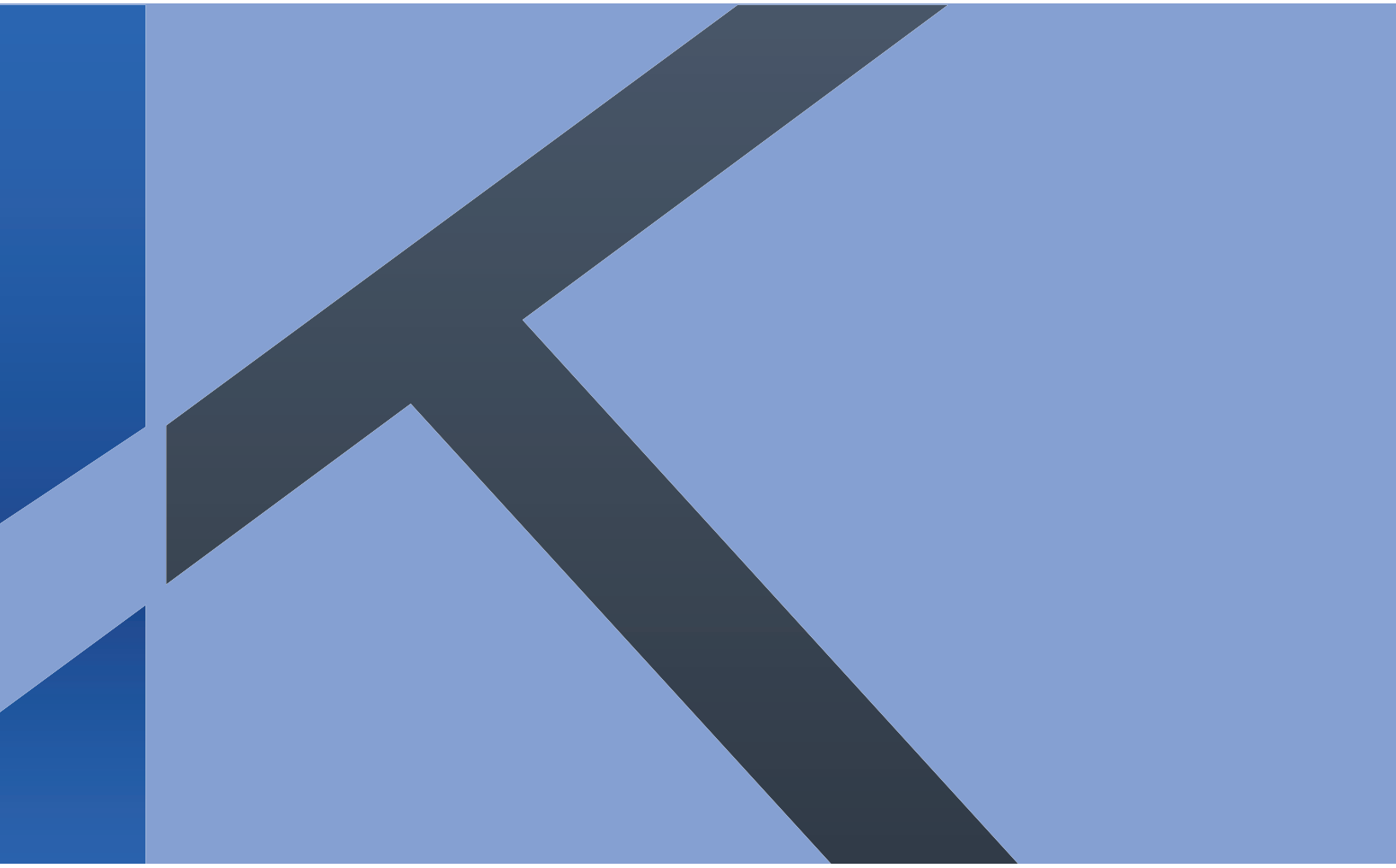
Capabilities
GUIDE



KINETIC
TECHNOLOGIES

Kinetic Technologies, LLC
500 Norwood Drive, Algona, IA 50511

kinetictechllc.com

From Our Founder

Mark Barglof
Owner of Kinetic Technologies

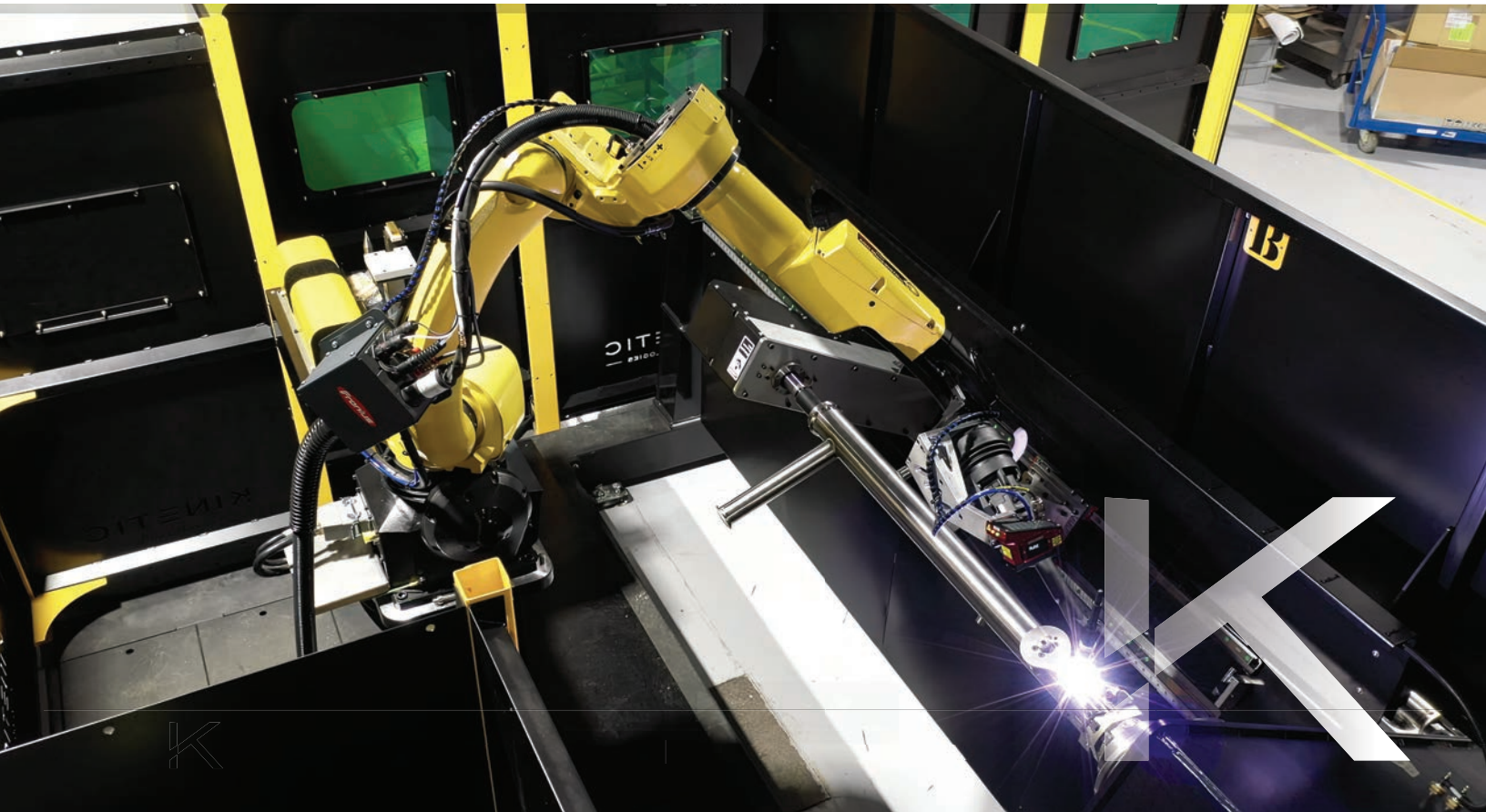
At Kinetic Technologies, we believe true innovation happens when people and technology work together.

That's why we go beyond building automation systems—we partner with you to overcome production challenges, streamline processes, and accelerate growth.

We approach every project as an extension of your team. By taking the time to understand your operations, your goals, and your challenges, we design solutions that fit your processes. Whether it's a custom robotic welding cell, an advanced fixture, or a new approach to automation, our mission is to ensure your success.

We are engineers, problem solvers, and collaborators at heart. When you choose Kinetic, you're not purchasing a product-you're gaining a partner who is just as invested in your outcomes as you are.

Thank you for considering us as your trusted solutions provider. We look forward to helping your team build, innovate, and thrive.



Our Values

Integrity Beyond Reproach

We never lie, cheat, or steal—nor tolerate anyone who does.

Quality in All Things

Our products and our actions reflect our commitment to excellence.

Servant Leadership

We succeed by helping our employees, customers, and community succeed.

Dream Big, Achieve Greatness

When we serve with humility and act with integrity, there are no limits to what we can achieve together.

Our Mission

At Kinetic Technologies, our purpose goes far beyond building automation systems. We are driven by a desire to serve our customers, employees, and community through integrity, quality, and innovation. Our mission, vision, and values reflect who we are at our core—and guide every solution we design, every partnership we build, and every challenge we help our customers overcome.

