

API AIRTECH FACILITIES

ISO 9001  
CERTIFIED

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API AIRTECH  
ALUMINUM  
HEAT  
EXCHANGERS



**API** Heat Transfer

# API Airtech

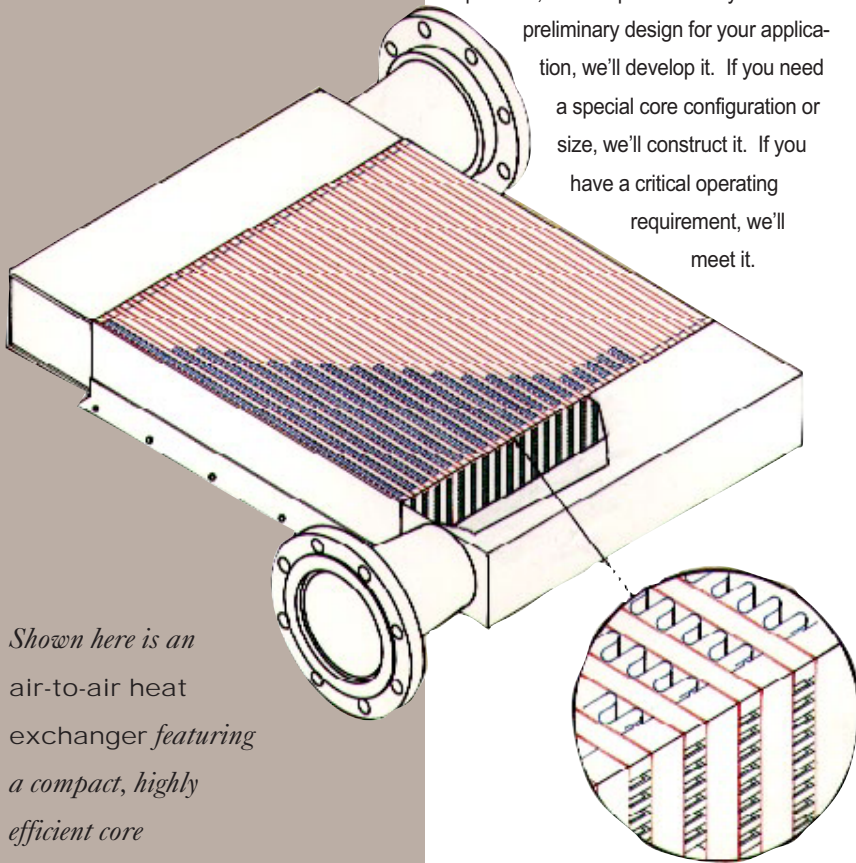
*Meeting your  
highest expectations  
with cost-efficient,  
air-cooled  
heat exchangers*

API Airtech Aluminum Heat Exchangers.

Whether you need a standard or custom design, you can get exactly what you need for your heat exchange applications from API Airtech, a subsidiary of American Precision Industries.

Air cooled, aluminum heat exchangers. Charge air coolers. Hydraulic oil coolers. Transmission oil coolers. Engine oil coolers. Combination oil/aftercoolers. We offer unlimited possibilities. And we have the expertise to deliver the best possible solution for your specific needs.

If you have a difficult heat transfer problem, we'll help solve it. If you have a preliminary design for your application, we'll develop it. If you need a special core configuration or size, we'll construct it. If you have a critical operating requirement, we'll meet it.



*Shown here is an air-to-air heat exchanger featuring a compact, highly efficient core*

No matter what you need, API Airtech has the resources, experience and flexibility to respond quickly, within your budget. We will meet or exceed your highest expectations.

Aluminum heat exchangers... the API Airtech advantage.

API Airtech is the leader in the design of air cooled, aluminum heat exchangers for a wide variety of industries, both air-to-air and air-to-liquid applications. You tell us your heat transfer specifications and we'll show you how our heat exchangers can work to deliver a distinct advantage for your product or process.

Our all-aluminum coolers feature vacuum-brazed, bar and plate construction for rugged reliability in a lightweight design, assuring trouble-free operation in even the most challenging operating conditions.

