



REVOLUTIONIZES AIR COOLERS



- Lower Cost
- Smaller Size
- Less Energy Consumption
- Galvanized Structure for longer life
- Optional Stainless Steel tubes

5 YEAR TUBE JOINT LIMITED WARRANTY

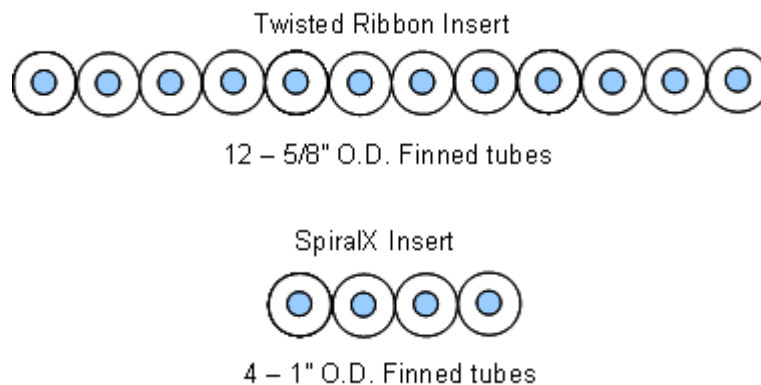
Viscous fluids, such as lube oil, flow in laminar layers inside cooler tubes causing flow stagnation at and near the inside tube wall. This flow stagnation is the major deterrent in transferring fluid heat to cooling air via finned tubes.

SpiralX overcomes much of the tube wall stagnation by disturbing the boundary layer with high velocity fluid flow directed by a helix. Fluid flow through the SpiralX center tube component moderates the fluid pressure drop and is cooled by the circular fluid flow in the helix.

A comparison of the relative number of required finned tubes for lube oil heat transfer with SpiralX inserts versus twisted ribbon inserts is shown below:



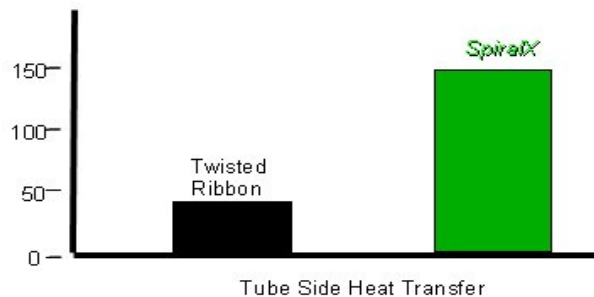
Patent Pending



This illustration shows that for lube oil cooling services in air coolers, four (4) 1" SpiralX finned tubes will transfer the same amount of heat as twelve (12) 5/8" finned tubes with twisted ribbons.

HOW SpiralX WORKS

Viscous fluids, such as lube oil, flow in laminar layers inside air cooler tubes causing flow stagnation at the tube wall. This retards heat transfer from the fluid to the inside tube wall and is the major deterrent in transferring fluid heat to cooling air via finned tubes. SpiralX overcomes this problem much more efficiently than any other invention since the 1905 patent was originally granted for twisted ribbon “turbulators”.

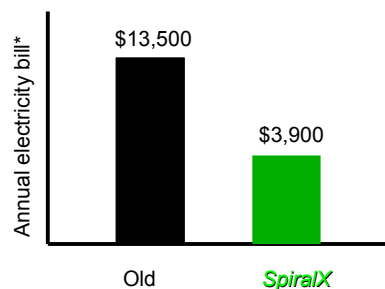


Go **Green** Save Money

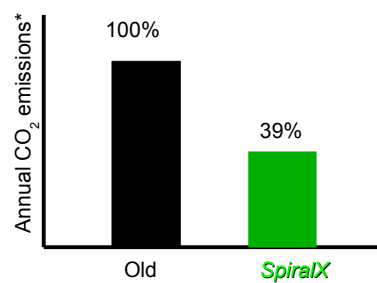
Going **GREEN** with SpiralX saves operating cash and reduces CO₂ emissions.

CO₂ emissions from power generated in the U.S. average almost one ton of CO₂ for each megawatt-hour of power generated.** SpiralX air coolers **REDUCE** CO₂ emissions by producing air coolers that consume less fan horsepower.

Air coolers are designed to operate at maximum ambient temperatures and maximum compressor horsepower requirements. With SpiralX electric air coolers, fans can be automatically, or manually, turned off as needed saving electricity while meeting the thermal requirements. These air coolers can be delivered with an optional variable speed drive to further fine tune savings and performance. A comparison of savings and CO₂ emissions for a typical 350HP screw compressor air cooler are shown below:



* based on 10ct/kw your savings may vary



* based on average Texas temperatures

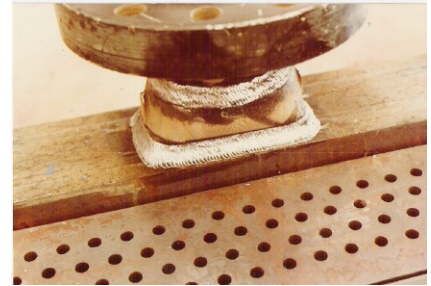
** reference Carbon Monitoring for Action (CARMA) at www.carma.org

SpiralX electric cooler fans can track the ambient temperature and/or the compressor load and still meet the thermal requirements of the compressor. This will use considerably less horsepower, saving electric power costs and reducing the related CO₂ emissions.

