

Bantrel is a leader in the Canadian market, delivering end-to-end solutions across engineering, procurement, construction (EPC) and construction management (CM).

Pipeline & Facilities

Bantrel's team has expertise in designing a broad range of pipeline, terminals & facilities including:

- Above ground and underground pipelines
- Product Lines: Dilbit, crude oil, diluent, steam, finished product, gas
- Mainline pumps and booster pump manifolds
- Meter bank manifolds and distribution manifolds
- Instrumentation & Electrical buildings
- Firewater & foam buildings
- Surge relief facilities
- Sending & receiving traps
- Large oil storage tanks & firewater storage tanks
- Storm water retention ponds
- Fire protection systems & layouts
- Packaged equipment (Metering skids, chemical injection)
- Instrumentation & automation
- Custody transfer, metering and proving
- Pipeline SCADA, PLC (station & mainline)
- Safety systems - SIL, HAZOP
- Electrical substations
- Piperacks

Field Storage Tanks

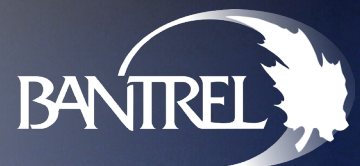
Combining our storage tank and balance of plant capabilities, we offer complete terminal solutions. Our expertise includes: bulk liquid terminals, LNG regasification terminals and LNG peakshaving and transportation facilities.

Bantrel provides engineering, procurement, fabrication and construction services for storage tanks. We specialize in the design and execution of all types of field-erected storage tanks. Our expertise includes: ambient storage tanks, high temperature tanks, tank maintenance and repairs, spheres and pressure vessels, low temperature and cryogenic tanks, LNG tanks.

Retrofits

Bantrel is a leader in the Western Canadian marketplace for sustaining capital work in the energy sector. Working seamlessly with your operations and maintenance personnel, our team of engineers, designers and support personnel are trained to provide engineered solution to de-risk your facilities and support your safety, profitability and operability goals.

We understand the challenges and complexities of executing projects in operating facilities and the necessity to minimize disruptions to your operations. Our team of professionals have hands on experience designing, procuring and constructing projects in operating facilities.



Bantrel specializes in facility modifications, pipelines, tanks & terminals.

Transient Analysis

- Isothermal transient analysis of liquid terminals
- Transthermal transient analysis of mainline pipeline
- Dynamic analysis of:
 - System start-up or shut-down
 - Stress nodes to determine loads/ forces on pipe segments
 - Surge relief tanks to determine optimal size
 - Emergency shut-down valve systems & system response
- Determination of overpressure mitigation, design of surge relief stations
- Steady state hydraulics of complex piping systems
- Analysis of both LVP and HVP systems
- Hydraulic analysis of various slurries including settling slurries (SRC modelling and transient)
- Evaluation of existing relief system & outlet piping
- Identification of potential high-erosion areas in a piping network

Incident Analysis

We have been able to successfully provide support to operating companies to troubleshoot existing operations and provide post incident root cause analysis to determine the exact sequence of how an incident occurred, and we have varied experience ranging from start-up and shut-down studies to large scale transient analysis on liquid pipelines, terminals and all associated piping.

Vapour Recovery

Bantrel has deployed engineering solutions using state-of-the-art vapour recovery process technologies. We have executed projects to meet the ever-increasing stringent requirements to contain emissions demanded by the marketplace. We have engineered tank vapour recovery solutions to capture a variety of sensitive species (H_2S , mercaptan sulphur, SO_x) to be processed in downstream incinerators, absorbers, scrubbers and flare systems.

We leverage our midstream technical expertise to deliver results for both pipelines & terminals.