The Kinetic Mission

We build lasting partnerships by delivering automation solutions that solve production, quality, and workforce challenges.

The Kinetic Vision

We help manufacturers reach new levels of productivity and quality through robotic automation—grounded in integrity, driven by quality, and guided by a spirit of service.

Integrity
Quality
Leadership
Dream Big

Who We Are

Kinetic Technologies is a team of engineers, builders, and problem-solvers dedicated to helping manufacturers thrive.

We are unconventional thinkers who draw on diverse industry experience with a hands-on approach. Our engineers don't just design-they build. More than a supplier, we serve as an extension of your team—combining technical expertise with a collaborative approach. Our goal is simple: to deliver innovative solutions that improve quality, boost productivity, and create lasting value for our customers.

KINETIC FAST FACTS

ISO 9001:2015 Certified
Proven commitment to quality

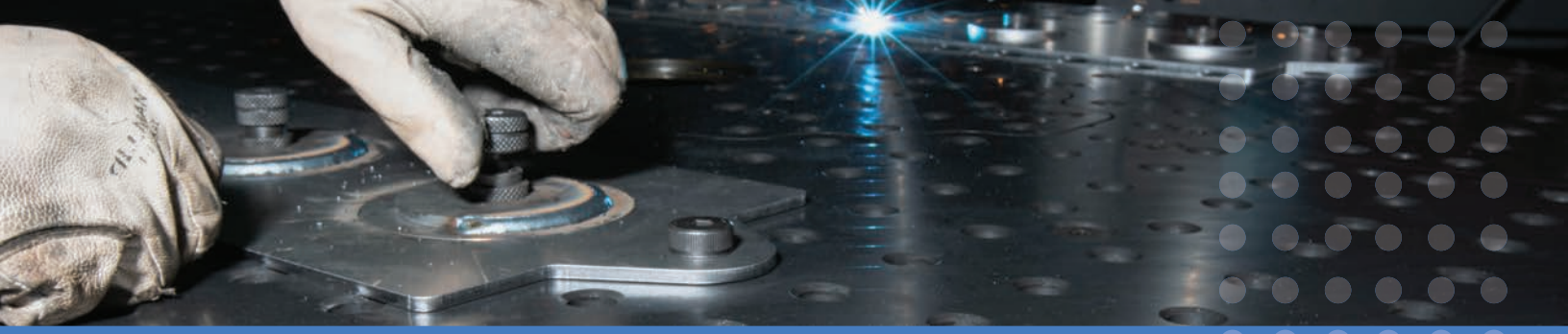
Experienced Team
Engineers, welders & automation specialists

Extension of Your Team
Collaborative, hands-on approach

Custom Solutions
Robotic welding cells, fixtures, and tooling

Customer Focused
Driving productivity, quality & ROI

Turnkey Capabilities
From concept and design to build, installation, and support



How We Work

At every stage, Kinetic Technologies is a true solutions provider. We focus on problem solving - not product selling. Our role is to ensure that the technology selected for your project is the very best solution-customized to solve the challenges you face.

