



Equipment

All TARA Equipment is manufactured to the highest of Internationally recognized safety standards set by the Alberta Boilers Safety Association (ABSA) and the BC Safety Authority. TARA is also registered with the National Board of Boiler and Pressure Vessel Inspectors and ASME U-Stamp certified for oil and gas production testing flowback services. TARA Oil & Gas Oilfield Fabrication Design Certifications Include: ASME Process Pipe B31.3 * Pressure Vessel SEC. 8 DIV. U-Stamp * National Board # * Structural CWB * Tank Fab ULC.





Equipment Brochure Contents

2
2
3
3
3
3
4
4
4
5
5
5
6
6
6

High Pressure Separator

2000psi, 9.9m3 (63bbl), 205°C (400°F) :

- Cushioned inlet with isolation valve
- Dual gas out with sectional gas diffuser
- Full 4 phase separation oil compartment
- Full dual 2" Fisher pneumatic fluid dump systems oil/water
- Standardized full inline setup
- Digital gas and fluid monitoring with live stream SCADA remote monitoring
- Built-in H2S and LEL monitoring/alarm systems
- High fluid/low fluid shut downs
- Built-in sparging system
- Built-in flow line ESD system
- Skid Mounted(Trailer Mounted available)

1440psi, 12.2m3 (75bbl), 205°C (400°F)

- Cushioned inlet with isolation valve
- Dual gas out with sectional gas defuser
- Full 4 phase separation oil compartment
- Full dual 2" Fisher pneumatic fluid dump
- systems oil/waterStandardized full inline setup
- Digital gas and fluid monitoring with live stream SCADA remote monitoring
- Built-in H2S and LEL monitoring/alarm systems
- High fluid/low fluid shut downs
- Built-in sparging system
- Built-in flow line ESD system
- Skid Mounted

Low Pressure Separator

196psi, 63m3 (396bbl), 205°C (400°F)

- 3-Cushioned inlets
- Dual gas out with sectional gas diffuser and mist pot
- Digital gas monitoring with live stream and SCADA compatibility technology
- Full Dual 3" Fisher pneumatic fluid dump systems oil / water
- Built-in H2S and LEL monitoring/alarm systems
- High fluid/low fluid shut downs
- Built-in sparging systems
- Built in flow line ESD system
- Skid Mounted

196psi, 55m3 (346bbl), 205°C (400°F)

- Cushioned inlets
- 4"/2" Meter runs
- Digital gas monitoring with live stream and SCADA compatibility technology
- Built-in H2S and LEL monitoring/alarm systems
- High fluid/low fluid shut downs
- Built-in sparging systems
- Built in flow line ESD system
- Skid Mounted

High Pressure & Low Pressure Separators

While following certain mandates of current industry environmental concerns, we have added features such as patent pending weir plates above the weir for better separation and redesigned mist extractor plates on gas outlet to decrease greenhouse emissions. To address operator safety, we have installed visual alarm systems to the exterior of the operator's cabin to eliminate con-fined space entry, which alerts all personnel if Hydrogen Sulphide or Low Explosion Levels are inadvertently present. All vessels are built with sparging systems, which allow for zero-entry cleaning of the vessels without opening hatches. This reduces the possibility of releasing emissions and increases operator safety.

TARA Energy's installation of high fluid shut downs and low fluid shut downs eliminate the environmental risk of spills and over pressuring of secondary vessels carrying fluid over and are set to actuate the on-board ESD system to isolate flow. Our gas and fluid metering systems are state of the art and all TARA vessels have dual ABB SCADA compatible digital meters with Barton chart records for back up on the gas side. The fluid side uses sur-flow totalizer combined with either D4 actuated fluid valves or full-port 3" V-ball valves in concert with Fisher L2 Controllers. With our sister company, TARA Manufacturing we have the capability to build equipment and modify faster than any other Canadian manufacturer. We pride ourselves on building and improving industry standards. We will always utilize this core competency for our clients' benefit and will custom build anything for any client that helps improve their operational efficiency.



SCADA

Through the use of our carefully selected and top of the line instruments, advanced communication hardware, custom built software, and in-house managed system we have the ability to adapt quickly to our customers requirements and develop a solution that not only meets their needs, but exceeds them all in a timely fashion.



Sparging System

At TARA you can count on uninterrupted flowback with our internal Sparging process. This means an increase in production time and the elimination of sand carry over to pipeline. Ultimately this leads to reduced downtime, third party trucking costs, and substantially lower washed parts cost. Every TARA vessel has sparge coils and crew members are trained to operate the pump.



Sparge Pumps & Sand Management

To manage the large volumes of sand we are seeing in today's new completion flowbacks, TARA has invested in high volume fluid pump skids to sparge our vessels and remove sand without interrupting flow operations. This helps to reduce costs and minimize downtime and washed parts within the vessels. The only additional equipment needed is one 400 BBL tank beside the pump skid. As an added benefit these pumps can be utilized for other applications on location as well such as transferring fluid, fluid injection, and fluid circulation.





SCADA

 Being in charge of the process from start to finish enables us to continually innovate and streamline our system to greater enhance reliability, accuracy, speed, and efficiency.