Our innovative designs are proven for increasing heat transfer efficiency and lowering operating costs of finished products in a broad range of applications including:

- Lube oil coolers
- Hydraulic oil coolers
- Bearing oil coolers
- Charge air coolers
- Engine intercoolers
- Blower discharge coolers
- Transmission oil coolers
- Compressor intercoolers
- Compressed air aftercoolers
- Jacket water coolers
- Diesel fuel preheaters
- Engine oil coolers

**Fin designs to accommodate your air or liquid flow characteristics.**

A wide selection of process and ambient air fin geometries are available to maximize heat transfer with minimum pressure drop within your operating conditions. In addition, a variety of ambient air fin geometries are available to minimize dirt build-up and facilitate cleaning when adverse operating conditions exist.

Flexible construction allows an infinite number of core configurations and sizes to custom design a solution to your exact requirements with minimal or no tooling costs.



**Cool multiple fluids or fluid circuits in a single unit.**

API Airtech can design a heat exchanger for your application that is capable of cooling multiple fluids in a single, brazed unit. High efficiency combined with a side-by-side mounting arrangement results in a compact assembly requiring minimal fan horsepower.

**Availability of standard designs.**

Our engineers can select from a variety of standard heat exchangers to meet your needs with maximum effectiveness at minimal cost. We maintain an extensive inventory of standard heat exchangers for prompt delivery, when and where you need them.

**Custom design expertise.**

If standard units don't meet your needs, we will work closely with you to custom-design the product that suits your application. Our engineering department can utilize its comprehensive computer capabilities to thoroughly analyze your thermal and mechanical design requirements to provide an optimum solution just for you. Our aluminum heat exchangers incorporate state-of-the-art alloys to provide rugged, durable designs and superior

corrosion resistance. Fully integrated CAD systems shorten response time and further ensure maximum effectiveness at minimal cost.

**Coordinating your needs.**

API Airtech Engineers also have the expertise to select and source a radiator to meet your exact requirements. While radiators are not included in our product line, we can combine your radiator and other cooler requirements into a single, simplified package to save assembly time and maximize efficiency.

**Service before the sale assures your satisfaction long after.**

Customers say our service is better than anyone else's in the world. We have earned a reputation for delivering creative solutions to difficult heat transfer requirements. We bring you a team of heat transfer experts, offering a distinct combination of experience, knowledge and skill to deliver your most efficient, cost-effective solution.

Our commitment to service starts long before the delivery of your heat exchanger, as we begin working with you, engineer to engineer. Together we can determine exactly what you need.

No matter what the requirement, we are eager to work with you to engineer a product to fit your specific needs.



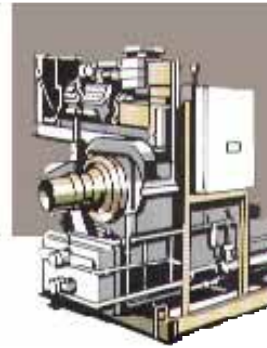
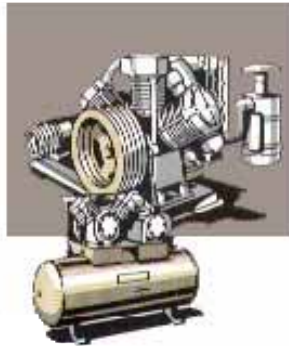
# API Airtech Aluminum Heat Exchangers

Rotary Compressors

Reciprocating Compressors

Turbo Compressors/  
Turbo-Generators

Your Product(s)



What is Cooled

Compressor oil,  
compressed air

Compressed air

Turbine bearing oil,  
generator oil

## API Airtech Cooler Type

The chart illustrates the scope of API Airtech aluminum heat exchanger capabilities, and represents just a fraction of what we can do for you. If you don't see what you need here, call us to discuss your application. Custom service is our specialty.



Oil coolers, aftercoolers,  
combination oil/aftercoolers



Aftercoolers



Oil coolers

## API Airtech Advantages

High heat transfer efficiency.  
Resistance to stress and vibration. Superior corrosion resistance.

Minimum operating costs.  
Resistance to stress and vibration.

High heat transfer efficiency.  
Minimum operating costs.  
Compact size.

**Agricultural  
Equipment**



**Construction  
Equipment**



**Machine  
Tools**



**Engines-Trucks  
Buses, Etc.**



Hydraulic oil,  
hydrostatic oil,  
turbocharger air

Engine oil, hydraulic oil,  
turbocharger air

Hydraulic oil

Engine oil, transmission oil,  
turbocharger air



Oil coolers, charge air coolers



Oil coolers, charge air coolers



Oil coolers



Oil coolers, charge air coolers

High heat transfer efficiency  
and light weight. Resistance to  
stress and vibration. Superior  
corrosion resistance.

