



TCA

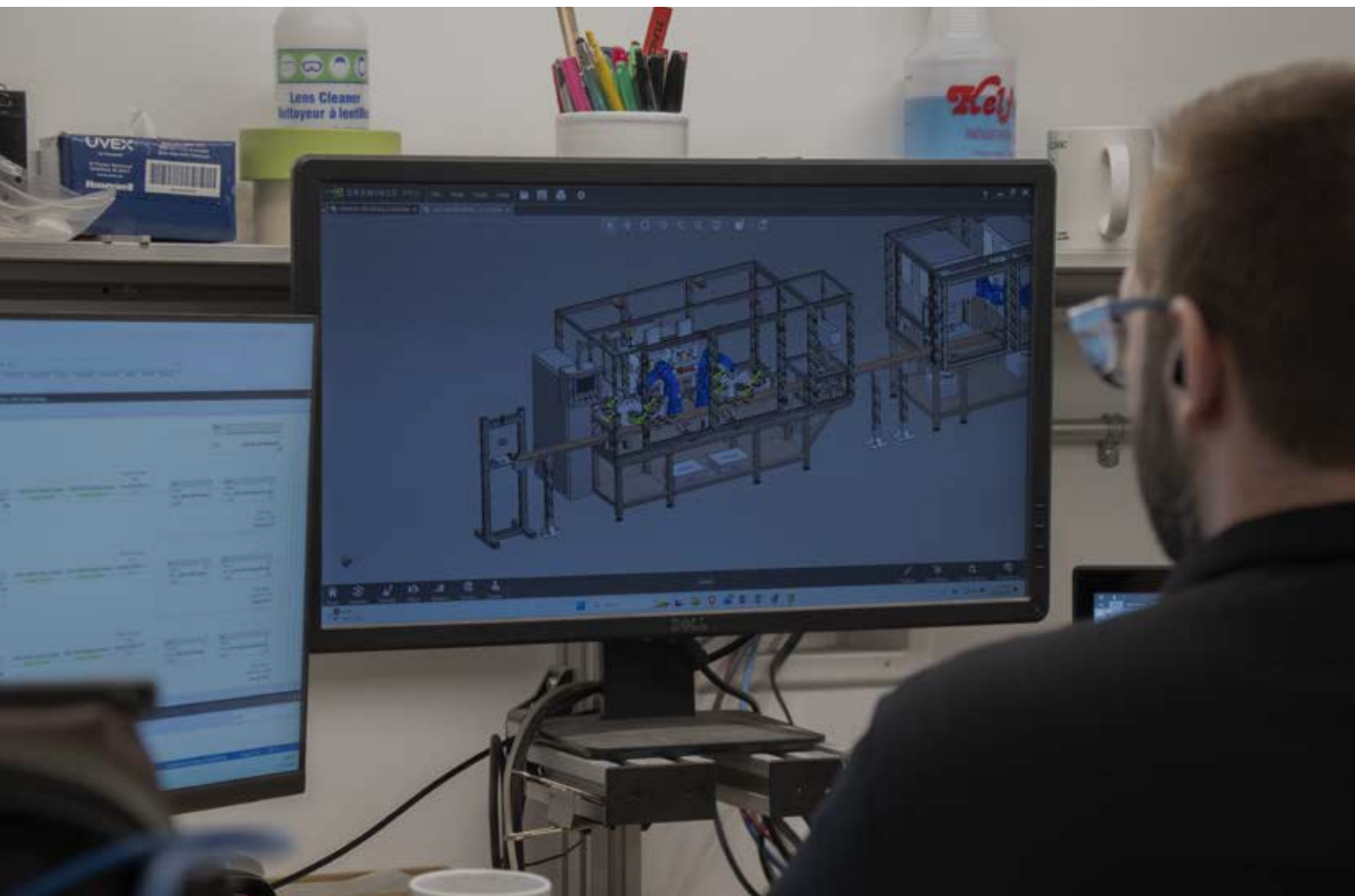
YOUR AUTOMATION **PARTNER**

AUTOMATION THAT SOLVES PRODUCTION CHALLENGES

TCA Technologies builds more than custom automated solutions, we build relationships

Whether you're struggling with labour shortages, capacity constraints, quality issues, or increasing customer demand, TCA helps manufacturers implement automation solutions that improve productivity, consistency, and profitability.

From custom machine design to fully integrated production systems, we work alongside your team to identify opportunities, reduce implementation risk, and deliver practical automation that generates measurable results.





Global Automation Expertise, Delivered with a Local Touch



Why Manufacturers Choose TCA

Manufacturers partner with TCA to:

- ✓ Increase production without increasing headcount
- ✓ Improve quality and process consistency
- ✓ Reduce repetitive manual work
- ✓ Minimize downtime and operational disruptions
- ✓ Improve worker safety and ergonomics
- ✓ Scale operations with confidence

TCA By The Numbers

1,000+

Successful Projects Delivered

90%+

Projects for Repeat Customers

30+

Years of Automation Experience

SOLUTIONS FOR EVERY INDUSTRY

While each industry brings its own challenges, from regulatory requirements to aggressive production timelines, TCA's approach remains consistent: deep front-end understanding, disciplined engineering, and solutions built to scale.