Sparging System

- Sparge coils in EVERY vessel
- High volume fluid pump skid capable of pumping at 500L/min at 1800psi
- These pumps can also be utilized for other applications on location such as transferring fluid, fluid injection, and fluid circulation
- Minimizes downtime and washed parts
- Removes sand without interrupting flow operations
- Increases production time and eliminates sand carry over to pipeline

Sparge Pumps

 20000 psi pressure rating and maximum fluid rate of 500L per minute

Sand Management & Disposal

- Cost savings provided by the reduction in daily washed flow component supersedes the daily cost for the equipment and men to run it
- Transforms flowback slurry into disposable landfill ready solids by essentially bringing the disposal facility to your location
- Encapsulate heavy metals, BTEX, oil and grease, and other contaminants, converting the frac sand to a nonhazardous and non-leachable material
- Provides up to 40% cost savings in comparison to vac truck and class 1 disposal method

Gas Analyzers

Certifications Include Process Piping (B31.3) Pressure Vessels SEC. 8 DIV.1 (U-Stamp Cert.) (National Board #) Structural (CWB) Tank Fabrication (ULC) with all safety records documented with Complyworks, ISNetworld and PICS Canada.

Comingled Choke Manifolds

TARA Dual Stage Manifolds

- 3" Double drop manifold
- (Qty-2) Adjustable chokes
- (Qty-2) Positive chokes
- Mounted on Full Containment Skid

Portable Gas Spectrometer Hydrocarbon Analyzer

We offer custom equipment builds and configuration packages for various types of applications such as pipelines and facility builds or switchovers and daisy chain defoaming to improve operational efficiencies for H2S projects. Our analyzers make H2S natural gas processing economical through the eliminating the process of having to send samples back to the lab and waiting for test results. They produce highly accurate compositional analysis with gas chromatography and the potential to reduce operational costs by live, accurate data.



Comingled Choke Manifold

Bridge Manifolds changes the way we interface our flowback equipment with Multi Well Pad, allowing us to seamlessly flow any well to any vessel within each group. Extra adjustable chokes will allow us to regulate wells to flow together more efficiently to one separator, as well as add another stage down in pressure to reduce erosion on equipment.

Each bridge allows each well to flow to a clean-up separator, then to a group separator, then pulled out to single well test separator without shutting down operations and causing downtime.



Debris Catcher

All of our 3" Double Barrel Debris Catchers are built with a containment skid underneath them ensuring zero spills when checking debris screens.



Debris Catcher

TARA DUAL Debris Catchers

- 10,000 psi 3 Inch
- Dual barrel
- 10,000 psi
- 3" or 2" available
- Mounted on Full Containment Skid
- 5 and 9 valve available

TARA DUAL STAGE MANIFOLDS

- 10,000 psi (3 Inch)
- 3" Double drop manifold
- (Qty-2) Adjustable chokes
- (Qty-2) Positive chokes
- Mounted on Full Containment Skid

Flare Stacks

Skid Mounted 80' and 120' Flare Stack

- 12 independent 4" tie in ports
- Flame arrest system
- Provides ports for up to 4 packages
- 8", 10" & 1' options
- Skid Mounted

Portable 6" x 60" Flare Stack

- 1 x 6" Mainline with knockout
- 4 x 4" Auxiliary lines
- Fireball ignition system
- Corrosion Resistant
- Minimal Ground Disturbance
- Trailer mounting/ self-standing

Pipe Skids

4 Inch & 3 Inch Production Line Skid

- 4" Fig 206 production line (400')
- 3" Fig 206 production line (800')
- 4" Swings (Qty-18)
- 3" Swings (Qty-36)
- 3" Flow tee w/t/w
- 3" Flow tee w/t/t
- 4" 150# Flange x 4" Fig 206 wing
- Skid Mounted with Tool Crib

3 Inch Production Line Skids

- 3" Fig 206 production line (1,200')
- 3" Swings (Qty-36)
- 3" Flow tee w/t/w
- 3" Flow tee w/t/t
- Skid Mounted with Tool Crib

3 Inch psi, Flow Line Skids

- 3" XXH 4130
- 162' Flowline
- (Qty-12) 3" Cushioned swings
- (Qty-1) BX 154 x 3" Fig 1502 wing changeover
- Skid Mounted with Tool Crib

Emergency Shutdown Valves

- 2,000 psi ESD
- 5,000 psi ESD
- 10,000 psi ESD
- 15,000 psi ESD

Flare Stacks

Tara flare stack rental fleet includes both mobile and free standing options. All flare stacks come standard with integral flame arrestors, auto ignition and knock out pots. All auxiliary lines are full port to provide several functional tie in points for more than one flowback package.



Pipe Skids

Tara has all sizes of pipe 1"-6" and capability to manufacture custom to clients' needs.



Emergency Shutdown Valves

Tara ESD's come in a range of psi options acting as an emergency safe guard to stop flowback remotely should a release occur downstream of the flow source.



Vaporizers

.5 MM BTU

Line Heaters

5,000 psi 3 Inch Cushioned Heater

- 8 Pass upstream 3" 5,000 psi
- 8 Pass downstream 3" 5,000 psi
- 5 MBTU with full burner management system
- Low level shutdown
- External LEL detection shutdown
- Fully insulated fluid bath
- Skid Mounted

5,000 psi, 2 Inch

- 8 Pass downstream 2" 5,000 psi
- Comes with adjustable choke and flanged gut spool
- 2" 1 MBTU
- Fully insulated fluid bath
- Skid Mounted

SAGD Line Coolers

MAWP 635psi 205°C (400°F)

- 2" 4 stage sectional coil system
- Inline chock setup
- 3" fluid bath circulation (inflow outflow
- Skid Mounted

Vaporizers

TARA's vaporizers are flame arrested with a digital onboard burner management system ensuring zero risk of an explosion. These units can be filled with water or glycol and are typically used to vaporize propane.



Line Heaters

Tara line heaters come in both 5000 psi and 10,000 psi options and offer an indirect heating solution for subzero flowback conditions. Flow passes through a series of bundles that sit within a water or glycol bath.



SAGD Line Coolers

Tara's innovative line cooler vessel utilizes a series of bundles to cool hot effluent between the flow source and surface.

