

# AIR COOLED HEAT EXCHANGERS



**Cooling Products, Inc.**





## *Serving the industry since 1961*

From its opening in 1961, Cooling Products has provided thousands of air cooled heat exchangers for the Gas Processing Industry, Natural Gas Transmission companies, Oil Refineries, Air Separation facilities, and Hydrogen enhancement additions. A true manufacturer, CPI designs and produces the structural components, finned tubes, and welded headers at its facility in Broken Arrow, Oklahoma. Validating our original and on going commitment to superior manufacturing, CPI equipment from the 1960s continues to operate more than forty years after fabrication. Because our internal quality standards exceed API-661 requirements, we do not produce off-the-shelf equipment – every cooler is custom designed and built to the client's requirements.

CPI's founder, Jim Carter, was an engineer in the early years of air cooled heat exchangers. He built Cooling Products on design integrity, service to customers, and commitment to employees – a number of whom have thirty or more years of continual experience working for CPI. These craftsmen of long standing assure our culture of quality is passed on to incoming generations of workers.



# Quality Assurance

For over twenty years, Cooling Products has been the only air cooled heat exchanger manufacturer with a representative serving on the industry appropriate ASME committees.



In addition to ASME Code, CPI produces CRN and PED registered equipment.

All forms of testing and NDE are available to meet customer or project requirements.



Scheduling, quality, and cost objectives are monitored in real-time resulting in better performance and lower pricing.

Assembled coolers are test run prior to shipment including vibration tests to API-661 (ISO 13706) standards.



## CERTIFICATE OF AUTHORIZATION

This certificate accredits the named company as authorized to use the indicated symbol of the American Society of Mechanical Engineers (ASME) for the scope of activity shown below in accordance with the applicable rules of the ASME Boiler and Pressure Vessel Code. Any construction subject to the provisions of the agreement granted by this Certificate of Authorization shall be subject to the provisions of the ASME Boiler and Pressure Vessel Code.

COMPANY:

Cooling Products, Inc.  
500 North Pecan  
Broken Arrow, Oklahoma 74012

SCOPE:



# *Finned Tubes*

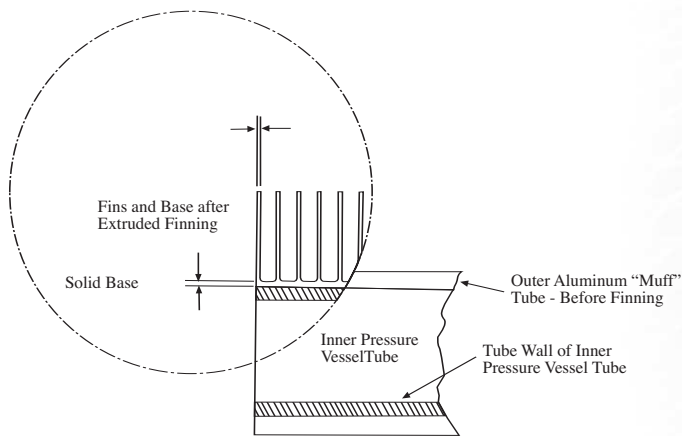
All varieties of industry standard fins are provided on CPI equipment. Our quality process requires pressure cleaning the base tubes before finning to prevent contact interference and to ensure maximum heat transfer and minimum thermal resistance.

L-fins, spirally wound under tension, are the most cost efficient type for benign environments and average temperature applications. CPI L-fins are checked for contact integrity and produced with cast zinc end bands to prevent loss of tension found in merely stapled options.

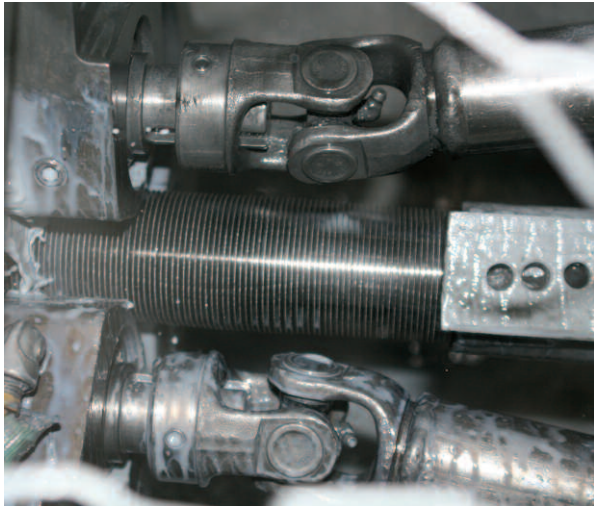
Embedded fins, suited for high temperature applications, have the aluminum edge fitted into a spiral groove in the process tube wall. Temperatures in excess of 500° F are the most common use of this fin type.







## Extruded Fin Tubes



Extruded fins are best for corrosive environments or higher process temperatures requiring alloy inner tubes where cutting into the tube wall is costly. Extruded fins are manufactured from a single piece of outer aluminum tubing. The high pressure, exacting process cuts and raises the multiple fins per inch, while stretching and mechanically bonding the outer aluminum to the inner tube.