» **DISCOVERY AND PROPOSAL**

We begin with consultation, taking the time to understand your pain points and goals. Once aligned on the right approach, we take ownership of your objectives and design around their success.

» **DESIGN**

With clear requirements in hand, our team develops a tailored automation solution engineered to fit—not force—your process.

» **CUSTOMER APPROVAL & MANUFACTURING**

After you approve the design, we move into production, building your system with our ISO 9001:2015 certified quality process.

» **FINAL ACCEPTANCE TEST (FAT)**

Before delivery, your system is set up and tested in our facility to ensure it meets every requirement. If adjustments are needed, we refine until it's right.

» **SHIPPING, INSTALLATION & SITE ACCEPTANCE TEST (SAT)**

Once installed at your site, we validate performance in your production environment—proving the system works as intended.

» **FULL LIFECYCLE SUPPORT**

We don't just drop off the robot and leave. We provide onsite training and ongoing service, so your team is confident to operate, maintain, and maximize your system from day one.

Our goal is simple: to deliver innovative solutions that improve quality, boost productivity, and create lasting value for our customers.

Robotic Welding Integration

Kinetic Technologies designs and delivers custom robotic welding systems for manufacturers across the U.S. and Canada. Our solutions combine engineered design, computer simulation, and custom-built fixtures and tooling to address real production challenges. We deliver production-ready systems built with the industry's best components—backed by hands-on experience gained from building and supporting robotic welding cells on shop floors just like yours.

Core Components

» **ROBOTIC ARM**

FANUC Industrial and Collaborative robots and THG Automation Robotic Welding Systems.

» **WELDING POWER SOURCE & TORCH**

MIG, TIG, or laser units paired with robotic torches engineered for precision and repeatability—using trusted industry leaders like Fronius and Lincoln Electric.

» **POSITIONERS, FIXTURES, & TOOLING**

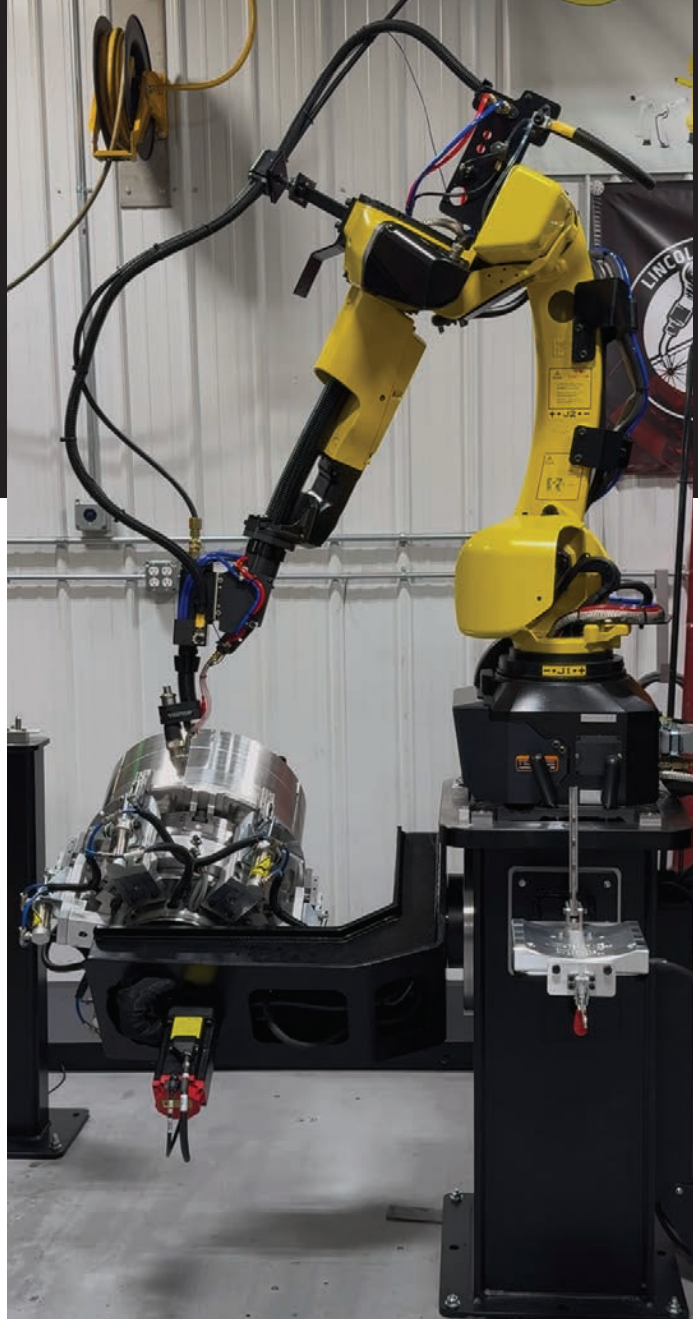
Custom designed to hold your parts, we manufacture devices that hold, clamp, and move the workpiece into the correct position.

» **SAFETY ENCLOSURE**

Fencing, light curtains, or interlocks to protect operators from moving parts, sparks, and arc flash.

» **CONTROLS & HMI**

The controller (robot teach pendant + PLC/HMI) that allows operators to program, monitor, and adjust the system.



Integration Elements

» **SPECIALIZED TOOLING**

Custom conveyors, loaders, gantries, skyhooks, and rails designed to optimize part flow.

» **SENSORS & VISION SYSTEMS**

Cameras, seam-tracking sensors, or laser scanners to ensure weld accuracy and adjust in real-time.

