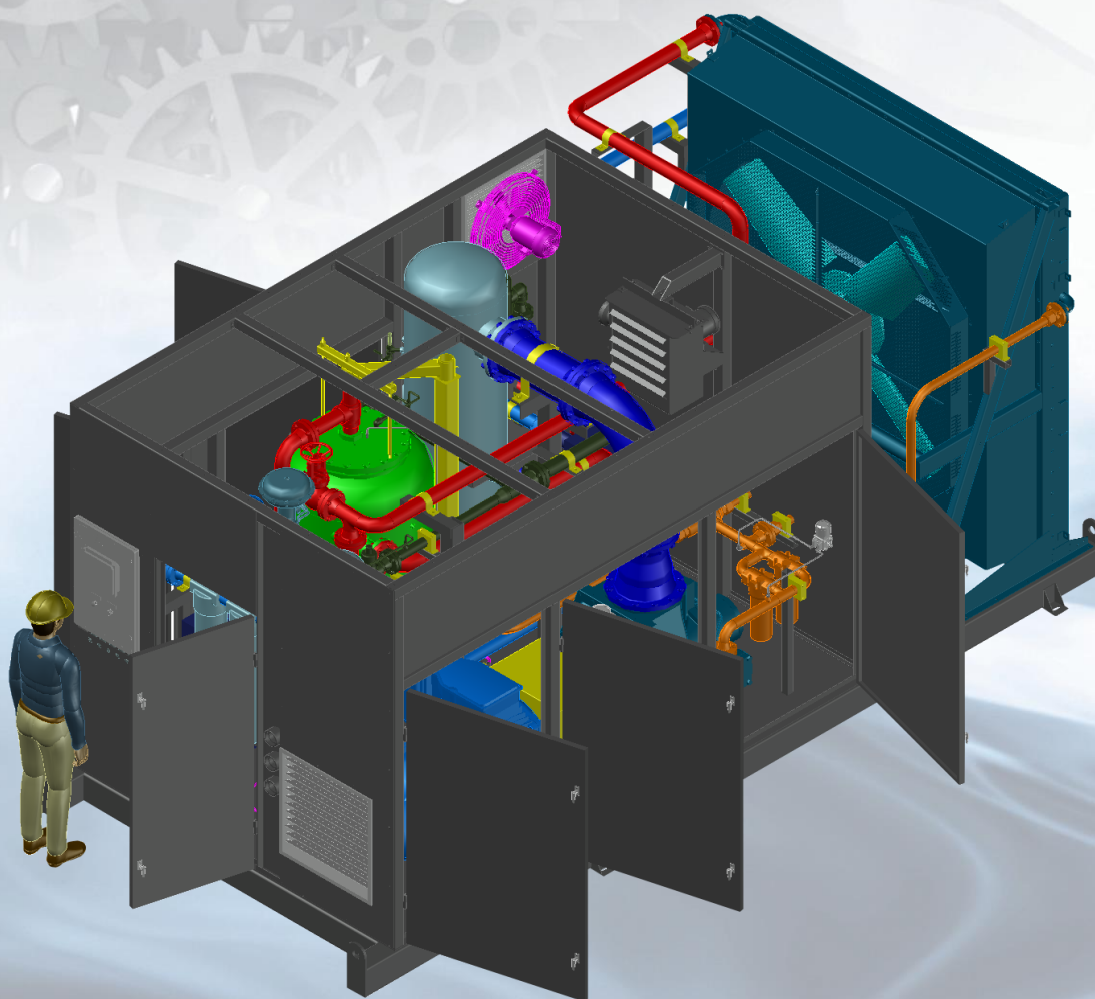




APPLIED COMPRESSION SYSTEMS

"Complete Compressor Packaging Solutions"



COMPANY PROFILE

THE COMPANY

Applied Compression Systems offers a single source solution to all your low-to-mid range horsepower specialty gas and air compressor packaging requirements.

ACS has a strong focus on custom designed, engineered, and fabricated compressor packages under 1000 HP in size. Our senior management has over 100 years of experience in gas and air compressor design and packaging and have been doing so since 1977. Our access to multiple vendors has provided us with the ability to provide compression solutions for all gases, from vacuum to over 10,000 PSIG. We specialize in designing compression solutions for Biogas, Syngas, RNG, Hydrogen, waste-to-energy projects, as well as solutions for Oil & Gas, power generation, research and development, food and beverage, and general industrial applications.