CPI extruded fins are checked for fin profile, tension, and bond, including cutting and destroying randomly selected tubes from every production run.

CPI extruded tubes are power washed and rinsed after finning.

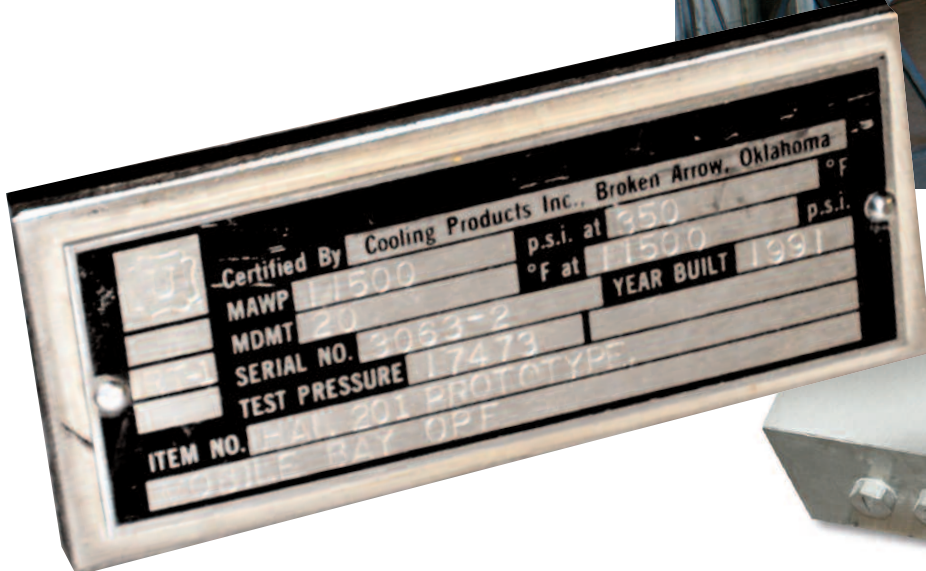


# Pressure Vessel Welding

At our facility, we create headers from carbon steel, stainless materials, and specialty nickel products. Meeting both severe design and demanding production requirements are CPI hallmarks. Lethal Service stamped bundles produced at our plant have operated for years without incident. CPI has successfully fabricated a number of extreme pressure ACHEs with ASME Code "U" stamps ranging to 11,500 PSI design and more than 17,000 PSI test.



Controlled environment rooms are available for alloy and exotic metal processes.





In addition to normal and high pressure Plug Type headers, Billet headers, Pipe headers, and Cover/Bonnet headers have all been manufactured by Cooling Products. During our decades of fabrication, virtually all welding processes have been utilized to meet product requirements or customer preferences. CPI welders receive on-going training in new methods and materials. Our policies encourage internal instruction and promotion, while our employee loyalty includes twenty and thirty year veterans.







# *Structure*

As with other component parts, Cooling Products manufactures its own structures, controlling quality, design, workmanship, and schedules without relying on sub-vendor whims. From OSHA requirements to end-user standards, we can assure compliance.



A standard CPI feature not offered by others – rounded, eased inlet and eased exit fan rings. The less abrupt change in air flow reduces static pressure, horsepower, and noise. Our fan rings, combined with other design features, allow CPI to produce some of the quietest coolers in the industry.







# *Shop Assembly*



Units with bay sizes up to 60 ft. and 40 tons are loaded and shipped from our facility.





# *Warm Air Recirculation Systems*

Cooling Products was a pioneer in warm air recirculation systems during the early 1960s. Working in collaboration with a major oil company research facility, CPI helped develop the over-the-end recirculation system that became an industry standard.

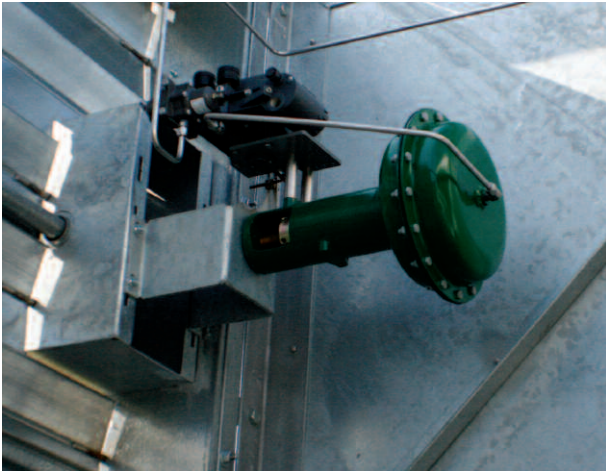
CPI further refined the design to allow for modular shipping to drastically reduce field installation time and manpower requirements.