» **PROGRAMMING SOFTWARE**

Offline programming (OLP) that reduce programming time and handle complex weld paths.

» **FUME EXTRACTION & VENTILATION**

Systems that capture welding fumes and keep the environment safe.

» **COOLING SYSTEMS**

Water or air cooling for torches, power sources, and sometimes the robot itself.

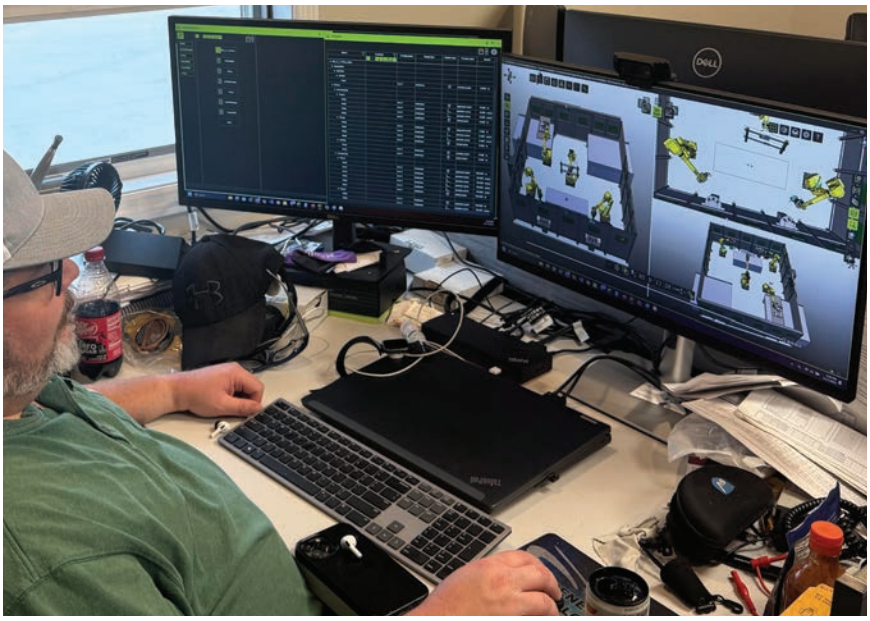
» **OLIS ROBOTICS REMOTE ACCESS SYSTEM**

Secure, real-time remote monitoring, diagnostics, and control enables Kinetic's engineers to connect to your system to troubleshoot issues, adjust programming, and monitor performance –all without an onsite visit.

