

CASE STUDY

A Fabrication Journey with a Torchmate CNC Plasma Cutting Table

CUTTING-EDGE CAPABILITIES TRANSFORM A PASSION INTO A BUSINESS

INTRODUCTION

Mata Metal Works was established in 2021. It was built from the ground up and needed a versatile piece of equipment that could be used to create all of the projects Mata had envisioned. Mata specializes in fabricating custom art pieces, signs, brackets and custom parts for side by sides and other vehicles. This case study explores how Torchmate®, leveraging CNC plasma cutting technology and proprietary TM CAD software, delivered exceptional results, constructing Mata Metal Works' manufacturing efficiency, product quality, and overall expansion capabilities.

About Mata Metal Works

Shelley, the owner of Mata Metal Works, has a unique background that combines a passion for creativity with a strong family tradition in welding and HVAC. Located in New River, Arizona, just north of Phoenix, Shelley transitioned from a 20-year career in the medical field, where she spent the last decade treating cancer patients. Her husband, who is an HVAC professional, and her father and brother, both welders by trade, inspired her to explore the world of metal fabrication. Despite having no prior fabrication experience, Shelley and her husband decided to invest in a Torchmate 4510 CNC plasma cutting machine in late 2021, transforming their three-car garage into a bustling workshop.

For more information, visit <https://www.facebook.com/profile.php?id=100091230643749>

THE CHALLENGE

- » **Lack of Fabrication Experience:** Shelley had no prior fabrication experience when starting Mata Metal Works. Finding reliable and easy-to-use equipment was crucial.
- » **Cost Efficiency:** Investing in high-quality equipment was essential to avoid long-term costs associated with off-brand products.
- » **Speed to Market:** Quick production timelines were necessary to meet customer demands and stay competitive.
- » **Innovative Solutions:** Advanced manufacturing technology was needed to tackle these requirements..

Interview with Mata Metal Works conducted March 27, 2025

WHY MATA METAL WORKS CHOSE TORCHMATE

Mata Metal Works evaluated several suppliers, ultimately selecting Torchmate for its:

- » **Proprietary Technology:** The Torchmate CAD software is proprietary and unparalleled by competitors. Mata Metal Works enjoys utilizing the nesting and scan and trace features.
- » **Ease of Use :** Torchmate tables are designed so anyone can easily learn to operate the machine. Minimal CNC and CAD experience is needed which allows for a fast learning curve. Shelley has become a near expert operator by utilizing Torchmate's online training videos.
- » **Expertise:** Lincoln Electric® has over 125 years of experience manufacturing a wide range of welding equipment and industry-leading expertise in complex 5-axis CNC machining, fabrication and quality. Mata Metal Works uses and trusts Lincoln Electric welding equipment.
- » **Customer Support:** Torchmate employs a team of professional technical support experts who are available via phone all weekdays to help Torchmate customers with any Torchmate table questions that may arise.

HOW THE TORCHMATE TABLE PROVIDED A SOLUTION

Shelley started using the Torchmate table to create artistic pieces and custom brackets, quickly seeing the business take shape. The Torchmate table was already proving valuable for Mata Metal Works. As word spread, customers began making requests for custom side-by-side parts and other unique projects. Shelley effortlessly tackled these requests with her Torchmate table, and soon, customers wanted more—powder-coated pieces, engraved designs, and more. Over time, Mata Metal Works expanded its capabilities to include various fabrication techniques.

Using the Torchmate CAD 9 software, Mata can scan drawn parts and cut them with precision accuracy. They can then weld any necessary pieces using their Lincoln Electric POWER MIG® 256 and Square Wave® Tig 200 welders. Once welded, they have the ability to powder coat and even engrave projects with the Torchmate Platemarker attachment.

The results speak for themselves: by purchasing a Torchmate table, Mata Metal Works was able to start its business from scratch. The business has independence from outside vendors and is completing projects Shelley had only dreamed of when she first started the company. Her journey from a novice to a successful fabricator can be an inspiration to many future entrepreneurs.



THE RESULTS

"Three years later, Mata Metal Works continues to thrive. They use their Torchmate 4510 with a plate marker attachment, enhancing their cutting capabilities and quality. "We use our Torchmate all the time; we cut everything from artistic pieces to custom brackets and trailing arms for side-by-sides," Shelley said.

Having the Torchmate technology in-house has had a positive impact on profits, allowing Mata Metal Works to redirect funds toward purchasing more equipment and even planning to build a dedicated shop in the backyard. The Torchmate 4510 has become an essential part of the manufacturing process. It's helped Shelley expand her capabilities and maintain the quality and precision that Mata Metal Works customers expect. The success of Mata Metal Works is a testament to Shelley's determination and the power of investing in the right tools.



“I would one hundred percent recommend the Lincoln Electric Torchmate technology. The quality of the system, the tech support, the ease-of-use, the software and the whole package deal is great.”

Shelley Mata

Owner

Mata Metal Works

 **DECREASED**
LEAD TIMES BY BRINGING CUTTING IN-
HOUSE AND AUTOMATING

 **INCREASED**
PROJECT CAPABILITIES

FACING SIMILAR HIRING AND MANUFACTURING CHALLENGES?

With advanced manufacturing technology, some of the largest equipment in North America, comprehensive in-house capabilities, and over a century of expertise, Lincoln Electric is well-equipped to tailor innovative, cost-effective solutions for your complex needs. [Contact us](#) today to learn more about our capabilities and how we can help you streamline supply chain operations and eliminate pain points, achieving exceptional results.



About Lincoln Electric

Lincoln Electric is the world leader in the engineering, design, and manufacturing of advanced arc welding solutions, automated joining, assembly and cutting systems, plasma and oxy-fuel cutting equipment, and has a leading global position in brazing and soldering alloys. Lincoln is recognized as the Welding Expert™ for its leading materials science, software development, automation engineering, and application expertise, which advance customers' fabrication capabilities to help them build a better world. Headquartered in Cleveland, Ohio, Lincoln has 71 manufacturing locations in 20 countries and a worldwide network of distributors and sales offices serving customers in over 160 countries. For more information about Lincoln Electric and its products and services, visit the Company's website at <https://www.lincolnelectric.com>.



CUSTOMER ASSISTANCE POLICY

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