



FLUID POWER PRODUCT OVERVIEW









We are an API Heat Transfer Company.

Sold through a global network of distribution partners, TTP offers a complete portfolio of standard products available from API Heat Transfer. This includes a broad range of fluid power related heat exchangers (oil-water, oil-air, air-air) utilized in mobile and industrial applications, along with custom engine cooling models.

We are a global network of distribution partners.

As a recognized industry leader, TTP catalogs a wide offering of standard oil coolers and builds custom designed OEM Engine coolers and modules for Industrial Fluid Power and Mobile markets. We design and build heat exchangers from Aluminum and Copper materials—both components and multi-tiered cooling modules. We have extensive experience engineering to applications in the Mobile, Industrial, Compressor and Process industries.



ISO 9001:2015

TTP Headquarters - Racine, WI USA

We serve these markets.

Industrial Machinery Agriculture Material Handling Fluid Power Construction Oil & Gas
Specialty Equipment
Turf Care



We are a world of heat transfer solutions.

- Racine, Wisconsin
- Franklin, Wisconsin
- Iron Ridge, Wisconsin
- Buffalo, New York
- Bretten, Germany
- Suzhou, China



Mobile Cooling

Our Mobile solutions offer oil coolers, radiators, and charge air coolers with or without electric DC fans and Hydraulic fan motor drives. Built from brazed aluminum or copper round tube and fin, and are available in standard catalog product and custom designed OE modules.

Market Focus

Agriculture
Construction
Forestry
Material Handling
Mining
Off-Highway
On-Highway
Specialty
Turf Care



Turn-key Cooling Module

Our Product Series

MA DH DF M MF AOC AOHM AOVHM

New Technology

Brushless DC Fan
TTP now offers axial fans
equipped with Brushless DC
electric motors. These fans
are a featured option on many
P-BAR Series MA standard
catalog oil coolers. Brushless
motors offer benefits for
extended life including low
current draw on start up, custom
fan speed control and lower
ambient noise.









Industrial Cooling

Our Industrial solutions offer air cooled oil coolers built with our without electric AC motors and water cooled shell & tube coolers designed for multiple fluid types and built from aluminum, copper and steel for fluid power related applications.

Market Focus

Hydraulic Presses
Injection Molding and Extrusion
Hydraulic Power Units
Oil & Gas
Wind Energy
Paper Industry

Product Series

Air Cooled

AOC AO AOF AOVH RM
AOL BOL OCA COL DH DHF
M MF AOHM AOVHM MA

Water Cooled

EK EKT EC HC SSC A B CA UC/UCV PVR BPSW BPW PF COLW

Wide Range of Technology

Cool Loop COLW Series Water cooled Cool Loop offline fluid conditioning system. Utilizes a high efficiency EK Series shell & tube heat exchanger.

Bypass Valves TTP now offers two bypass valve options on standard BOLR and MAR models—a factory installed integrated pressure valve and a temperature/ pressure bypass valve.

BP Series Our BP Series heat exchangers are rugged, compact, cost-effective and reliable over long periods of time with minimal maintenance.

PF Series Our PF Series heat exchangers are a compact, serviceable design and flexible cost saving alternative.

HC Series TTP introduces the HC-Series shell & tube heat exchangers. "Hybrid" design based on interchangeability with the previous TTP C-Series.







Compressor Cooling



TTP manufactures air to air aftercoolers, water to air aftercoolers, and air to oil lube oil coolers for air compressor applications in both catalog and custom OE models. Our high quality products provide outstanding cooling performance in rotary screw, piston and centrifugal air compressors, as well as vacuum systems and blower lube oil coolers.

Market Focus

Oil & Gas

Power

Pharmaceutical

Waste Water

Printing

Auto

Plastics

Paper

Metals

Transit

Our Product Series

BGA AHP / AHPH

HC

AΒ M BELT GUARD ACOC / ACOCH AOL



AB



HC

Process Cooling

TTP process coolers cover a wide variety of industrial process applications, across many industries. These coolers are used in the daily plant operations to provide a means of highly reliable, compact and efficient cooling. Our process coolers cover a variety of industrial applications beyond Hydraulics Oil Cooling—chillers, fuel heaters, biogas, natural gas, de-ionized water, refrigerant air cooling, condenser and more.