Our core products include:

- Biogas and Syngas - low, medium, and high-pressure solutions
- Natural Gas compressor packages
- Custom gas compressor packages for everything from **Air to Xenon**
- Cascade storage and dispensing/filling systems for H2 and CNG
- Instrument and industrial air compressor packages
- Engine starting air compressor packages
- Air and inert gas boosters
- Fuel gas boosters
- Vapor recovery units
- CNG and H2 vehicle fueling compressors
- Nitrogen and oxygen generator packages
- Supplied breathing air compressor and filtration systems
- Compressed gas and air filters, dryers, and accessories
- PLC Controllers and VFD/disconnect/contactors panels

Applied Compression Systems is a locally managed company, enabling us to respond quickly to specific customer requirements and offer shorter lead times.

Maintaining tightly controlled overhead costs and utilizing specialized out-source partners allows us to pass significant savings on to our customers, lowering overall costs while maintaining quality and meeting promised deliveries.

We can supply pre-engineered units but if standard equipment does not meet your needs, we can design and fabricate equipment that is custom-built to your specific requirements from concept to completion.

BENEFITS

Engineering and procurement departments worldwide recognize the benefits of purchasing fully packaged compression systems from a company with two generations of compressor packaging experience. These benefits include:

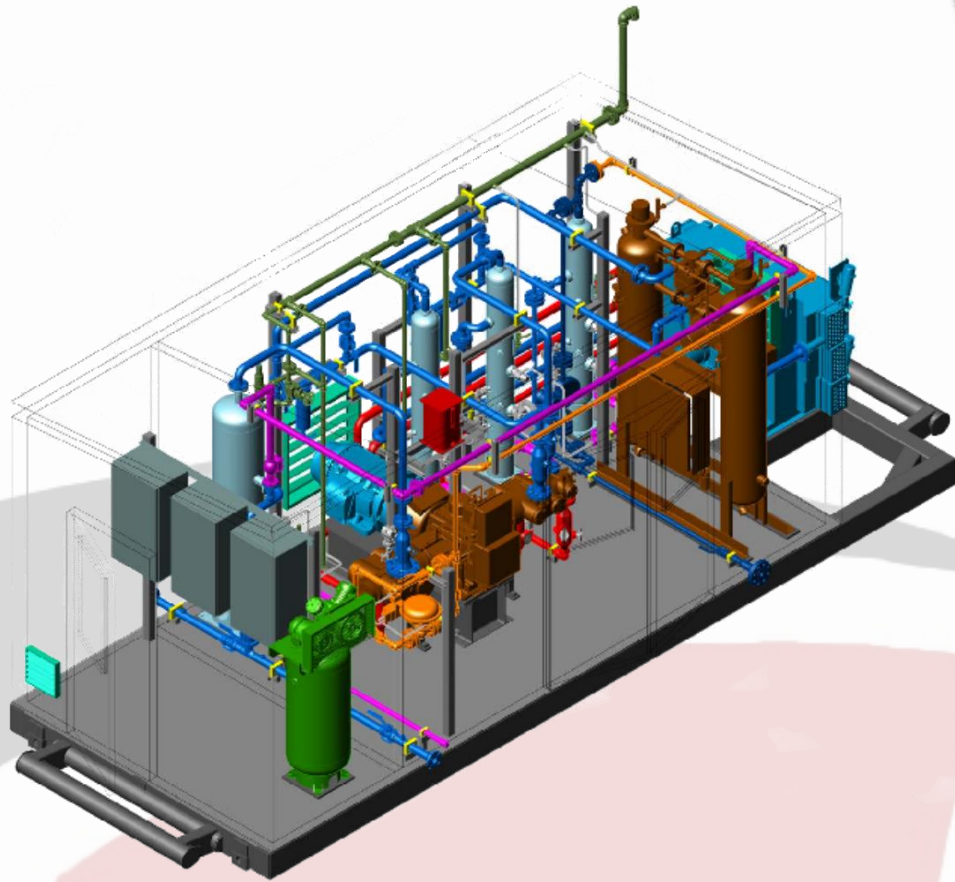
Reduced Construction Costs: Our shop costs are much lower than those of field construction.

