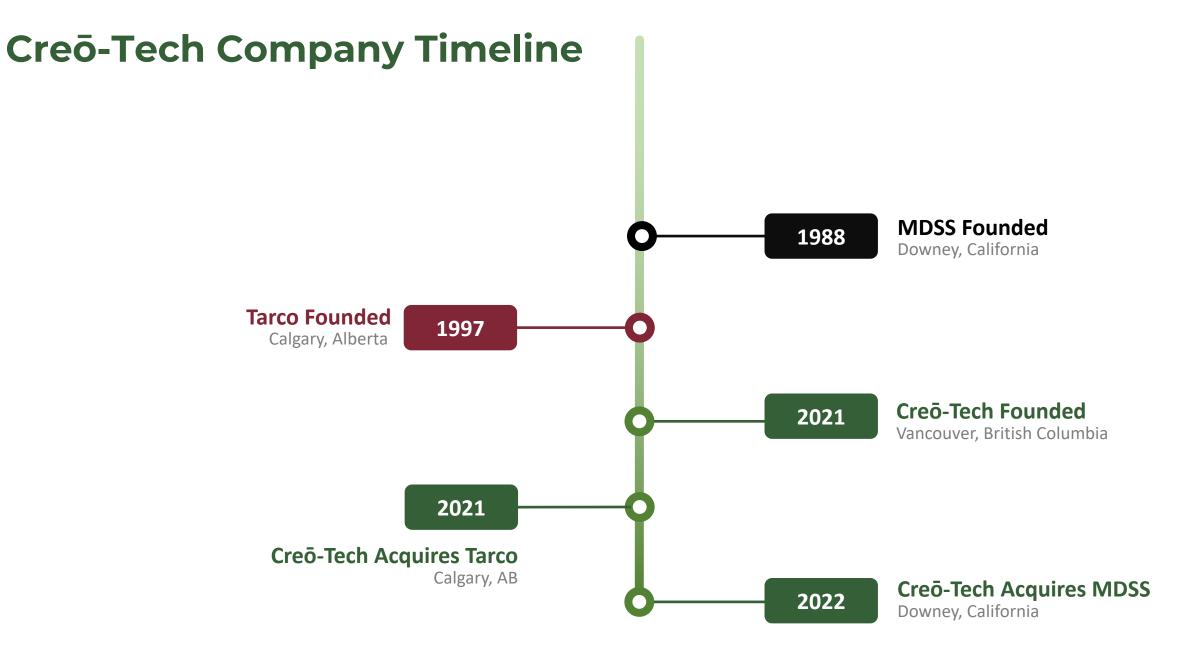
INDUSTRIAL GROUP INC.

February 2024 www.creotechgroup.com

Family of Companies



Creo-Tech Owns 100% of ALL entities.



Who We Are

- A cutting-edge, full scope Design, Engineering and Procurement **family of companies**.
- We are dedicated to delivering innovative Industrial Solutions & Automation.



- Through best-in-class proprietary technologies and a unique combination of structural, mechanical & electrical designers & engineers, we deliver some of the most advanced industrial and structural engineering solutions in both new construction and retrofit environments.
 - Multi-industry engineered solutions provided from Western Canada & United States - with a global reach!

Our Values



TRANSPARENCY

Being open and honest in our communications and actions.

Providing information that is accurate, complete, and timely.

Sharing information about our decisions as well as our successes and challenges.

TRUST

Trust is the foundation of our relationships with our employees and customers.

Relying on others

Being trustworthy ourselves

Honouring our commitments

Cultivating an environment of mutual respect and integrity.

TOGETHERNESS

Working collaboratively and supporting one another to achieve common goals.

Valuing diversity and fostering a sense of community and inclusivity.

Promoting a culture of teamwork and recognizing the importance of the contributions of all team members.

TAKING OWNERSHIP

Being accountable for our actions and taking responsibility for the outcomes of our decisions.

Taking initiative and being proactive in identifying and solving problems, rather than waiting for someone else to do it.