Automotive

Meet demanding production targets while maintaining strict quality and traceability requirements.



Health Sciences

Improve throughput, reduce variability, and support compliance requirements through precision automation.



Energy

Increase production reliability and support mission-critical manufacturing requirements with robust automation systems.



Consumer Products

Automate repetitive processes, increase throughput, and adapt quickly to changing customer demand.



Agrifood

Reduce labour dependency, improve operational efficiency, and support year-round production growth.

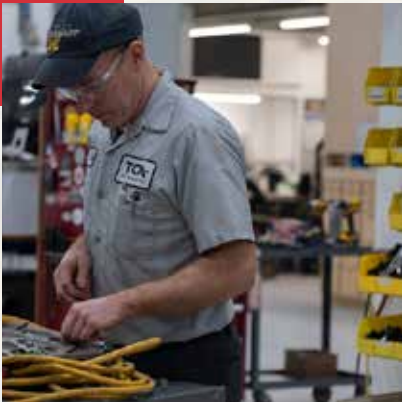


Construction

Improve productivity, reduce material handling challenges, and increase operational efficiency in demanding environments.



PROVEN AUTOMATION EXPERTISE



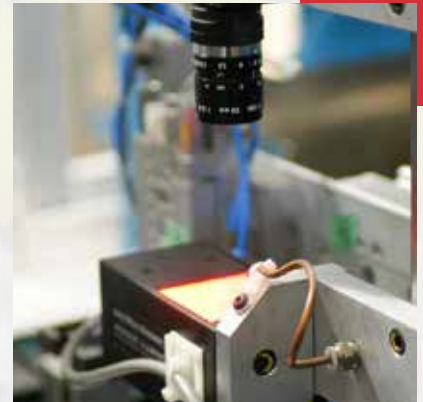
Prototyping

- Feasibility Studies
- Concept Validation
- Proof of Concept Development
- Prototype Equipment Design
- Prototype Tooling
- Process Validation



Assembly

- Palletized Systems
- Indexing
- Rotary Dial
- Clean Room
- Robotics
- Lean Cells



Machine Vision

- Vision Inspection
- Defects Recognition
- Integration to Tracking
- Alignment Monitoring
- Feature Recognition
- Parts Measurement & Placement



Leak Testing

- Pressure Decay
- Mass Flow
- Leak & Flow Testing
- Air & Gas Test
- Differential Mass Flow



Material Handling

- Automated Conveyors
- Robotic Palletizing Systems
- Ergonomic Lift Assist
- Air Tables
- Parts Transfers



Plastics & Composites

Mold Unload & De-Gating
Ultrasonic Welding
Assembly & Test
Insert Over Molding



Industrial IoT

Machine Connectivity
Data Collection & Monitoring
Real-Time Dashboards
Production Analytics
OEE Monitoring
Predictive Maintenance



Welding

Welding Cells
Robotic Spot Welding
Projection Welding
Seam Welding
Resistance Welding



Hipot Test Systems

EV Cold Plate
Automotive Component
Cable & Harness
Motor & Stator
Battery Component
Electrical Assembly



Automated Plating Lines

Continuous Strip Electroplating
Automotive Plating
Material Handling
Reel-to-Reel Plating
Surface Finishing Lines

OUR PROCESS

Automation Projects Succeed When Risk Is Managed Early

Investing in automation can be complex. TCA's proven methodology helps manufacturers reduce uncertainty, validate assumptions early, and ensure solutions perform as expected before they reach the production floor.

Our process is designed to help you move from concept to implementation with confidence while minimizing operational disruption and maximizing long-term value.