olis® robotics

WHAT WE DO

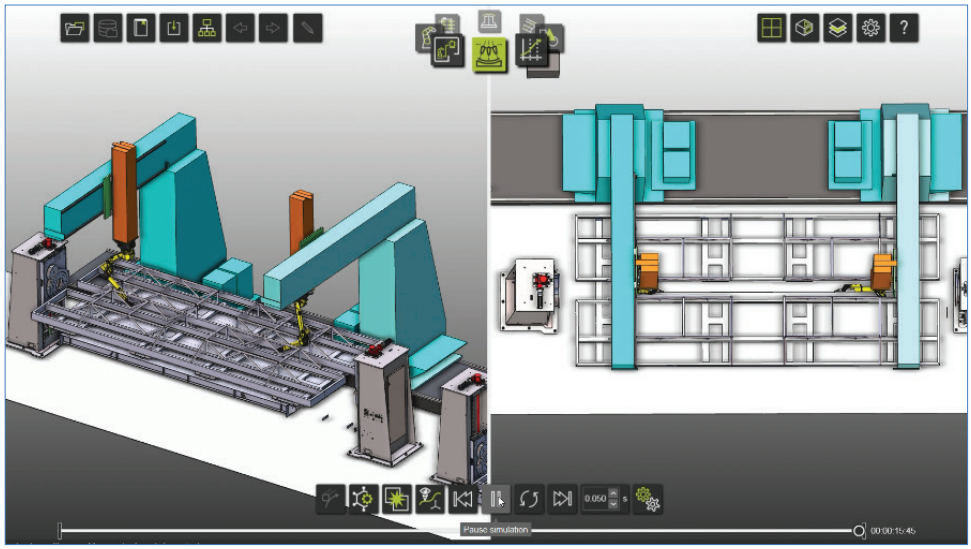
Simulation & Offline Programming

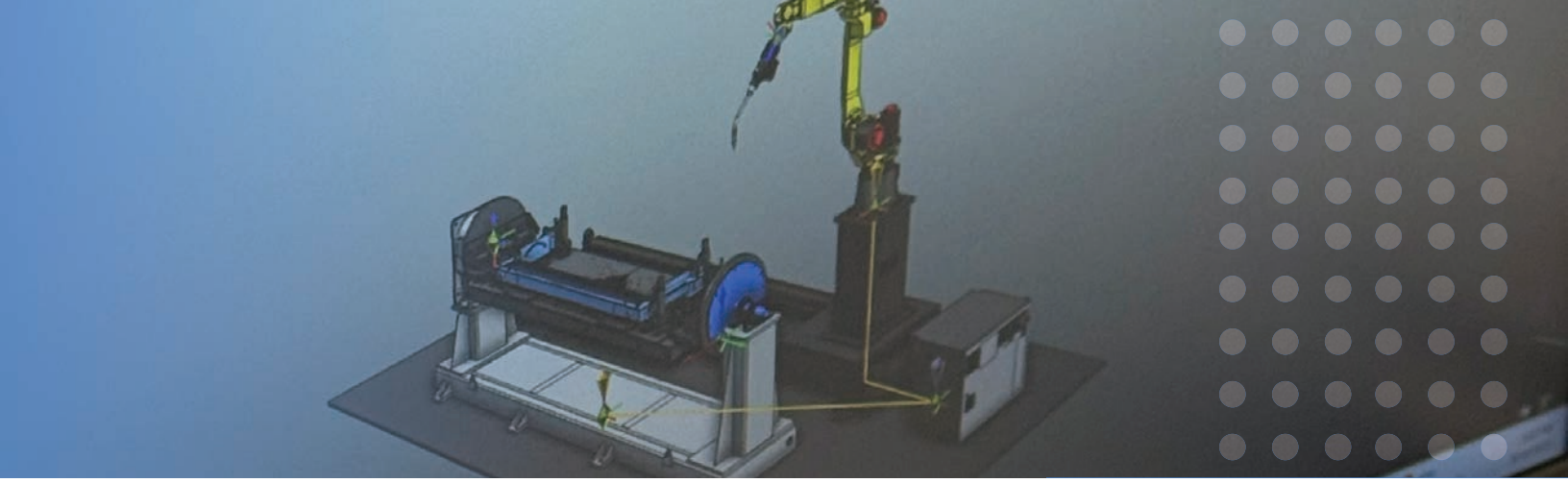


We use advanced simulation tools and offline programming to help you design, validate, and deploy robotic welding systems with confidence. From early reach studies to digital twins for deployment, simulation reduces guesswork and gets your system into production faster.

At Kinetic Technologies, simulation is built into every stage of our integration process—from quoting to deployment. Our team doesn't just run software; we use real-world welding experience to ensure every program and layout translates to reliable production results.

Simulation is built into every stage of our integration process.





Our Simulation-Driven Process

» **SIMULATION-DRIVEN QUOTING & FEASIBILITY STUDY**

Evaluate robot reach, cycle times, fixture clearance, and process viability before committing to a solution.

» **TOOLING & CELL LAYOUT VALIDATION**

Use 3D simulation to test torch angles, part access, and orientation—minimizing guesswork and rework.

» **DIGITAL TWIN DEPLOYMENT**

Create a full virtual model of your robotic cell to verify programs and support offline troubleshooting and training.

» **OFFLINE PROGRAMMING FOR FASTER COMMISSIONING**

Deploy and test robot paths outside the cell environment to shorten install time and reduce on-site risk.

With simulation and offline programming, Kinetic ensures your robotic welding system is production-ready from day one—engineered, validated, and proven virtually before it ever hits your floor.

WHAT WE DO

Positioners

Positioners that Power Productivity

Robotic positioners transform welding cells by improving access, efficiency, and safety. Kinetic offers a full range of standard options, or we can custom-build a positioner engineered specifically for your application.

Key Benefits of Robotic Positioners

- **BETTER WELD QUALITY**
  Maintain ideal “downhand” positions for consistent, repeatable results.
- **INCREASED PRODUCTIVITY & UPTIME**
  Boost arc-on time by loading and welding parts simultaneously while reducing cycle time.
- **IMPROVED SAFETY**
  Eliminate manual flipping or lifting of heavy or awkward parts.
- **MORE FLEXIBILITY**
  Process parts previously out of scope or beyond the robot’s reach, including large or complex geometries.
- **FASTER WELD CYCLES**
  Simplify setups for your most complex parts to speed up throughput.
- **SMARTER USE OF SPACE**
  Compact, easy-to-install positioners maximize floor space and minimize setup hassles.
- **STRONGER ROI**
  Higher first-pass quality, greater uptime, and faster cycle times accelerate payback on your investment.

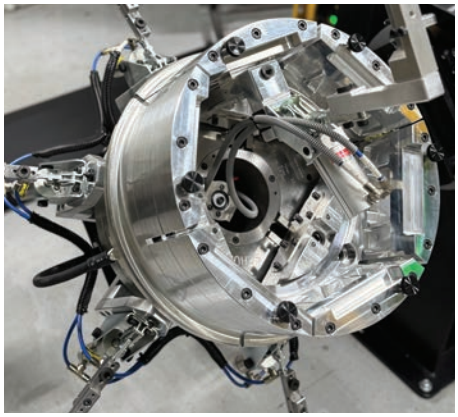
Types of Robotic Positioners

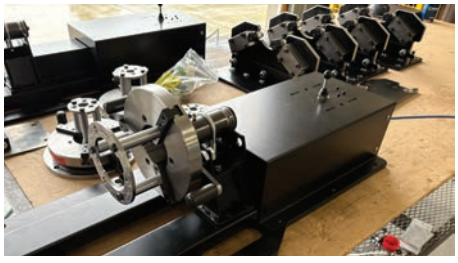
1. **Kinetic Technologies’ Patented RT1 ™ and RT Lite Rotary Positioners (Single-Axis)**
   - A single table or chuck rotates parts around one axis.
   - Perfect for smaller parts or high-mix, low-volume production.
2. **Kinetic Technologies’ HT1 ™ Headstock / Tailstock Positioners**
   - Two synchronized rotary axes hold and rotate long or heavy parts.
   - Ideal for frames, beams, and multi-sided weldments.
3. **Ferris Wheel Positioners (Dual-Station Indexing Positioners)**
   - Two tables mounted on a central axis allow loading on one side while the robot welds on the other.
   - Maximizes uptime by combining rotation with quick part changeover.
4. **Skyhook / Drop-Center Positioners**
   - Provides rotation and tilt for complex or oversized parts.
   - Great for keeping welds in the flat/downhand position on multi-sided components.
5. **Tilt/Turn (2-Axis) Positioners**
   - Combines tilt and rotation to present weld joints at the optimal angle.
   - Versatile for medium-sized parts and complex geometries.

Fixtures and Tooling

Why Fixtures and Tooling Matter

Even the most advanced robot can only weld as well as the fixture holding the part. Poor fit-up, awkward access, or slow load/unload processes quickly erode productivity and weld quality. That's why precision-engineered fixtures and tooling are critical to getting the most out of your robotic welding system.





Common Challenges Solved by Smart Fixture Design

» **WELDING ROBOT ARC-ON TIME**

Robots need to be welding, not waiting. Well-designed fixtures keep parts consistent and cycle fast, maximizing arc-on time and overall throughput.

» **INCONSISTENT JOINT FIT-UP**

Variations between parts lead to inconsistent welds. Precision locators and clamp designs hold every part within tolerance—ensuring repeatable quality.