Our Philosophy

CUSTOMER FOCUS

Responsiveness Best Total Solution

OPERATIONAL EXCELLENCE

Efficiency Highest Value

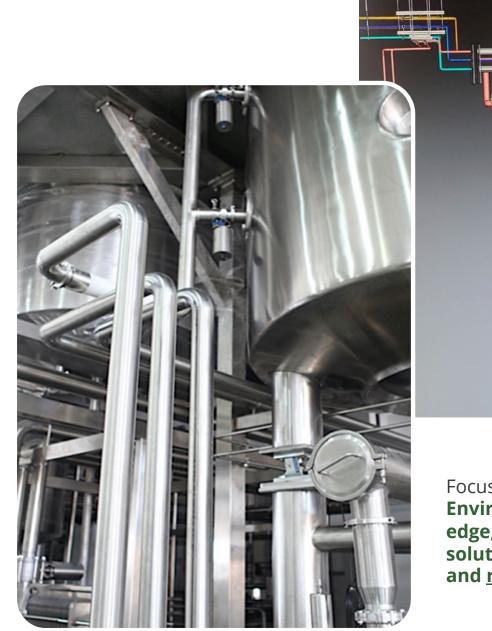
PRODUCT

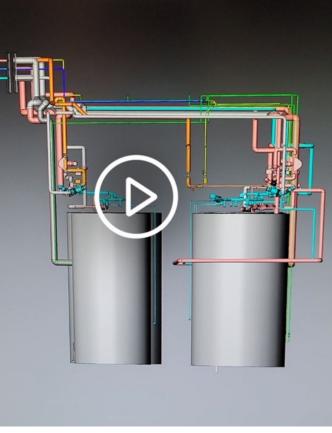
Innovation Best Product

What We Do

Full-Service

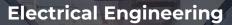
- Pre-Construction Planning
- Design Engineering
- Detailed Engineering
- Automation Systems Integration
- Procurement
- Project Management
- Manufacturing
- Construction
- Safety
- QA/QC
- Engineering Validation / Documentation





Focused on Industrial & Commercial Environments, we deliver cuttingedge, reliable industrial engineered solutions in both <u>new construction</u> and <u>retrofit</u> environments.





Mechanical Engineering

Civil / Structural Engineering

Process Engineering

Engineering & Design Services

Creō-tech

Preconstruction Design

Detailed Engineering

Industrial Automation / Integration Rotating Equipment Controls

Electrical Engineering

- Power distribution and transmission system design
- Electrical load & short circuit analysis
- Arc Flash studies
- Substation design
- Switchgear & transformer stations
- MCC design
- Cable and raceway design
- Emergency power systems

Mechanical Engineering

Process Piping

Pre-fabricated skid design

Engineering design review

Purchase specifications

Acoustic Engineering

Process Optimization

Equipment Retrofits

Pump sizing

Civil / Structural Engineering

Process Engineering

- Structural Steel
- Foundations
- Equipment Supports
- Structural 3D Modelling
- Civil Roadworks
- Grading Design
- Engineering design review

- P&ID Design
- Piping and equipment modeling
- Pump and process equipment sizing
- Valve Cluster Design
- Controls and Automation
- Integration

Preconstruction Design

- Design/Build Systems
- Systems Audits
- Feasibility Studies
- Specification Preparation
- Modeling
- Concept to P&ID Design

Detailed Engineering

- General Arrangements
- Engineering Calculations
 Fabrication Drawings
- Fabrication Drawings
- Weld maps
- Schematics
- Cable Schedules
- Quality Control
- Installation Instructions
- Manuals & Training

Industrial Automation / Integration

- PLC/RTU/SIS Design and Programming
- DCS Configuration
- HMI/SCADA Systems
- 24/7 Service Hotline
- Process Optimization
- Control Narratives
- Shutdown Keys
- Alarm Rationalization

Rotating Equipment Controls

- Fuel Control
- Anti-surge systems
- OEM Upgrades
- Compression control
- Pump Controls
- Lead/lag systems

Automation Industry Partners

As a **vendor** integrator we have extensive experience in a wide array of automation **neutral** systems. We will work with any system our clients require.



Markets We Serve



Energy & Infrastructure

Oil & Gas

Life Sciences

Power Generation

Critical Power Systems

Mining

Food & Beverage

Water & Wastewater

The Creō-Tech Advantage

Cross Industry / Market Pollination

Industry Spread Across Companies



- Oil & Gas
- Energy
- Pipelines
- Utilities
- Water & Wastewater
- Industrial Automation



Cross Industry/Market Pollination Opportunities between Group Companies are Significant!

Our Locations

Proudly **NORTH AMERICAN**, Creō-Tech has locations in Canada & the United States.

Combined we have successfully completed, and continue to execute, a multitude of projects internationally.

Expansion Geographies / Facilities Considered





Where We Have Worked





Customer Partnerships

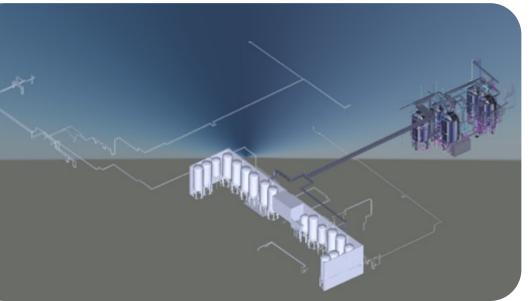






Complete Weigh Mix Processing Line at B Braun





Location – California, USA

- Assisted with pre-construction planning
- In partnership with client and main contractor engineers completed the detailed system engineering to final design
 - Modelling layout, design of all structural and mechanical systems
- Project Managed
 - Manufacturing and fabrication
 - Completed the field installation and commissioning of entire weigh mix and processing system
- Did **materials take-offs and B.O.M.'s** derived from final design and engineering and forward to operations teams
- Complete documentation including validation, manuals, service and maintenance guidelines post installation