Conceptualize

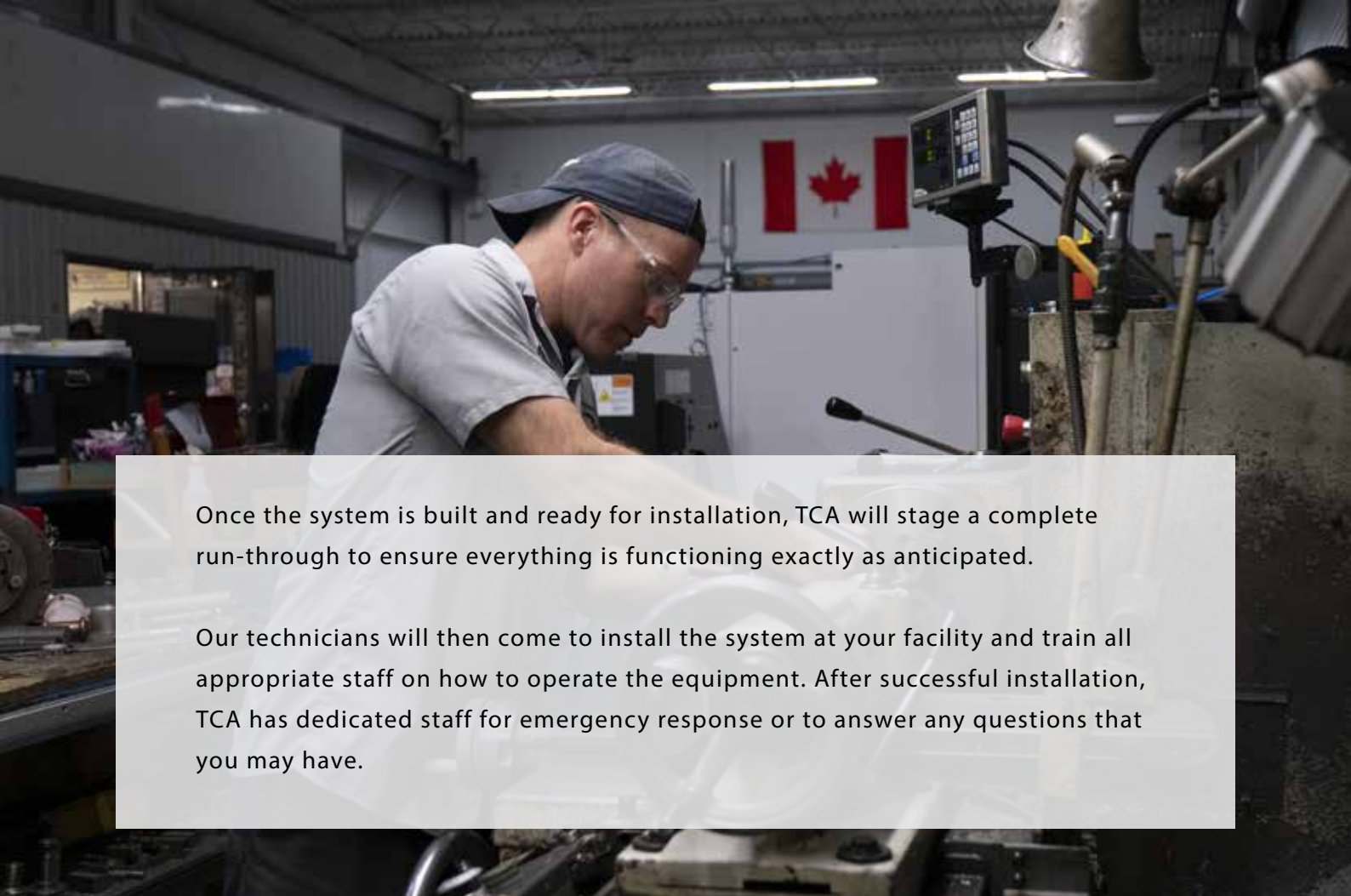


Refine



Engineer

TCA has a team of highly trained engineers that take the time to properly understand the specific needs for each project. Focused on exceeding our customers' expectations, TCA makes sure both current and future requirements are planned for and that the system integrates seamlessly into current infrastructure.



Once the system is built and ready for installation, TCA will stage a complete run-through to ensure everything is functioning exactly as anticipated.

Our technicians will then come to install the system at your facility and train all appropriate staff on how to operate the equipment. After successful installation, TCA has dedicated staff for emergency response or to answer any questions that you may have.



Build



Test



Install & Support



The background image shows a complex industrial manufacturing environment. It features various pieces of machinery, including what appears to be a robotic arm or automated assembly line. There are safety features visible, such as a red emergency stop button and a digital display showing '0.2'. The scene is well-lit, typical of a factory floor.

Our company has worked with TCA Technologies on a number of challenging projects over the years. Their extensive range of manufacturing technology expertise successfully translated into our company receiving highly effective, turnkey manufacturing automation solutions every time.

R&D Engineer
Velcro Canada

TCA has been our supplier for more than thirteen years. During that time we have successfully designed, installed and maintained multiple machines, fixtures, and other solutions. The TCA team is incredibly accommodating to our needs, with the ability to work on tight timelines providing effective solutions.

Sr. Manufacturing Engineer
Dana Power Technologies Group

PROCESS DEVELOPMENT



Validate before you Automate

Automation delivers the greatest value when it's built on a proven process. TCA's Process Development approach helps manufacturers reduce risk, validate production methods, and make informed investment decisions before committing to full-scale automation.



Requirements and Scope

We work closely with your team to understand production goals, challenges, and future growth plans. Together, we define clear success criteria that align with your operational objectives and expected return on investment.



Proofs of Principle

Potential solutions are evaluated to identify the most effective technologies, processes, and methodologies for your application. This early validation minimizes technical risk and helps ensure the right solution is selected from the start.



Trials and Analysis

Depending on the application and level of process maturity, targeted trials and analysis may be conducted to validate critical assumptions and reduce risk. Findings are reviewed collaboratively to ensure the proposed solution can deliver the required quality, performance, and production objectives.



Automate

Once the process is validated, TCA seamlessly transitions into system design and implementation. The proven solution is scaled into a production-ready automation system that maximizes output, improves consistency, and supports long-term operational success.



YOUR AUTOMATION PARTNER

DESIGNING AND BUILDING CUSTOM
INDUSTRIAL AUTOMATION EQUIPMENT
SINCE 1996

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