WHY **SpiralX** COSTS LESS

SPIRALX vs BOX HEADERS

- Fabricated box headers, such as shown in the photo at the right, require extensive machining and welding which contributes to the cost and extended delivery time of packaged air coolers.
- SpiralX packaged air coolers use ASME approved pipe headers for lower cost, higher design pressures, and reduced delivery times.

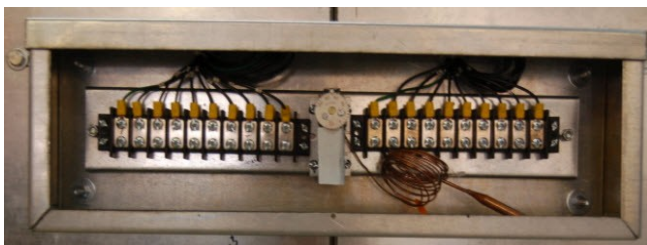


SPIRALX FLEXIBLE PASSES

- SpiralX tube bundles have variable pass arrangements that can be easily changed to give compressor packages a wider range of applications.
- Each tube row can be removed, as an individual unit, or changed without replacing the entire unit.
- Rows can be added to existing units to increase capability without increasing the footprint of the unit or dramatically changing the piping
- SpiralX pipe headers are furnished with screwed, socket welded or butt welded fittings.

SPIRALX RUGGED CONSTRUCTION

- SpiralX packaged air coolers use considerably stronger 1" OD steel tubes, and achieve higher heat transfer rates than the 5/8" OD tubes that are traditionally used.
- Tubes are WELDED into the pipe headers, as shown in the photo at the right, for increased reliability.
- Pipe headers with welded tube joints are stronger, more reliable, and less expensive to build than box headers.



SPIRALX ENERGY SAVER

- Thermostatically controlled fans
- Digital on/off of required fans
- Continuous temperature control and electricity usage with Variable Speed Drives.



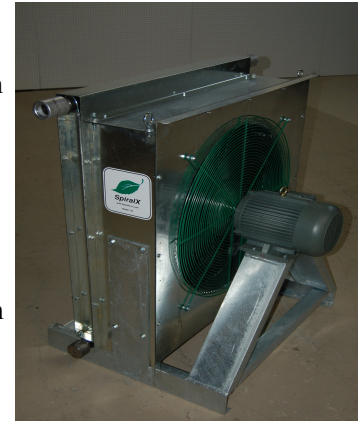
MODEL CD DIRECT DRIVE UNIT and MODEL CE ELECTRIC DRIVE UNIT



These units are three feet wide by three feet tall by twenty inches deep with a 30" fan that can blow in either direction. They are designed with an oil section that can cool a screw compressor ranging from 40 to 200 horsepower.

An optional after cooler for natural gas, nitrogen, or compressed air can be bolted to the front of the unit.

These units come standard with steel tubes and carbon steel headers. Stainless steel is available.

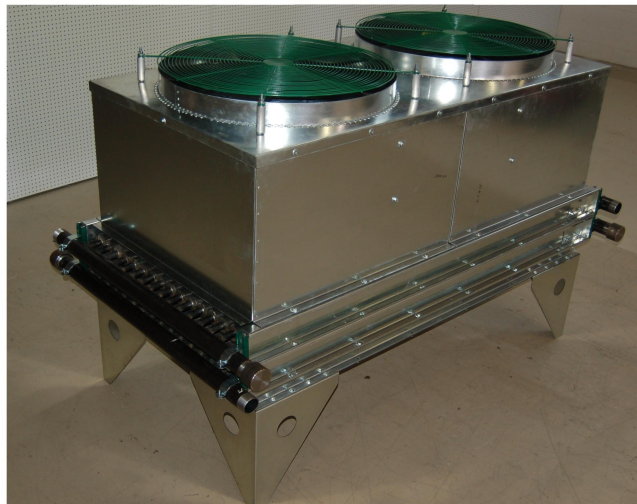


MODEL H ELECTRIC DRIVE UNITS

Model H coolers are manufactured in 3' x 3' modules and are available with 1,2,3,4,8, or 12 modules with varying tube lengths for required cooling services.

Controls are available to turn the fans on and off manually or automatically.

With SpiralX variable speed fan controls, the fan speeds (and consumed electricity) can be controlled to exactly meet the thermal requirements of any of the various services.



Visit us at www.SpiralXLLC.com or email us at INFO@SpiralXLLC.com



**3532 Miller Park Drive
Garland, Texas 75042**