» **LIMITED TORCH ACCESS**

Complex parts can be difficult to reach. Fixtures and positioners are designed to rotate or tilt parts into optimal weld positions, keeping welds in the flat/downhand position whenever possible.

» **SLOW LOAD/UNLOAD TIMES**

Inefficient setups eat into production. Ergonomic designs and repeatable nests speed up every cycle, making part handling safer and faster for operators.

The Kinetic Advantage

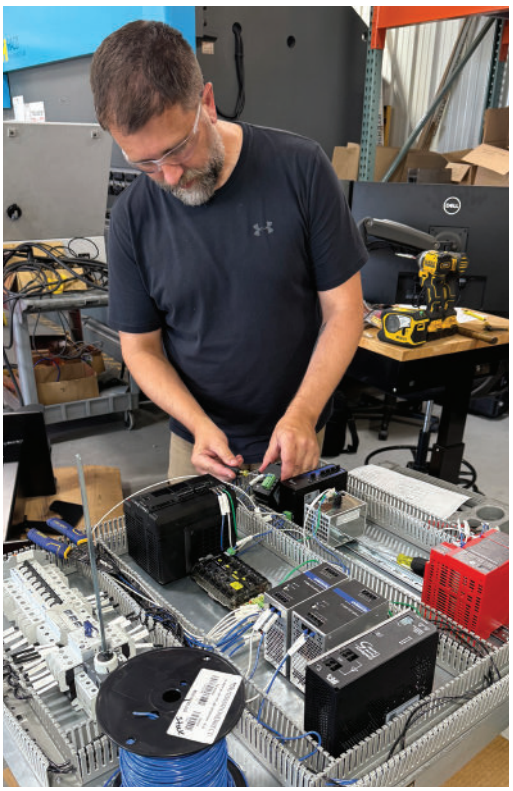
Kinetic Technologies designs and manufactures custom fixtures and tooling to match your exact parts, processes, and production requirements. Our solutions reduce variability, improve quality, and increase robot utilization—helping your automation investment deliver faster ROI.

WHAT WE DO

PLC Integrations & Custom Control Panels

Make your automation easy to run, easy to trust, and easy to improve.

Kinetic designs and delivers operator-friendly HMIs and robust PLC architectures that tie your robots, welders, fixtures, positioners, and peripherals into one cohesive system. We act as an extension of your team—engineering controls that fit your process.



What We Build

» **OPERATOR-FIRST HMIS**
Clean screens, guided workflows, clear alarms, and built-in work instructions to reduce training time and errors.

» **INDUSTRIAL-GRADE PLCS**
Standards-based control for robots, welding power sources, positioners, safety systems, and aux axes.

» **DATA & TRACEABILITY**
Part/lot tracking, weld parameters, barcode/RFID, quality records, and easy export to MES/ERP.

» **RECIPE & CHANGEOVER**
One-touch job selection, parameter management, and error-proofing for high-mix environments.

» **DIAGNOSTICS & REMOTE SUPPORT**
Health dashboards, alarm history, networked I/O, and secure remote access from Olis Robotics.

» **SAFETY INTEGRATION**
Safety PLCs/relays, light curtains, scanners, e-stops, interlocks; aligned with ANSI/RIA and ISO requirements.

Platforms & Tooling

» **Allen-Bradley / Rockwell Automation** (CompactLogix, GuardLogix, PanelView/FactoryTalk Optix)

» **Beckhoff** (TwinCAT, EtherCAT, IPC/HMI)

» **Keyence** Safety Systems

» Protocols: **EtherNet/IP, Profinet, Modbus TCP, EtherCAT, barcode/RFID,** welders (Fronius/Lincoln), robot controllers (FANUC, etc.)

Why It Matters

» **FASTER STARTUPS**
Standardized code, simulation-ready I/O, and pre-tested sequences shorten commissioning.

» **HIGHER UPTIME**
Smart alarms and guided recovery keep operators productive and reduce calls to maintenance.

» **CONSISTENT QUALITY**
Recipes, interlocks, and error-proofing features enforce the right settings every time.

» **ACTIONABLE INSIGHT**
Real-time KPIs (OEE, arc-on time, cycle time), shift reports, and audit trails to drive continuous improvement.

» **FUTURE-PROOF**
Modular architecture leaves room for new stations, sensors, and product variants.

Rockwell Automation

Allen-Bradley

BECKHOFF

KEYENCE

Our Approach

1. **Application Review & Requirements Definition**
   - » We start by understanding your automation goals, part flow, and operator needs to define the logic, safety, and motion control requirements.
2. **PLC & HMI Design**
   - » Our team develops a custom control architecture, including logic sequencing, HMI screens, and motion control plans tailored to your system.
3. **Pre-Install Testing**
   - » We test PLC programs, motion sequences, and HMIs before installation to reduce downtime and validate system behavior.
4. **Onsite Installation & Commissioning**
   - » We handle installation, power-up, and full system commissioning at your facility, ensuring the control system performs as expected.
5. **Remote Access & Ongoing Support**
   - » We provide remote troubleshooting tools, program updates, and support after installation to keep your system running reliably.

Onsite Installation and Runoff

When your robotic welding system arrives at your facility, our job is just getting started. At Kinetic Technologies, we ensure every system is installed, tested, and proven on your floor before turning it over to your team.

Our Installation Process

» **DELIVERY & SETUP**

We work with your team to coordinate shipping, rigging, and placement of your robotic system in your plant.

» **INTEGRATION & CONNECTIONS**

Our team installs electrical, pneumatic, and safety connections so the system ties seamlessly into your operation.

» **CALIBRATION & START-UP**

Robots, welders, fixtures, and positioners are calibrated and tested to perform exactly as designed.

» **RUNOFF TESTING (SITE ACCEPTANCE TEST)**

» **PROVE PERFORMANCE IN YOUR PLANT**

After installation, we conduct a Site Acceptance Test (SAT) with your team to verify that the system performs to the agreed-upon specifications.

