## SHELL AND TUBE SYSTEM

Our shell \& tube BTEX Emission system is built around all stainless ASME code shell tube heat exchangers, manufactured by SpiralX. These systems are used in extreme cold weather where there is no electricity. Regeneration capability ranges from 200,000-3.5MM BTU/hr. 95\% destruction is claimed through SpiralX combustors paired with a PREFIRE burner management system. There are FIVE major reasons end-users prefer this design.

1. The Glycol is on the SHELL side. This acts as an insulator thus enhancing the unit's ability to not freeze during severe cold weather conditions. Inferior systems run the glycol on the TUBE side and the condensation on the shell side and are therefore prone to freezing.
2. The shell tube heat exchangers are in a vertical arrangement. This allows for near zero back pressure on the still column greatly reducing the chances of relief valves popping. Horizontal arrangements are prone to clogging.
3. SpiralX shell tube systems use a $24^{\prime \prime}$ diameter stainless separator tank, complete with removable demister pad. Inferior systems use a 4" diameter separator, which often is not large enough to get good separation between the condensable and the BTEX gases.
4. 35 GPM rated diaphragm pumps are used to move condensate as opposed to 4 GPM blow cases.
5. SpiralX shell tube systems come with an optional combustor to destroy the BTEX gases as opposed to the dangerous practice of pushing those gases back into the dehy burner.


Features:

- Level glass mounted on separator tank to show liquid level during operation.
- Liquid level control to automatically purge separator tank.
- Rated for Class I, Group D, Div. I or II, whichever is required.
- High level shut down (HLSD) system to prevent condensate from entering next stage of BTEX removal.