Single Source Responsibility: From concept to solution, we provide design, engineering, fabrication, and testing.

Guaranteed Component Capability: One source for all the major components, ensuring component compatibility and process functionality throughout the entire system.

Reduced Lead Times: Many of the standard packages that we offer are pre-designed for quick turnarounds.

Flexible Design: Our flexible modular design allows us to plan and fabricate a compressor package to meet individual customer specifications and industry specific applications quickly and economically.



WHAT WE OFFER

Application Experience: Our management has been involved in the design and fabrication of specialized compressor packages since 1977. Regardless of your application, we likely have the needed experience.

Control Of Manufacturing Process: In our three manufacturing facilities we maintain care and control of the complete manufacturing process, from Drafting & Design, Engineering, QA/QC, Project Management, Structural and Pressure Welding, Electrical, Controls and Automation.

Product Selection: We offer a complete range of compressor types, brands, and models allowing us to select and recommend a solution that meets your specific requirements and specifications.

CADD Design: We utilize a Computer Aided Design and Drafting (CADD) system, so we can provide you with a detailed look at your compressor package before it's manufactured.

Detailed Parts & Operating Manuals: Each compressor package manufactured by us comes with a set of in-depth parts and operating manuals so you can clearly understand the operation and maintenance requirements of the equipment.

Quality Control Documentation: On completion, you are provided with detailed quality control documentation including material test reports (MTRs), hydro-test reports, x-ray certificates, welder qualifications, weld mapping, ASME U1A forms etc., ensuring safe equipment operation for years to come.

Recommended Spare Parts Lists: Once each package is completed, we provide a detailed recommendation on which spare parts should be maintained in stock at site.

Testing: Whenever possible each compressor package undergoes a mechanical run test and detailed inspection process prior to shipping.

Shipping Logistics: Whether you need a package to be shipped within Canada, across North America, or overseas we can assist with final shipping arrangements to your site.

CORE PRODUCTS

- **Biogas Compressor and Blower Packages**

Biogas captured from biodegradable materials can be compressed and used as a sustainable fuel source.

Applied Compression offers North America's largest selection of low, medium, and high-pressure compressor and blower packages for these corrosive digester gas applications ranging in size from 1 HP to a 1000 HP.

We offer North American packaging expertise, combined with the experience of internationally recognized compressor manufacturer's including LeRoi, Mapro, Blackmer, National Turbine, Mycom, and Fornovogas.

These packages are designed and fabricated here in North America ensuring compliance with local code requirements including UL, CSA, ASME and OSHA.

Our compressor modules offer a clean, simple design that allows easy access for normal maintenance and are available with a locally mounted PLC control panel suitable for class 1 div 2 electrical areas.

Also available are variable speed drive control systems that evenly match compressor capacity to gas production rates. In periods of low demands, the VFD reduces the gas flow rate by reducing the drive speed. This reduction in drive speed saves power and reduces operating costs.

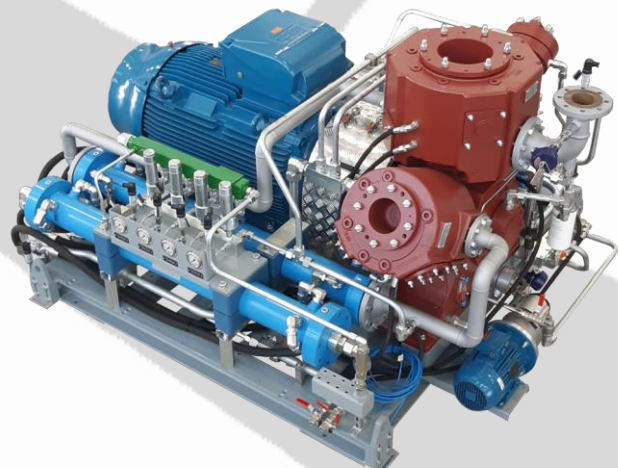
Our shop has Class A welding certification, a CSA Z299.3 quality assurance program and ISNetwork safety compliance.

- **Syngas and Hydrogen Compressors and Packages**

Syngas is a mixture of Hydrogen, CO₂, CO, and CH₄ predominantly with about 50% of the energy density of natural gases. It is used as a fuel source or cleaned into its base components for use.