Market Focus

Chemical Processes
Mining

Pulp & Paper

Marine
Power Generation

Hydraulic Power Units

Food Industry
Oil & Gas

Plastic Injection Molding

Extrusion Machinery

Our Product Series

BPW BPSW B UC/UCV EKT HCR CA EC PF PVR HC EK

USSC/USSCV (stainless steel)

Wide Range of Technology

Brazed Plate Heat Exchangers

BP Series heat exchangers are rugged, compact, cost-effective and reliable over long periods of time with minimal maintenance. The compact design and multiple mounting options lead to optimization of heat transfer for compact industrial applications. 316 stainless steel construction and standard SAE connections are features of this highly efficient technology.

Plate & Frame Heat Exchangers

PF Series heat exchangers are a compact, serviceable design and flexible cost saving alternative. The unique designs produce high heat transfer coefficients for a given application. Large heat exchanging surfaces in a very compact, space-saving frame. Double sealing design prevents the possibility of mixing the two process fluids. Readily expanded for greater capacities. Low temperature approaches/differences. Capable of handling large volumetric flows with low pressure drops.



Available Contraction Materials

- Carbon Steel
- Stainless Steel
- Duplex & Super Duplex Stainless
- Copper & Copper Alloys
- Nickel & Nickel Alloys
- Hastelloy
- Chrome-Moly Alloys
- Titanium
- Alloy-Lined, Clad, Explosion-Clad & Weld Overlay

Available Certifications & Registrations

TEMA ASME C-TPAT ISO 9001 API ABS

GOST-R NR-13 PED

HTRI



Engine Cooling

Flexible Cooling Solutions for Diesel, Gas, Alternative Fuels & E-Fan Integration

TTP can supply complete cooling packages, including in-house designed framing, fan shroud, finger guard, expansion tank, and more. Modules are pressure and leak tested, assembled and packaged.







TUBULAR MICRO
CHANNEL EXTRUSION

CUSTOM PLATE & BAR DESIGN

SEAM WELDED TUBE



T-BAR is a proprietary extrusion design and one of the most clever cooling technologies available on the market today. Highly engineered on the front end, equals simplicity on the application end. T-BAR has unrivaled strength and rigidity, which ensures reliable field performance. T-BAR is factory zinc coated for cathodic protection, seam/leak free extruded and ultimately reliable.

Superior Performance

Aluminum has up to 25% higher heat transfer capacity in comparison to a traditional copper/brass cooling package.

Look to T-BAR for demanding applications where performance is an absolute.

P-BAR is the most efficient design solution in heat transfer today, utilizing an aggressive hot side turbulator. Perfect for all fluid medias in diesel engine cooling applications demands, while offering remarkable heat rejection levels for new Tier systems. P-BAR is a cost effective solution and excels in core combination packaging.

Superior Performance

Aluminum has up to 30% higher heat transfer capacity in comparison to a traditional copper/brass cooling package.

Look to P-BAR as an industry standard solution & available globally.

S-BAR is a high strength automotive design, utilizing a seam welded, free flowing tube design. Constructed in a tube to header plate fashion, with options for multiple rows, fin types and tank material (plastic or metal). S-BAR is the choice for engine water jacket cooling in lower HP ranges and OEM production volumes. Engineered for challenging heat loads and demanding ambient conditions.

Superior Performance

S-BAR high flow tubes offer higher heat transfer capacity in comparison to traditional radiator cooling package designs.

Look to S-BAR for high volume OE applications in small HP ranges.



NEW Products





BP Series

Our BP Series heat exchangers are rugged, compact, cost-effective and reliable over long periods of time with minimal maintenance. The compact design and multiple mounting options lead to optimization of heat transfer for compact industrial applications. 316 stainless steel construction and standard SAE connections are features of this highly efficient technology.



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HC Series

TTP introduces the HC-Series shell & tube heat exchangers. "Hybrid" design based on interchangeability with previous TTP C-Series units. The HC Series remains the industry standard in ultimate value and long-term reliability. This proven fixed tubesheet design shell and tube heat exchanger offers the cost effectiveness that comes with having a highly standard design, while easily providing for various options to meet specific application requirements.



Brushless DC Fan

TTP now offers axial fans equipped with Brushless DC electric motors. These fans are a featured option on many P-BAR Series MA standard catalog oil coolers. Brushless motors offer benefits for extended life including low current draw on start up, custom fan speed control and lower ambient noise.



Bypass Valves for BOLR and MAR Series

TTP now offers two bypass valve options on standard BOLR and MAR models—a factory installed integrated pressure bypass and a thermo/pressure bypass.