Integrated Systems at Coca-Cola

Location – California, USA

- Assisted with pre-construction planning, detailed engineering, project management and selfperformed various process systems and installations, including:
 - Coke Downey
 - 2021 Line 6 Filler and Syrup Room Modifications
 - 2019 Filler line 7 Install, retrofit hot water loop systems
 - 2018 External Cleaning CIP for Filler lines, plant upgrades and install of Monster Energy lines
 - Coke LA
 - 2019 Nitrogen Gas Lines to storage tanks
 - Coke Ontario
 - 2021 Installation of Water for Injection Treatment & Brine Tank
 - 2019 Tank installations and replacements, Bliss New Filler lines
 - 2018 CIP Processing Line Project
 - Coke San Leandro
 - 2021 Complete New Line and expansions
 - 2018 External Cleaning System installs
- Detailed system engineering to final design, including **modelling layout and design of all structural and electro-mechanical systems**
- **Project Managed** manufacturing, fabrication and completed the field installation and commissioning of project
- Materials take-offs and B.O.M.'s derived from final design and engineering and forward to operations teams
- Complete documentation including validation, manuals, service and maintenance guidelines post installation

GE LM2500 Turbine Compressor Controls Retrofit



"Tarco is a very successful multi-disciplinary engineering, construction and industrial automation company. We have access to dozens of highly skilled engineers – think Electrical, Mechanical, Structural & Process.

Our controls integration and industrial automation skills allow us to deliver projects successfully around the globe!"

– Brittany Ray-Wilks, President

Location - Texas, USA

- Retrofitted two Stuart & Stevenson LM2500 packages. Design, procure, install and integrate all instrumentation required
- Replaced the existing Unit Control System and Compressor Anti-Surge / Load Sharing system with Tarco designed redundant Allen Bradley Control Logix PLCs
- Built a brand-new control building to accommodate new MCCs, UPS, and Control Panels
- Replaced all existing electrical and controls cabling on site
- Upgraded the existing Fire and Gas detection system & Vibration System
- Primary contractor on site. Responsibilities included coordinating and directing all engineering and site activities during the project
- Performed detailed planning and pre-work so the commissioning window was not exceeded. Project was delivered on time and on budget

RR RB211 & GE LM2500 Turbine Test Facility

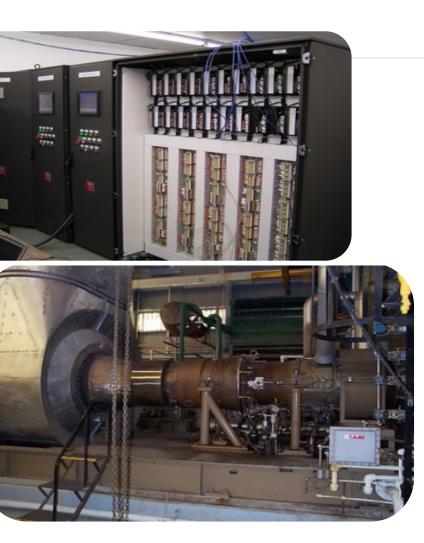
Location – China

- Provide a single control system that could test, to OEM specifications, both the Rolls-Royce RB211-24G and the General Electric LM2500+ industrial turbines, without having to make physical changes to the system
- Designed HMI with engine specific screens, but with a similar look and design to ensure that the operators can easily operate both engines
- Implement control modes which included Ignition and Start Ramp Control, Speed Control with Dynamic Gains, EGT Control with Dynamic Gains, Acceleration/Deceleration Control and IGV Control (RB211) and VSV Control (LM2500)
- Protection System: Start Permissives, Engine Trips and Shutdowns
- HMI-Configurable Engine and I/O Setpoints
- Engine test facility certification by both Rolls-Royce and GE





Lean Gas Station And Two RR Avon Turbine Controls Retrofit



Location – United Arab Emirates

- Engineered and supplied a **new station control system** using a TUV rated PLC system
- PLC redundant controls system upgrade for two Avon turbine control systems
- Design, draft and create control narratives and documentation to upgrade design for the existing GE PLC control systems
- Fabrication, procurement, installation and commissioning of all control panels
- Control network architecture hardware selection and design
- All control system programming and control network configuration
- Network design and communications work to enable the duplex communications between the three new control systems supplied with the main station DCS system
- Provision of training courses to the client employees
- Onsite start-up and commissioning
- **Upgraded unit control platforms** from Woodward system to GE PLC systems
- Installed new station control system for the lean gas unit, utilizing a TUV rated GE PLC system
- The facility required load sharing between two gas turbine powered units, which Tarco completed on the unit PLC systems

- LNG facility and unit upgrades with redundant plant controls and Rolls Royce Avon turbine driven compressors – GASCO, UAE
- Water injection pumping facility with Solar Centaur turbine driven injection pumps Pengrowth, Canada
- Isolated power generation facility with Allison 501k gas turbine driven generators with load sharing ATCO, Canada
- Large midstream compression facility with GE LM2500 turbine driven compressors and ROTOFLOW turbo expanders - DCP Midstream, USA
- Pipeline station and gas turbine obsolescence upgrade with Rolls Royce RB211 turbine driven compressors – TC Energy, Canada
- Refinery safety system upgrade with triple redundancy **Shell**, Canada
- Oil battery safety shutdown and process control systems CNR, Canada
- Oil LACT unit system replacement **Enbridge**, Canada



Our Websites & Social Media



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