Syngas and Hydrogen compression requires a gastight, leak-free compression system. ACS has solutions that are purpose built for these applications utilizing rotary vane, roots, reciprocating, rotary screw, and diaphragm compressor technologies. We design, engineer, and fabricate compression solutions that are a perfect fit for the recovery of synthesis gas from pyrolysis and gasification phases of biomass decomposition. As well as for Hydrogen refueling systems which require oil-free compression and pressures up to 750 BARG.

Our Packages are designed to handle the potential for corrosion, hydrogen embrittlement and meet the electrical requirements that are related to syngas and Hydrogen compression. With the selection of oil-free compression ACS can also provide contaminant free compression solutions. All our packages can be provided as open skid mounted systems up to complete walk-in style buildings designed for ambient temperatures down to -50C.



• Natural Gas Compressors and Packages

Applied Compression Systems designs and manufactures electric motor driven natural gas compression equipment primarily in the range of 5 to approximately 1000 HP.

Our products range from smaller compressors for stripper-well applications to larger rotary screw, rotary vane, and balanced horizontally opposed reciprocating compressors for larger capacity and higher-pressure applications.

These cost effective, dependable, and user-friendly packages are available as basic open style skids or fully housed and heated units specifically suited for the harsh winter climates of Northern Canada and the United States.

We offer both rotary screw and reciprocating natural gas compressors for applications including:

- Fuel Gas Boosting
- Field Gas Gathering
- Casing Gas
- Gas Gathering
- Gas Lift
- Vapor Recovery
- Recycle Gas
- Coal Bed Methane
- Solution Gas
- Flare Elimination



• Air Compressors and Packages

Our instrument air compressor packages are designed specifically to provide clean and dry compressed air for process and instrument air applications. These instrument air compressor packages are designed and fabricated to meet today's stringent ISA requirements for instrumentation quality compressed air, with outstanding performance and long-term economy. Packages are designed specifically to meet our clients' specifications including Class 1 Division 2 and explosion-proof electrical area classifications.

Our cold-start and black-start air compressor packages are designed for outstanding performance and long-term economy. By storing compressed air at pressures of 250 – 1000 PSIG and then reducing the pressure at the air starter, the size of the air receiver tank is greatly reduced. This is particularly critical in packaged generator and gas compressor sets, as well as marine applications where the availability of floor space is limited. Standard packages are available in both simplex and duplex configurations. Prime movers include electric motors, gasoline or diesel engines, hydraulic motors, and power take-offs.

Applied Compression Systems offers a complete range of standard breathing air compressor packages for both high and low-pressure applications. In addition, we can provide breathing air packages that are custom designed and fabricated to your specifications including special requirements for portable and offshore applications. We also offer fully self-contained low pressure breathing air systems for confined space applications in the mining, oilfield, and power generation industries. Our breathing air solutions include all drawings and operating manuals necessary to complete your project.

In addition to these specific air compressor applications, we also provide options for medium and high-pressure air, PET bottle blowing, pulse air filtration, high pressure energy storage, oil-free, and engine driven packages.

- **Nitrogen Generators**

Applied Compression's nitrogen generators offer users a cost-effective alternative to expensive bottled nitrogen. Whether you simply require a nitrogen generator itself, or a complete system with feed air compressor, dryer, filters, storage tanks, and booster compressors, Applied Compression Systems can help.

At Applied Compression, we recognize that in many cases, the initial capital cost of the gas generator package will often determine the economic viability of the project. With this in mind, we have developed a range of PSA gas generator packages that allow us to easily match a unit to your specifications and budget.

As a provider of both standard and custom fabricated systems, we have the expertise to design and supply the most cost-effective package for your requirements. Each package supplied by us includes a comprehensive set of operating manuals and data sheets.

Nitrogen flows up to 10,000 Nm³/h and purity levels ranging from 90 to 99.9999% are available.

- **Oxygen Generators**

An engineered oxygen generator package from Applied Compression will substantially reduce your oxygen costs.

Our modular PSA oxygen systems offer unmatched flexibility and have set new standards in oxygen generation.

We will design and fabricate a custom-built oxygen generation package to your specific requirements.

Our turn-key packages can be skid-mounted, containerized or housed in a cold-climate package and arrive complete with oxygen generator, feed-air compressor, dryer, and buffer tanks.

Oxygen flows up to 387 Nm³/h and purity levels ranging up to 95% are available.

