

DATA CENTER SOLUTIONS

Rear Door Cooler



Rear Door Cooler

Active Rear Door Heat Exchanger mounted on the back of any standard server rack. Designed for high-density cooling up to 75kW per rack.

Key benefits:

- Heat Neutral White Space: Removes heat at its source, eliminating traditional cooling methods (CRAC/CRAH, containment, raised flooring)
- Energy Efficiency: Works with IT hardware fans to reduce power consumption and extend equipment life
- Condensation-Free: Operates above ambient dew point for safety near electrical components
- Up to 90% Efficiency Gains: Reduced cooling footprint and improved overall data center performance

How it works:

- Room air enters the cabinet via EC fans
- Heat from servers is absorbed and transferred to coolant in the heat exchanger
- Coolant circulates to chilled water source; cool air is exhausted back into the room
- System actively monitors rack-level variables (air temp, pressure, water temp) for dynamic adjustment

Scalability & Features:

- Cooling Capacity: 0–75kW with 100% heat removal
- Rack Compatibility: Fits any industry-standard rack (Open19 & OCP compliant)
- Control System: PLC-based active cooling with remote monitoring
- Fans: 2–6 hot-swappable EC fans for flexibility
- Safety: Leak prevention/detection, optional quick connect hoses
- Redundancy: Mission-critical design for enterprise and supercomputing environment

This solution is ideal for enterprise data centers and HPC environments looking to:

- Handle growing thermal demands
- Reduce energy costs
- Eliminate traditional cooling infrastructure



Heat Exchanger Core Technology

With the vast array of product technology under API we can meet your design requirements.

Copper Tube/Aluminum Oil Coolers

Product Technology

- Round copper tube and aluminum fin

Product Highlights

- 3/8" or 3/4" round tubes
- Copper or Steel tanks
- Multi-pass and bypass options



Bar & Plate Aluminum Cooler Capabilities

Product Technology

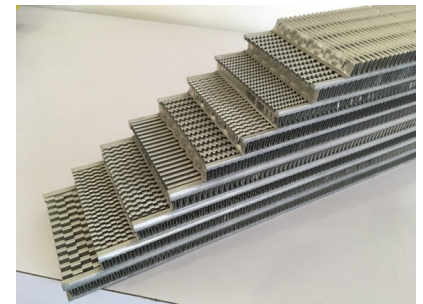
Vacuum-brazed aluminum

Manufacturing Locations

- API Suzhou, China
- Racine, WI (final assembly)

Product Highlights

- Standard components offer flexibility
- Braze multiple fluid circuits in one unit
- Compact efficient surfaces
- High- and low-pressure designs
- Low-to-no tooling required
- Wide range of fins available
- Maximum single core 50" x 80" x 12"
- Multiple cores can be welded together



Micro-Channel Condenser Capabilities

Product Technology

CAB brazed-aluminum extrude tube

Manufacturing Location

- API Franklin, WI

Product Highlights

- 18mm and 25.4mm core depths
- Louvered 14-20 FPI
- Wave fins 8, 10, 12 FPI
- Max size:
 - 90" manifold-to-manifold
 - 33" stack height/ single core – 80 tubes
 - Multiple combined & welded



45%
Less Refrigerant

Compared to F&T. Significant cost savings.

29%
Smaller

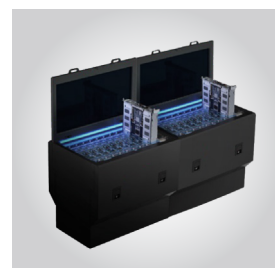
Compared to F&T.

33%
Lighter

Compared to F&T.

Data Center Application Strategy

Disrupt and displace brazed-plate heat exchangers as basis of design in major applications



IMMERSION TANKS



AIR-COOLED CHILLERS

World Leader in Heat Transfer Technology

API Heat Transfer has successfully established itself as the market leader in innovative and energy efficient equipment. Our 140-year heritage has been dedicated to designing and delivering world-class heat transfer solutions for nearly every industry. Our reputation is bolstered by our worldwide network of manufacturing facilities and more than 1,100 employees who provide sales, service, and support. Our process is ingrained in our culture and has served customers around the world for nearly a century and a half. Working with us, you'll find our performance sets us apart. API Heat Transfer utilizes a customer-focused approach to deliver highly engineered heat transfer solutions for market-specific applications that meet our customers' needs throughout the world.

Quality and capabilities.

API has world-class manufacturing facilities strategically located around the globe with the highest-quality standards and certifications to support the needs of our customers.

World Class

- Global sourcing
- Strategically located
- Product-specific technical centers
- FEA, CFD and other modeling
- Cleaning and regasketing services
- Installation and commissioning engineers

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Certifications

- 3A Sanitary
- ISO 9001:2015
- TUV

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Codes & Standards

- ASME , PED, GOST, CML
- ANSI, TEMA, CRN, API
- And many more

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API Heat Transfer, a family of high-performance brands