



High Temperature Hot Water Generator

| | Membrane Style | Lamont Style |
|------------|---|--|
| Furnace | Membrane tube construction | Tangent tube construction |
| | Shorter tube length | Longer tube lengths |
| | • Tube access from the side | Tube access from the rear |
| | Smaller maintenance area, due to the | Maintenance area is larger due to the |
| | ability to access tubes from both sides. | longer tube pull. |
| | • Headers are located on opposite corners, | Headers are located around the perimeter |
| | run parallel to the furnace | of the front wall. |
| | • 2" OD tubes with 0.25" thick membrane | • 1.25" OD tubes |
| | bar | |
| | Furnace access on the front wall | Furnace access on the front wall |
| | Observation ports on the side wall | Observation ports on the rear wall |
| | Removable casing for tube welds | Requires welded casing behind tangent |
| | inspection | tubes |
| Convection | Inline tube arrangement | Staggered tube arrangement |
| | Convection bank consists of bare tubes, SS | Convection bank consists of bare tubes, SS |
| | fin tubes and CS fin tubes | fin tubes and CS fin tubes |
| | • 2" OD tubes | • 1.5" OD tubes |
| | Scallop bar construction | Scallop bar construction |
| | Tube bends and welds are external to the | Tube bends and welds are external to the |
| | gas path | gas path |
| | Convection bank is located behind the | Convection bank is located above the |
| | furnace, closer to the floor. | furnace, requires platform to access. |
| | Directly connects to the furnace header | Separate headers |
| | No external piping needed | Connects to furnace via external piping |
| | Separate economizer is not necessary, can | Provision to integrate economizer to the |
| | be integrated to the convection bank. | convection bank. |
| | Multiple flue gas passes | Single flue gas pass |
| | Removable side panels for tube welds | Removable side panels for tube welds |
| | inspection | inspection |
| Footprint | Low overall height | Convection & Economizer are mounted on |
| | | the furnace requiring more overall height. |
| | Longer floor space | Shorter floor space |
| | Less field installation: no interconnecting | Requires more field installation: |
| | piping, Convection and Economizer comes | Interconnecting piping, Convection and |
| | factory installed. | Economizer come in separate modules. |