sessions at public events, inviting vendors and customers to join. However, as the workforce evolved, so did some of the early lessons learned. Knowing the importance of a trained workforce, the company decided to reinvigorate its Lean journey by bringing IMEC back for two educational and skill-building workshops focused on continuous improvement.

Solution

IMEC delivered two full-day Lean Manufacturing Overview with Simulation workshops for Header Die employees. Employees developed skills on how to identify improvement opportunities and also learned how to implement the tools needed to help make needed changes. These interactive sessions used a hands-on, simulated production environment to teach and reinforce Lean principles. Each participant went through three simulated production "shifts," applying Lean tools in real time and learning by doing.

Long-Term Impact

One major result from early Lean efforts was a custom-built collet board, designed by the team to organize incremental-size tooling that had previously been stored haphazardly across the shop. What once caused daily frustration and wasted time is now a streamlined, clearly labeled system that helps machinists find what they need in seconds. That solution, still in place today, was born from the ideas generated during the original 5S projects supported by IMEC and serves as a lasting reminder of the power of employee-led improvement.

The most recent Lean 101 simulation reinforced and revitalized a culture of continuous improvement, helping the entire team, both long-time employees and newer staff, build a shared understanding of Lean principles. By putting everyone through the same hands-on experience, Header Die and Tool established a common foundation for communication, efficiency, and problem-solving. This alignment supports the company's ability to stay competitive in a high-precision, low-volume manufacturing environment, while also preparing a new generation of machinists to carry forward the mindset of thoughtful, lean-driven work.

Results

- **\$200,000** in new sales
- **\$60,000** in total cost savings
- **\$10,000** in other cost reductions
- **\$5000** invested in workforce development
- **4 jobs** created

"Lean 101 has been one of the most impactful initiatives we've ever implemented. It puts everyone, whether new or seasoned, on the same page, builds common ground, and provides a shared experience that sticks. Even years later, team members reference the simulation to make sense of what we're doing and how we can continue to improve."

Lucas Derry, President, Header Die and Tool, Inc.