- **Compressed Air and Gas Filters and Accessories**

- Refrigerated and regenerative desiccant air and gas dryers
- Full range of filters including moisture separators, particulate, coalescing, and activated carbon options
- H₂S removal systems
- Storage tanks through a wide range of volumes and pressure ratings. Custom vessels for any application are also available
- Cascade storage and dispensing/filling stations
- After-coolers, heat exchangers, and chillers
- Breathing air filtration systems and complete packages



- BRANDS

**Gardner
Denver**



FORNOVOGAS
WE MOVE ENERGY



fluitron_{Inc.}



DALGAKIRAN

GHH RAND



VECTOR





- BRANDS



MYCOM

THS, Inc.



Allen-Bradley



SOMARAKIS™
- Vacuum Pumps & Compressors -



AND MANY MORE...

BIOGAS & SYNGAS PACKAGES



Reciprocating Compressor Packages

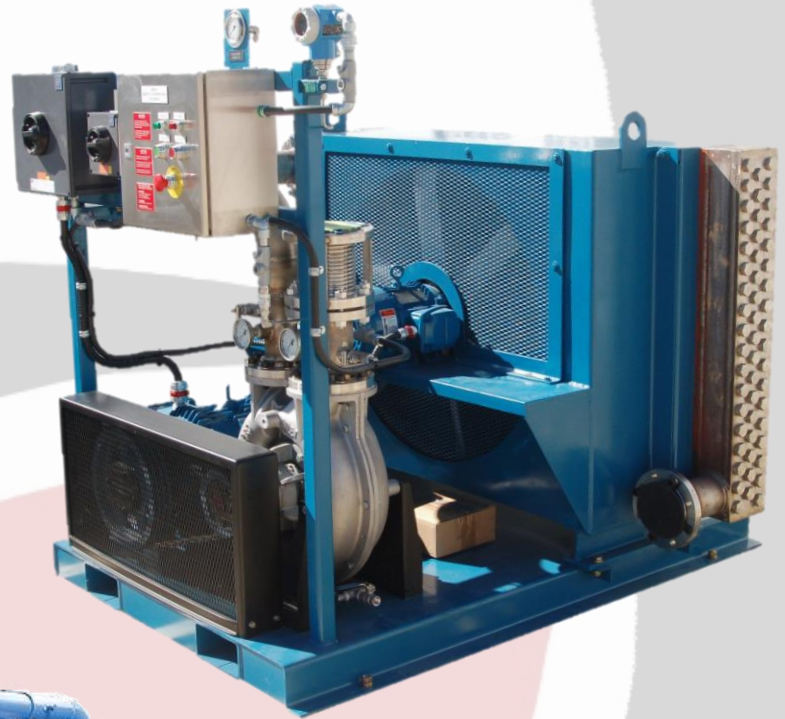


Diaphragm Compressor Packages



Screw Compressor Packages

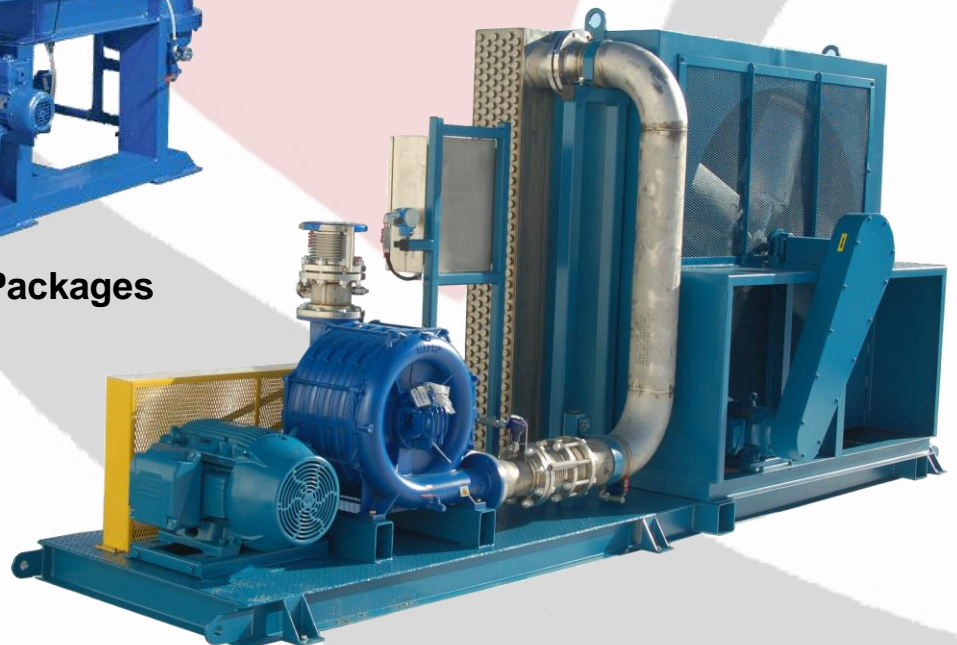
BLOWER PACKAGES



Regenerative Blower Packages



