## **USA MADE HD+CONDENSERS**

## Better by Design. Engineered for Life.

American Cooling Solutions drop-in replacement HD+ USA+ condensers set the standard by which all others are judged. Engineered for heavy duty and off-road durability and performance.



**HD+USA+** tube and fin condensers are produced in the USA with the **strongest construction** of any tube and fin cooler, maintaining high efficiency in thermal transfer. We use a thermal-conductive steel tube, avoiding the copper that is used by others. Our steel tubes are **thicker and sturdier** than competitive copper tubes, yet when used as a coil, the heat transfer is about the same as copper! Our robust steel tubes are stronger than copper and can endure much more fatigue, making it an ideal material for condensers. The steel tube joints are brazed for ultimate strength rather than soldered like copper coils. This avoids weak joints, lead exposure and the high cost and volatility of the copper metal market.



For more information and pricing, give us a call or drop us a note. Office: 866 736 7335 sales@americancoolingsolutions.com

www.americancoolingsolutions.com

## WHY ARE THESE CONDENSERS SO MUCH BETTER?

We're glad you asked! **It's all in the Fins.** Our aluminum fins are strong and press-fitted to the tubes through a process called tube expansion. This tight fit allows transfer of the heat from the cab to the outside atmosphere with great efficiency. These materials, combined with our construction methods, yields the world's most reliable and proven condenser available for HD & Off-Road conditions on the market today. In fact, our products are prized in the proving grounds of the Bakken North Dakota oil patch. With 45 years of experience, our steel tube coils have been in continued production at our USA plant since 1976!

While the popular aluminum parallel flow condensers are efficient and low cost, the aluminum lacks the critical resistiance to fatigue offered by our steel tube units. Metal fatigue is common in extreme environments like those found in Off-Road Trucking, Oil Field Tending, Agriculture, Industrial & Mining Operations. These fatigue fractures appear at the brackets and manifold joints in extreme temperature changes and bumpy roads, resulting in shorter product life. Our **HD+USA+** Condensers fatigue resistant steel and an accordion-like design provides flexibility, strength and increased lifecycle, under the same conditions.



## Superior Quality and Durable Construction, Made in America

The world has forgotten about round tube steel manufacturing, and we have a great story of American craftsmanship and performance advantages that needs to be told to a new generation.

- Designed for increased lifecycle in extreme environments like that found in Off-Road Trucking,
  - Oil Field Tending, Agriculture, Industrial & Mining Operations
- Steel is stronger than copper and can endure much more fatigue, making it an **ideal material for condensers**.
- We use a thermal conductive steel tube
- Steel Brackets.
- Our thicker and sturdier steel tubes transfer heat about the same as copper when used for refrigerant in a condenser. Thermal resistance from wall conduction in steel tubes is much less than the resistance from convection from copper tubes, so a steel tube condenser performs with no noticeable difference to one with copper tubes.



Auto Braze Production Process

- It's all in the Fins...our aluminum fins are strong and press fitted to the tubes through a process called tube expansion.
- The steel tube joints are brazed for **ultimate strength.**
- Steel round tube and fin with its accordion-like design, provides flexibility, strength and **doesn't crack** like aluminum parallel flow condensers.

Designed and proven to maintain high efficiency in thermal transfer HD+USA+ tube and fin condensers are produced in the USA With 45 years of experience. Our steel tube coils have been in continued production at our USA plant since 1976!

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