» **FINE-TUNING**

If adjustments are needed, we make them onsite until the system is production-ready.

The Kinetic Difference

We don't just drop off equipment and leave—we stand with you through the final test run. Our onsite installation and runoff process guarantees your robotic system isn't just delivered–it's proven, reliable, and ready to perform from day one.

Customer Training

At Kinetic Technologies, we believe that automation success doesn't stop at installation—it depends on confident, capable operators. That's why we provide customized training programs designed around your team, your process, and your equipment.

Customized Training Curriculum

- Tailored to your exact system, parts, and production goals.
- Hands-on sessions covering robot operation, programming, safety, and troubleshooting.

Certified Training Partnerships

Kinetic Technologies is proud to be an Authorized Training Reseller for industry leaders:

- **FANUC ROBOTICS**

  Operator and programmer training, from basic handling to advanced welding applications.

- **LINCOLN ELECTRIC**

  Training on welding power sources, processes, and robotic integration.

- **FRONIUS**

  Training on advanced welding systems, arc management, and precision processes.

Your success is our mission. Through hands-on instruction and trusted industry partnerships, Kinetic Technologies ensures your operators are not just trained—they're ready to lead your automation forward.

Lifecycle Support

Comprehensive Support Across Every Stage

As an extension of your team, Kinetic Technologies helps ensure your technology investments remain optimized, secure, and fully functional, from initial installation through year 25 and beyond.

We understand that mission-critical systems don't stop evolving once deployed. Our Service and Support program provides structured, proactive, and responsive support to help organizations maintain peak performance throughout the lifespan of their solutions.

Service and Support Offerings

» **PREVENTIVE MAINTENANCE**
Routine inspections, firmware updates, and risk assessments to prevent downtime and extend asset life.

» **TROUBLESHOOTING AND TECHNICAL ASSISTANCE**
Support from Kinetic Engineers and Technicians offering rapid issue resolution. Remote support powered by Olis® Remote Diagnostic System.

» **SPARE PARTS**
Comprehensive spare parts support ensures critical components are available when needed.

» **LIFECYCLE PLANNING & OPTIMIZATION**
Strategic guidance on upgrades, replacements, and capacity planning to maximize ROI.

» **WELD PROCESS SUPPORT**
Our expert AWS-certified weld inspectors provide guidance and on-site assistance to ensure welding procedures, parameters, and quality standards are optimized for performance, consistency, and compliance.

Robotic Weld Demonstrations

Kinetic Technologies' Robotic Weld Demonstration Program provides clients with a first-hand experience of automated welding technologies in action.

These demonstrations showcase the capabilities of advanced robotic systems for speed, consistency, and precision — helping customers evaluate solutions that can enhance productivity and quality in their own operations.

Our experienced engineers and certified welding technicians conduct demonstrations using real-world parameters and part geometries, providing valuable insight into process feasibility, optimization, and ROI potential.

Additional Services

Expanding Capability, Enhancing Performance

In addition to our comprehensive service and support and offerings, Kinetic Technologies provides specialized services that help customers accelerate innovation, streamline production, and validate advanced manufacturing processes.

These programs extend our expertise beyond maintenance and into hands-on manufacturing excellence — ensuring our clients have access to the same high standards and precision we bring to every Kinetic solution.

Contract Manufacturing

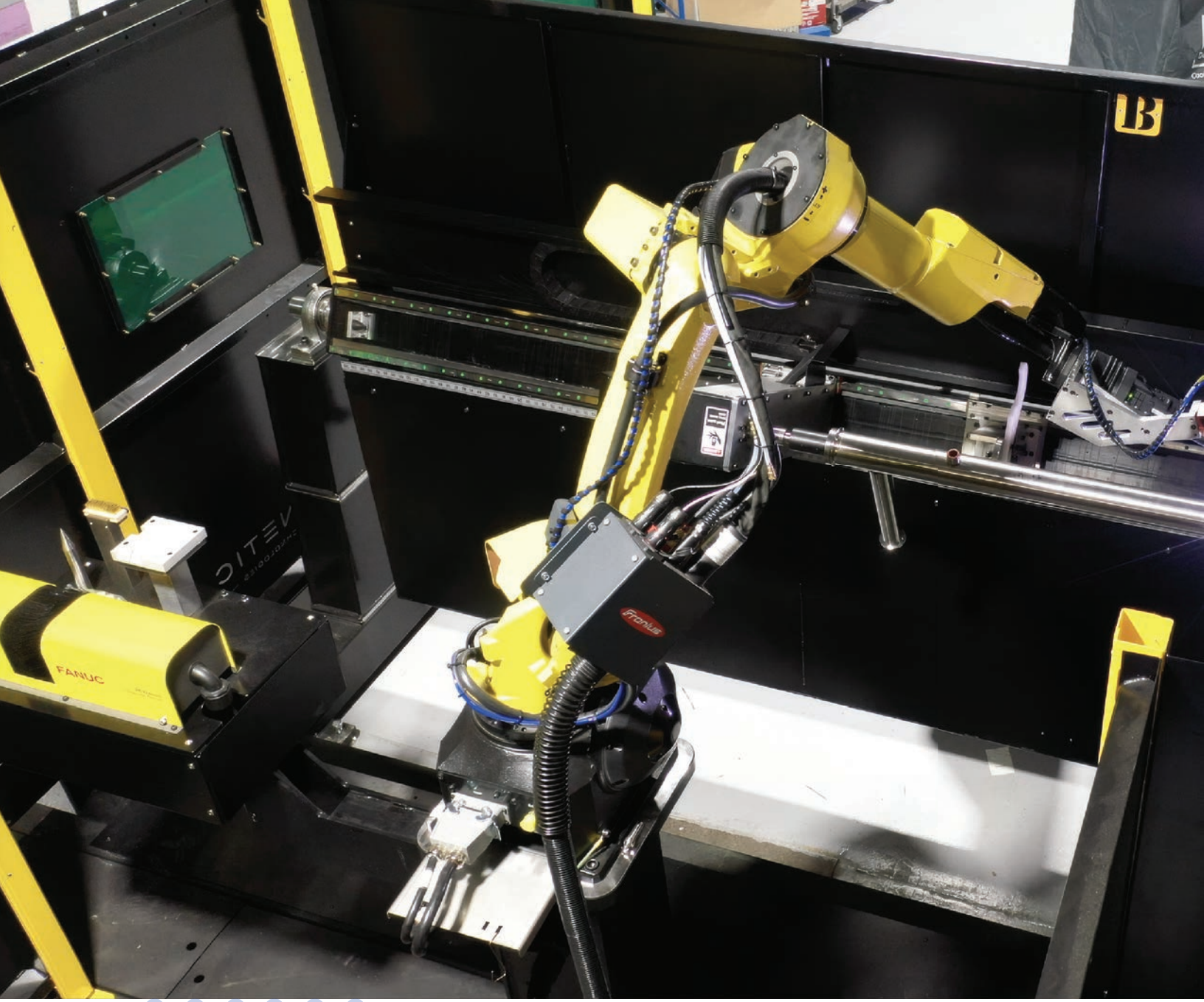
Our manufacturing team supports low- to mid-volume production runs, prototyping, and specialized component fabrication.