Rotary Vane Blower Packages



Centrifugal Blower Packages

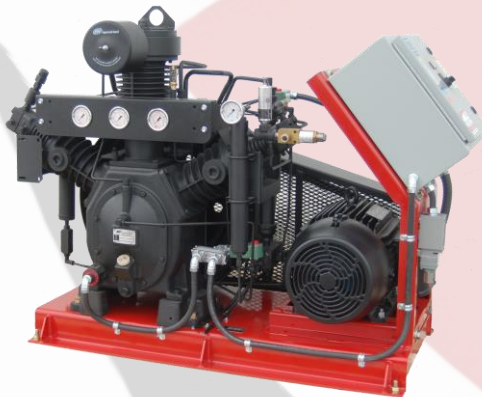
AIR & INERT GAS COMPRESSOR AND GENERATOR PACKAGES



**Standard & Custom
Instrument Air Packages**



**Explosion-Proof
Instrument Air Packages**



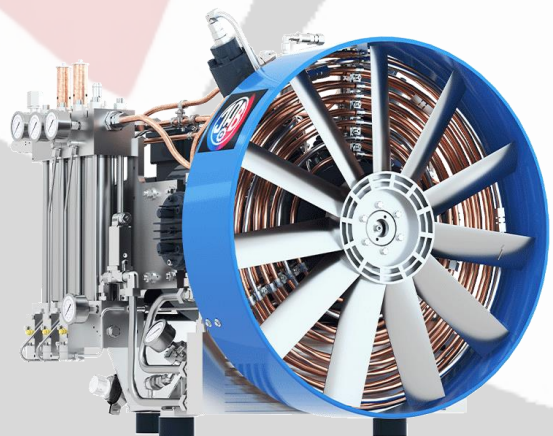
**Medium/High Pressure Compressors
(250 to 6000 PSIG)**



**Complete Breathing Air
Packages**



Nitrogen / Oxygen Generators



Helium Compressors



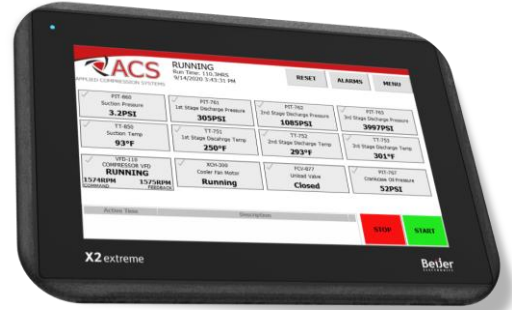
SPECIAL EQUIPMENT AND SERVICES



Cold Climate Packages



VFD, Disconnect, and Contactor Packages



Allen Bradley PLC Control Panels



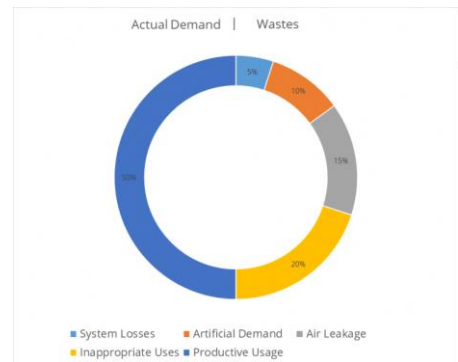
Compressor Parts and Rebuilding



Field Startup, Service, and Repairs



Cascade Storage and Dispensing Systems



Compressed Air Energy Audits



Applied Compression Systems
 Toll Free (855) 417-2396
 Fax (250) 417-3183
 info@appliedcompression.com

400 Industrial Road A
 Cranbrook, BC, Canada, V1C 4Z3



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