

Your trusted partner in fluid handling and control.

Who We Are

Are you looking for custom engineering, fabrication, and field support for fluid handling equipment, process control, and beyond? Wave Control Systems Ltd. (Wave) is your trusted partner in fluid handling and control. Ask us for a quote today.

What We Do

We provide equipment and field support to 95% of Alberta's producing oil sand sites in addition to other energy and industrial facilities in Western Canada and the United States. Count on us for quick turnaround on custom engineering, fabrication, assembly, and service.

Our Competitive Advantage

We pay close attention to the details to deliver solutions that will meet or exceed your scope and expectations. This ultimately translates to a more efficient project with some of the most complete documentation in the industry.

What our clients are saying

"It was a no brainer to reach out to Wave to supply pumps and automation systems. They are familiar with our applications and our chemistry and know our customers' specifications."

- District Manager for a major chemical supplier to the Canadian Oil and Gas Industry
- "Most firms provide an 'off the shelf' solution but Wave delivers what's unique and new because of their focus on research and development."
- Process Engineer with Canada's largest crude oil producer

"One of the key advantages of working with Wave is that they are prompt. I now refer a lot of work to Wave."

- Mechanical Engineer with one of the largest EPC firms in the world
- "They are incredibly knowledgeable with specialty products... always giving us ideas to work within budget."
- Major supplier to Western Canada's Oil and Gas Industry

Products and Services

In addition to our engineering expertise – which encompasses mechanical, chemical/process control, electrical, instrumentation, and software knowledge – you may choose a product or service from this list. **Call us for a quote.**



Chemical injection packages and custom engineered process solutions



Accessories: tanks, stands, containment, hoses, pumps, spare parts, etc.



Polymer activation, batching (dry or liquid) and fluid metering and mixing systems



Modules, instrumentation shelters and control panels



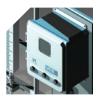
Field service, installation and technical support



Rentals include chemical injection packages, tote stands, and flow meters



Engineered injection quills, specialty fittings and piping systems with CRN



UCS systems for precise flow monitoring with pulsating pumps



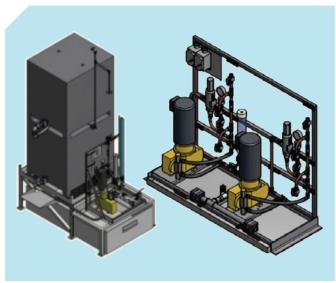


Research and development of fluid handling, metering, monitoring, mixing, pilot plants and sensor/ analytical products

Engineered and Fabricated Packages

Our in-house engineering, fabrication, and technical support team can expedite multi-discipline, integrated systems and provide the necessary after sales support.

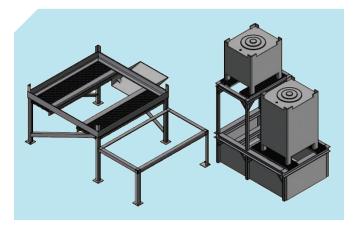
- Engineering and technical support for mechanical, chemical/process control, electrical, instrumentation, and programming/software.
- Wave is licenced to practice engineering in Alberta, British Columbia, and the North West Territories (APEGA, APEGBC, NAPEG).
- Documentation, Quality Assurance/Control, and HS&E to meet new construction requirements.



Stock and custom designed chemical injection pump packages for almost any chemical requirements in markets such as energy, petrochemical, industrial, water treatment, etc.

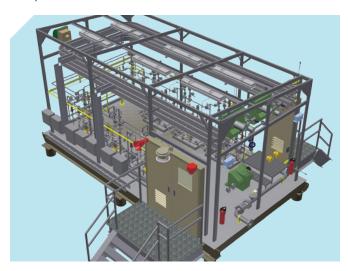
Accessories

Tote stands, containment, hoses, pumps, and spares, etc.

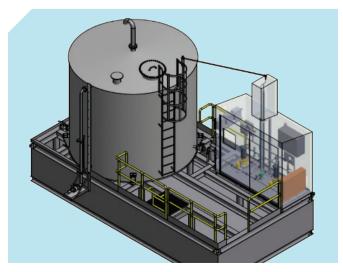


Modules And Shelters

Complete with pumps, process piping, instruments, analyzers, and controls.



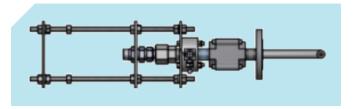
A major International Oil Company contacted Wave when they required a critical chemical metering building in the shortest time possible



UCS system for precise chemical injection and monitoring at remote sites. Bulk tank with containment basin.

Engineered Fittings and Piping Systems with CRN

Static and retractable injection quills, static mixers, specialty mixing and dilution spools, etc.



Service, Trades, and Tech Support

Electrical/instrumentation, welding, and millwright services

 Quality Assurance/Control programs, HS&E, and site specific work training for majority of Alberta oil sands sites and many other energy, industrial, and petrochemical sites. Wave is PICS, ISNET, ABSA, and CWB approved



- Equipment installation, commissioning, repair, testing, operator training, documentation services for metering pumps, controls, instruments, analyzers, etc.
- Design, assembly, and tech support (shop or field) of PLC/HMI/VFD/control panels, instrumentation, analyzers, mixing/batching, process, and control systems.
- Alloy and carbon steel structural and pipe welding with CWB and ABSA certification for B31.3 piping and fittings. Plastic welding and fabrication (PFA, PVC, HDPE, etc.).



Uninterruptable Chemical Supply "UCS" System

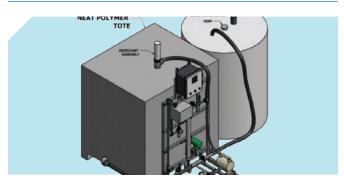
Our patented chemical injection flow and tank level monitoring system surpasses industry standards for precision chemical metering of both pulsating and intermittently operating pumps.

The Uninterruptable Chemical Supply (UCS) system provides accurate chemical feed rates and tank level monitoring. The UCS system enables the injection of chemical to a targeted PPM set point to avoid over/under

feeding. Enhanced operational efficiency with real-time communication eliminates the need for manual measuring.

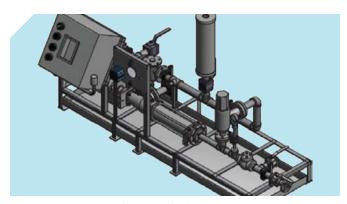


Polymer Batching, Metering, and Mixing



UCS-Poly, automated and activation of emulsion polymer for low to medium flow or intermittent/batched applications.

Progressive cavity pump and Wave's activation and mixing devices for continuous (no batching) polymer applications.



Progressive cavity and API675 diaphragm metering pump packages for high volume activated polymer feeding.