With a commitment to quality control and process repeatability, Kinetic delivers components and assemblies that meet stringent performance and compliance requirements — on schedule and within budget.

Capabilities include:

- Laser sheet metal cutting and metal forming
- Precision machining and fabrication
- Manual and robotic welding
- Electrical and mechanical assembly
- Testing, calibration, and quality assurance

Kinetic Technologies delivers complete, connected solutions that keep your mission moving forward. From system design and integration to manufacturing, sustainment, and long-term support, we combine technical expertise with responsive service to ensure every project performs with precision and reliability. Backed by innovation, experience, and a commitment to partnership, Kinetic Technologies stands ready to help you achieve operational excellence — today and for years to come.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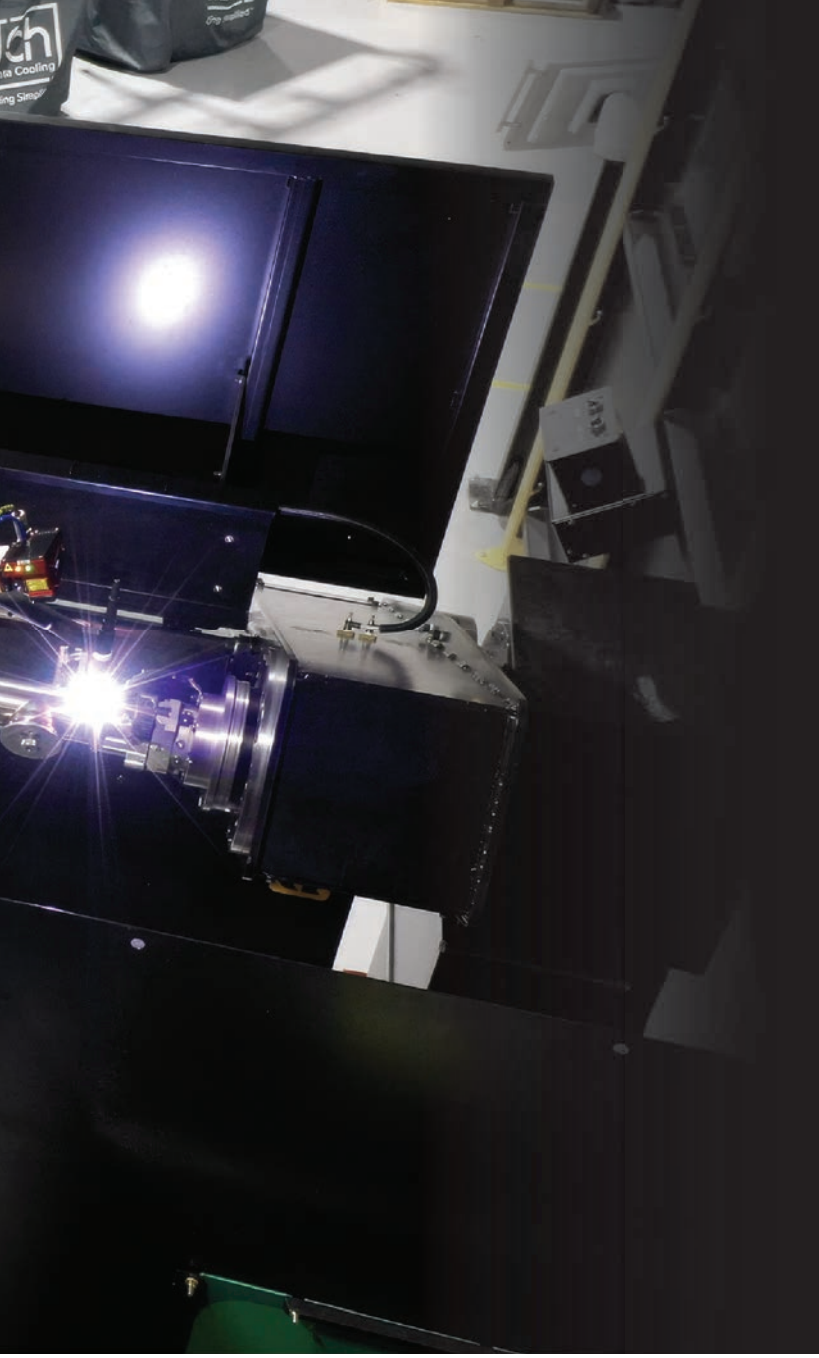

We've had a great experience working with Kinetic Technologies. Their team communicates clearly, responds quickly, and consistently follows through—qualities that make a real difference in a fast-paced manufacturing environment. We've especially appreciated seeing their team grow and develop over time, continuously improving and expanding their capabilities. It's clear they're committed to long-term partnership and excellence.

Austin Vande Vegte
Chief Manufacturing OfficerDoubleHH Quality Products

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