High heat transfer efficiency.  
Resistance to stress and  
vibration. Compact size.  
Superior corrosion resistance.

High heat transfer efficiency.  
Compact size.

High heat transfer efficiency  
and light weight. Resistance to  
stress and vibration. Superior  
corrosion resistance.

The  
quality  
is brazed In.



API Airtech *facilities*



Modern production facilities.

API Airtech's new 80,000 sq. ft. facility in Arcade, New York enables an efficient, smooth production flow. Raw material stocking. Precision fabrication.

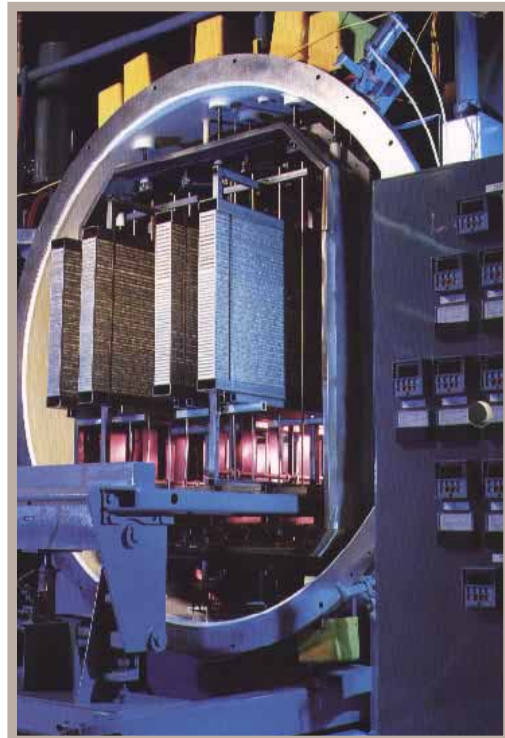
Computerized automatic vacuum brazing. State-of-the-art coating operation. ISO 9001 certification. High quality aluminum heat exchangers. Affordable cost. Timely delivery. We have what it takes to meet your most demanding requirements.

Readily available raw materials.

We maintain an ample inventory of raw materials to ensure availability at minimal material cost for quick response to your needs. Heat exchanger components are prepared in quantity, on precision high speed equipment, for the most efficient material flow.

Precision fabrication and assembly.

A variety of precision fin and cutoff machines combined with automated assembly equipment are used to produce totally homogenous core assemblies with outstanding dimensional stability. Header elements and other sheet metal components are precision cut and formed for proper configuration to your specifications.



### **Vacuum brazing for rugged reliability.**

Two computer-controlled vacuum brazing furnaces are used to bond assembled core units into a vibration and stress resistant, pressure-tight unit for maximum reliability. Finished core and tanks are inert gas welded to produce a quality, trouble-free unit.



### **Finished for long-lasting performance.**

When the units are completed, a durable epoxy coating is applied to protect against adverse environmental conditions. This highly adherent coating also minimizes dirt collection and fouling of the air cooling surfaces. Special coatings are also available to meet your specific needs.

### **Excellence through Quality.**

Our products are designed, manufactured and tested to perform under your most exacting requirements. And to be sure that they do, we subject them to ours.

With ISO 9001 as our cornerstone, we have built a comprehensive program of quality control which assures reliable performance of our products for your application. All of our employees are trained in the principles of Total Quality. At every production step, from fabrication

of components to final pneumatic pressure testing, we make sure every unit conforms to the most exacting quality standards.

At API Airtech, we see quality as a means of fulfilling a commitment to you, the customer. We relentlessly challenge our own quality through continuous improvement programs and strive to always offer you something better for your heat exchanger needs.

### **Product developments to meet future needs.**

We have a team of engineers dedicated to designing products and developing technologies to address the market's current and future needs. Increased performance. Decreased costs. More cost-effective designs. Novel technologies. Improved manufacturing systems. Faster delivery. You name it, we are working on it. We also work closely with clients on customer-specific developments.