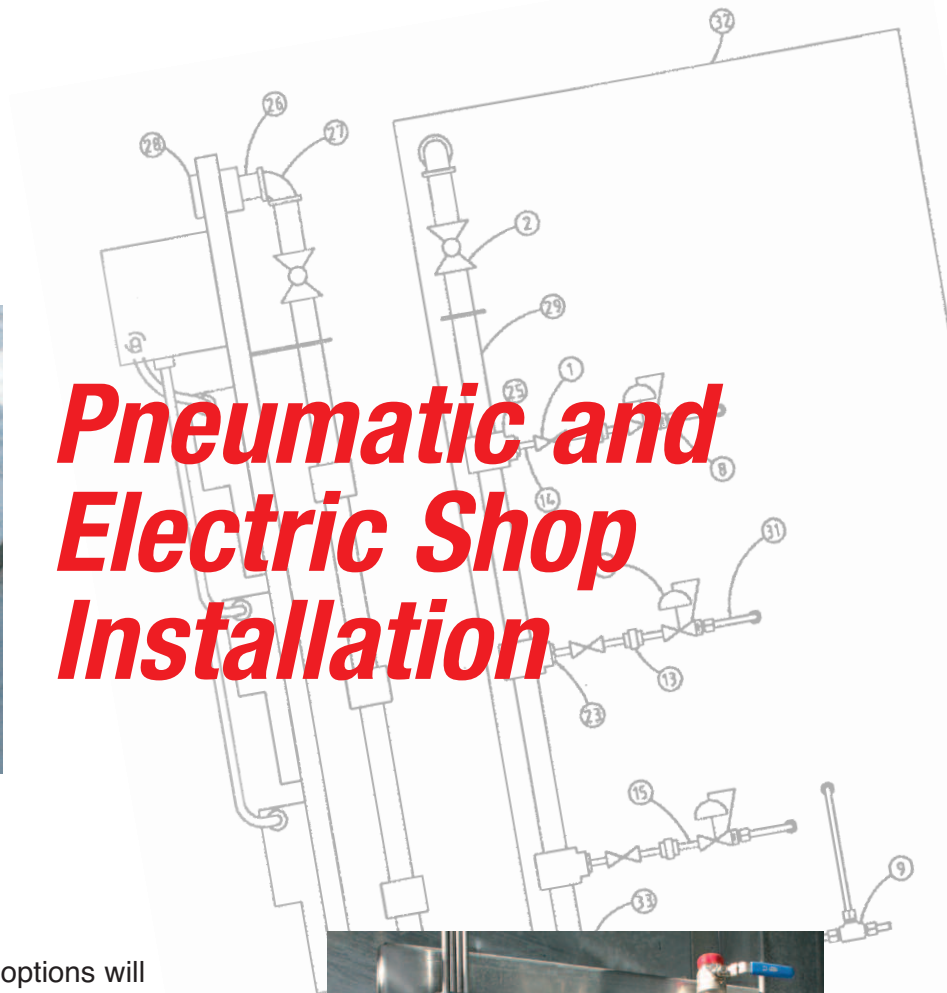
Years of successful operation in the northern U.S., Canada, Alaska, and Russia, have proven our designs and construction reliability.



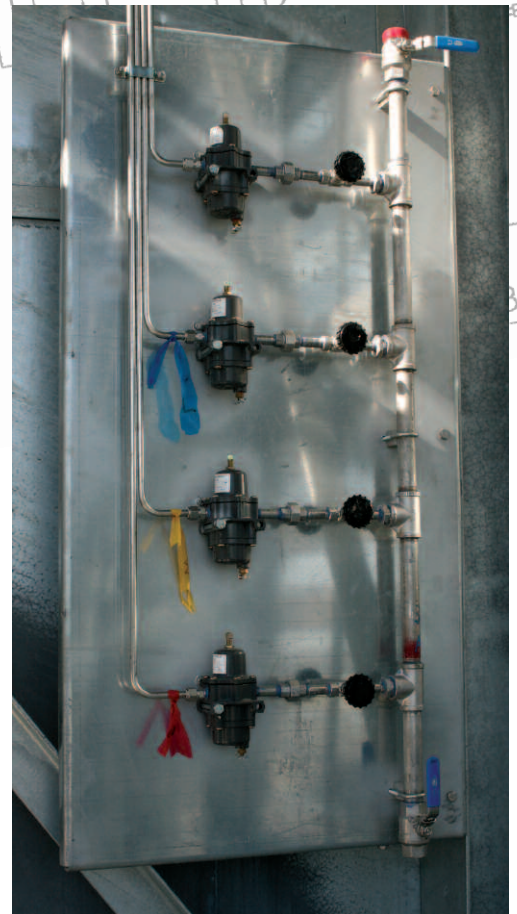




# ***Pneumatic and Electric Shop Installation***



Beyond assembled systems, our value added options will further reduce jobsite costs and completion time. These alternatives include partial wiring, shop-installing actuators and air lines, and providing an air manifold with a single, client input. Computer logic interfaces and other forms of system integration can also be factory installed by CPI.





***Conception to Completion***  
***Total Manufacturing of Air Cooled Heat Exchangers***



*Cooling Products, Inc. manufacturing plant and  
headquarters, Broken Arrow, OK*



**Cooling Products, Inc.**

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**Web Address**

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**Plant Location**

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Broken Arrow, Oklahoma 74012-2333