CUSTOMER CASE STUDY

How Bridge Metals Went from Fabricator to Precision Manufacturer

When Amir launched manufacturing operations at Bridge Metals, GCODE-CNC came in and built the foundation that turned a growing shop into a precision operation.

COMPANY
Bridge Metals

LOCATION
Ontario, CA

INDUSTRY
Precision Metal Fabrication

PRIMARY WORK
Laser cutting, welding & custom fabrication

~$125K	Precision	Full Cycle
Estimated annual savings in gas costs after recalibration	Elevated from basic fabricator to certified-quality manufacturer	Every stage of manufacturing optimized, from machines to people

THE OPPORTUNITY

A business vision, a new shop, and room to grow

Bridge Metals was built around a clear idea: bridge the gap between manufacturer and customer. Amir came from a business background, and when the opportunity arose to bring manufacturing in-house, he took it. With the operation up and running, Amir saw the potential to take things further and wanted a partner who could help him get there.

The shop was producing work and getting parts out the door. But Amir recognized there was more on the table: more efficiency, tighter processes, consistent training, and the kind of machine optimization that turns a good shop into a great one. He also wanted to make sure the foundation was built right through safety standards, documentation, and the systems that support long-term growth. Amir knew the ceiling was higher than where they were. He needed someone who could see the full picture and help him reach it.

THE SOLUTION

Referred to GCODE-CNC — someone who could see around corners

Amir heard about Ivan at GCODE-CNC through a referral. What stood out immediately wasn't just that Ivan could address the goals Amir had in mind, it was that Ivan could see opportunities Amir hadn't thought to look for yet. He could foresee what the shop needed before being asked.

Ivan started by understanding Bridge Metals at a cost level, breaking down exactly what the shop was spending per hour on labor, consumables, and machine time. From there, he worked through every stage of the manufacturing cycle. He went through machine calibration, gas flow, electrical setup, workplace culture, worker training, and quality standards. He wasn't brought in to fix one thing. He built the foundation for what came next.

THE ONGOING RELATIONSHIP

When something needed attention, Ivan was already ahead of it

The machine setup and electrical. One of Ivan's first priorities was making sure the physical setup of the shop matched the standards of a precision operation. He secured fiber cables into proper raceways and upgraded the electrical cabinet with correctly rated amp breakers, ensuring the machines were protected for the long haul and the workspace met the standards.

The laser recalibration. The laser was running at 350 inches per minute with gas consumption that had never been benchmarked against an optimized baseline. Ivan built out distinct parameter sets for multiple nozzle applications using nitrogen, dialed in the cut speed to around 300 IPM, and calibrated the gas flow to match the actual needs of each job. This gave the team a clear standard to work from going forward. The result wasn't a slower machine. It was a smarter one. Bridge Metals now produces cleaner cuts, reduces consumable waste, and saves approximately $500 per day in gas costs, around $125,000 a year.

The weld certifications. To unlock higher-value contracts, Bridge Metals needed welders trained to certified standards. Ivan worked with the team directly, and his approach went beyond technique. He reinforced a mindset that elite shops operate by. It takes exactly as long to produce a great weld as a mediocre one. The time is the same, the difference is the standard you hold yourself to. That message, combined with hands-on mentorship, elevated both the craft and the culture. Parts started getting accepted by clients who demand precision, and contracts that hadn't been available before

were suddenly within reach.

The intangibles. Beyond the numbers, Ivan brought something harder to measure: years of floor-level knowledge about machine behavior, failure patterns, safety configurations, and optimal setups. He built documentation, standardized processes, and training protocols from scratch. The workers weren't just learning procedures they were developing the skill and confidence to handle whatever gets thrown at them.

RESULTS

A shop that runs like a precision manufacturer

- ~$125,000 estimated annual savings from laser recalibration and nitrogen gas optimization
- Cut quality improved while reducing consumable waste — better output, lower cost per part
- Workforce trained to meet certified weld standards, opening higher-value contracts that were out of reach
- Machine setup upgraded: fiber cables secured in raceways, electrical cabinet rebuilt with properly rated breakers
- Shop-wide documentation, standardized processes, and training protocols built from scratch
- Full manufacturing cycle optimized — machines, consumables, culture, and safety

"The biggest thing GCODE-CNC has done for us is bring operational efficiency and real cost savings. But beyond that, Ivan developed our workers — he gave them the training, the confidence, and the skills to perform at a level we couldn't reach before. We went from being a fabrication unit to a precision manufacturer."

— Amir Zia, Owner, Bridge Metals