### **Your exact heat exchanger solution is just a phone call away.**

You will find the professionals at API Airtech are an easy group of people to work with. We are eager to assist you and will work with you, every step of the way, to make sure our products and services precisely meet your needs.

Call API Airtech today at 716-496-5755 for more information on our aluminum, air-cooled heat exchangers. We will meet or exceed your highest expectations.



### **The strengths of API Heat Transfer.**

API Airtech (previously known as the Air Technologies Division) is part of API Heat Transfer, a subsidiary of American Precision Industries.

API Heat Transfer is the largest manufacturer of industrial heat exchangers in the US. It offers the broadest line of industrial heat transfer products under the Basco®, Acme®, Whitlock®, Schmidt, and Airtech names. Some of these have been in the market more than 100 years. API Heat Transfer has manufacturing facilities in North America

and Europe. And has representation around the world.

The company offers heat transfer solutions through its shell & tube, plate, plate fin and brazed aluminum heat exchanger products and technologies. For more information on API Heat Transfer call **716-684-6700**.

# API Airtech

*American Precision*

*Industries Inc.*

API Airtech Inc.

*Air Cooled Aluminum Heat Exchangers*

91 North Street • P.O. Box 68  
Arcade, New York 14009-0068  
(716) 496-5755 • Fax: (716) 496-5776

API Basco Inc.

*Basco® Shell and Tube Heat Exchangers*

2777 Walden Avenue  
Buffalo, New York 14225  
(716) 684-6700 • Fax: (716) 684-2129

API Ketema Inc.

*Acme® Refrigeration Equipment*

*Whitlock® Shell and Tube Heat Exchangers*

2300 West Marshall Drive  
Grand Prairie, Texas 75051  
(972) 647-2626 • Fax (972) 641-1518

API Schmidt-Bretten Inc.

*Plate Heat Exchangers*

2777 Walden Avenue  
Buffalo, New York 14225  
(716) 684-6700 • Fax: (716) 684-2129

API Schmidt-Bretten GmbH

*Plate Heat Exchangers*

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**API Heat Transfer**

## API Heat Transfer Products

### Standard 500 & HT Series



Available for off-the-shelf delivery, these standard units reflect the latest in heat exchanger technology and state-of-the-art manufacturing facilities. Design and material options are available. Shells range from 2" (5.08 cm) to 12" (30.48 cm).

### TEMA Shell & Tube



A wide variety of shell and tube exchangers including all TEMA types are available using pre-engineered or custom engineered designs. Shell diameters from 6" (15.24 cm) to 60" (152.4 cm). ASME, TEMA, API, ABS, TUV, ISPEL and other code constructions available.

### Pipeline Aftercoolers



Efficient, straight tube, counterflow aftercoolers designed to yield cool, dry compressed air. Available with or without accompanying moisture separators and constructed to a wide variety of design codes. Shell diameters from 6" (15.24 cm) to 42" (106.68 cm).

### OptiDesign®



Straight tube, removable bundle exchangers fabricated from standard components for common liquid and air applications. Exclusive floating tubesheet design provides for seal leak detection and easy maintenance. Shell diameters from 6" (15.24 cm) to 42" (106.68 cm). ASME, TEMA, API, ABS and other code constructions available.

### Extended Surface



Unique, patented compact plate fin design for centrifugal or axial compressor intercooler and aftercooler applications. Capable of cooling large volumes of air or nitrogen at minimal pressure loss. ASME code design is standard and shell diameters range from 22" (55.88 cm) to 120" (304.8 cm).

### Air Cooled Heat Exchangers



High efficiency, brazed aluminum coolers for cooling a wide variety of liquids and gases with ambient air. Capable of cooling multiple fluids or fluid circuits in a single brazed unit. All units can be supplied with or without a separate cooling fan and a variety of power drives.

### Refrigeration Equipment



Packaged chillers, chiller barrels and condensers available. Water and air cooled packaged chillers used as process water chillers, tank chillers, ice rink chillers, anodizing chillers, brine and glycol chillers. Standard and custom chiller barrels, condensers and marine condensers available to 1000 tons. Industrial refrigeration and HVAC applications.

### Plate Heat Exchangers



Compact units provide excellent heat transfer. Plates are pressed in stainless steel, titanium or other alloys. Sealing gaskets of nitrile, EPDM, and Viton are used. Compressed fiber or Teflon for harsher service. Welded design options for gasket-free requirements.