



1987 MACHINERY
Sheet Metal Machinery & Service

CASE STUDY

How Kogok Corporation Achieved a 300% Increase In Productivity



CLIENT INDUSTRY

Commercial HVAC Ductwork Fabrication



OUR EXPERTISE

Metalworking Machinery & Support Services



KEY SOLUTION

1987 Machinery Custom Laser Cutting Table



KEY CHALLENGES

- ✗ Inefficient Plasma Cutting Process
- ✗ Excessive Grinding and Weld Prep Time
- ✗ Poor Air Quality and Shop Cleanliness

KEY RESULTS

- ✓ Welding prep hours eliminated
- ✓ Cutting speeds increased by 300%
- ✓ Clean shop environment with reduced particulates
- ✓ Near-instant service and support response

CONTEXT

Kogok Corporation, founded in 1995, manufactures and installs commercial HVAC ductwork across the Mid-Atlantic. With five facilities and a nonstop pipeline of projects, the company fabricates everything it installs and supplements demand with outside contractors.

As production scaled, reliance on plasma cutting tables created bottlenecks. Plasma's arc-based process generated rough edges requiring extensive grinding before welding, while smoke and airborne particulates degraded shop conditions. Despite significant ventilation efforts, the environment became harder to manage, and welders spent too much time on prep rather than production.

Kogok needed a cutting solution that could accelerate throughput, reduce manual prep work, and improve shop air quality without sacrificing precision.

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Redefine your fabrication process with 1987 Machinery's laser cutting solutions. Learn more at 1987machinery.com.



CHALLENGES

Welding Prep Inefficiencies

Plasma cutting left jagged edges that demanded hours of grinding. Each weld joint required extra labor before fabrication could proceed, slowing throughput and reducing efficiency.

Shop Conditions

Plasma's smoke and particulates overwhelmed the shop atmosphere, accumulating on walls and floors while burdening ventilation systems. Air quality suffered, affecting staff working nearby.

Production Bottlenecks

Plasma tables operated slower than the company's installation pace demanded. Parts queued at the cutting station, forcing welders and fitters to wait on upstream processes and delaying ductwork output.

RESULTS

Improved Weld Readiness

The precision-cut parts allow Kogok to incorporate state-of-the-art technology such as handheld laser welding, which they weren't able to accomplish with plasma-cut parts.

Accelerated Production

The new laser tables cut so quickly that parts were ready faster than operators could clear them. Kogok adjusted workflows, adding secondary staff to label and remove parts in real time, effectively converting the cutting station from a bottleneck to a throughput accelerator.

Cleaner Work Environment

Airborne smoke and particulates dropped dramatically. Test runs even without ventilation showed negligible smoke — a stark contrast to plasma operations. This improvement created a safer, cleaner shop and reduced facility maintenance.

Minimal Downtime With Responsive Support

Kogok has been running its laser table for three months. As new operators have been introduced to the table or any assistance was needed, 1987 Machinery responded within minutes by phone, text, or email — even showing up in person when necessary. This responsiveness has minimized downtime and preserved revenue continuity.

SOLUTIONS

1987 Machinery, led by Andrew Hess and Mike Hardesty, had worked with Kogok's operations team for over a decade. Leveraging that relationship, they proposed a laser cutting solution that re-engineered conventional designs.

Custom Laser Platform

1987 Machinery's table eliminated the bulky gantry system found on competitive tables prone to vibration and drag, replacing them with a streamlined frame that cut faster and with greater stability. A patent-pending shroud ensured operator safety without compromising efficiency.

Autofocus Integration

The system introduced automatic focusing across gauge changes, removing operator guesswork and ensuring consistent cuts across stainless and galvanized duct components. This reduced human error while simplifying daily operation.

Hands-on Installation and Training

Andrew and Mike handled every step of installation: compressor and chiller hookups, calibration for Kogok's most common gauges, and on-site operator training. Their approach ensured that the equipment was fully production-ready from day one.



OVERALL IMPACT

Kogok now operates one laser cutting table and has asked 1987 Machinery to return to retrofit a competitor's table to double the cutting speed. The transition reshaped fabrication workflows, accelerated throughput, and improved both operator experience and environmental conditions.

Most significantly, the partnership demonstrated that equipment ROI extends beyond specs. Support and responsiveness proved just as valuable as laser speed or wattage output. The relationship with 1987 Machinery ensured Kogok had not only the right machine but also a trusted partner behind it.

SUCCESS

Kogok Corporation's adoption of 1987 Machinery's laser cutting systems eliminated welding prep bottlenecks, created a cleaner shop environment, and increased cutting speeds by 300%. By pairing technical innovation with direct service support, 1987 Machinery delivered a solution that continues to scale with Kogok's operations.