XSELECTOR®

The XSELECTOR® Software program from TTP allows you to:

- Perform cooler heat transfer sizing and analysis on coolers for Air Cooled and Water Cooled applications.
- Now perform cooler heat transfer sizing and analysis on Air Cooled (Air Blast) coolers found in our P-BAR Series and Brazed Plate in our BP Series
- Size our Proprietary T-BAR core (OCA only)

The Aftercoolers and COL units are not included in the software

* To register for XSelector® please go to www.thermaltransfer.com/get-in-touch/ and complete the XSelector® Inquiry form and submit.

Download the **XSelector®** for both Apple and Android formats by searching for **XSelector®** in their App Stores. You must first register for **XSelector®** before using it on mobile devices.

Available fluids that can be selected include:

- ISO Grade Oils from ISO 32 to ISO 220
- Water
- Various Water/Glycol Mixes

Projected results allow the user to select the cooling solution from a list of performing heat exchangers.

Final model selection choice can be decided from the following sizing results:

- Performance
- Material
- Weight
- Size
- Price Factor
- Estimated Delivery

3D Standard Product Configurator



Features:

PDF Datasheet

- Displays 3D Model that can be Rotated to Desired Position
- Provides Basic Series Data
- 2D Drawing of Configured Unit

CAD Download

150 Software Packages of Native CAD Programs

Video

 How to Use Video Located on TTP Webpage, www.thermaltransfer.com/2022/10/14/3d-productconfigurator-for-standard-catalog-product/

Tech Center



Our fully equipped multiple-disciplinary
Technical Centers in Buffalo, NY and
Bretten, Germany are available for
expert application engineering,
metallurgical and analytical support.
Working with our customers and OEMs,
we provide heat exchanger performance
modeling, performance analysis and
mechanical testing.

- Integrated heat transfer performance test platform.
- Sophisticated laboratory analytical services providing metallurgical, chemical and polymer analysis using EDS x-ray, FTIR and DSC, as well as a wide array of mechanical and material properties analysis.
- Durability, life cycle and corrosion testing platforms to validate designs and optimize materials and performance.
- Providing the technology and expertise to support the development of new products to meet the current and future needs of our customers.

Our Tech Center capabilities include:

Performance Validation and Enhancement

- Performance testing of new or existing designs with service fluids including Water and Glycol
- Bench test comparison testing between API Heat
 Transfer designs and designs by other manufacturers
- Test facilities for Pasteurization, Evaporation and Dealcoholization running with original customer's products

Buffalo Lab

- Calorimetric Performance Testing
- Pressure and Thermal Cycle Testing
- Computational Fluid Dynamics (CFD)
- Thermal Contact Resistances Measurement

Bretten Lab

- Single phase flow stands for thermal performance and pressure drop testing
- Pilot plants
- Utilities



See how our performance can improve yours.

With manufacturing facilities, R&D locations and sales support all over the world, we're where you need us to be. Contact your TTP sales rep or visit thermaltransfer.com.

Find TTP on a world of applications

Agricultural Harvesting Machines Air Compressor Lube Oil Cooling Systems Aviation Fuels

Bearing Lubricating Systems Blow Molding Machines

Brake Retarders

Broaching Machines Brush Cutters

Chemical Process Heaters & Coolers

Chillers Compressed Air Aftercoolers

Compressed Air Cooling

Compression Molders Cutting Oil Cooling

Die Casting Machines

Hydrostatic Drives

Induction Brazing Machines

Injection Molding Machines

Mining Equipment

Paint Heating

Paper Making Machines

Pavement Compactors

Plastic Film Making Machines

Plastic Injection Molding Machines

Quenching Oil Coolers

Redi-Mix Concrete Trucks

Reduction Gears

Rough Terrain Fork Lifts

Diesel Engine Lube Oil Systems

Engine Jacket Water/Glycol

Engine Oil Cooling Extruders

Fluid Drive Centrifugals

Fluid Power Systems

Gasoline Engine Lube Oil Systems

Heat Transfer Fluids

Hydraulic Couplings

Hydraulic Winches

Hydraulically Operated Robots

Solvent Coolers

Timber Harvesting Machines

Torque Converter Oil Cooling

Torque Converters

Tractors

Transformers

Transmission Cooling

Trucks-Off Road

Tube Formers & Testers
Turbine Oil Cooling

Welding Machines

API HEAT TRANSFER LOCATIONS

Buffalo Facility

2777 Walden Avenue Buffalo, NY 14225, USA +1.716.684.6700

Franklin Facility

4700 Ironwood Drive Franklin, WI 53132 USA +1.414.761.4500

Iron Ridge Facility

1025 Industrial Road Iron Ridge, WI 53035 USA +1.920.387.4200

GERMANY

Bretten Facility

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CHINA

Suzhou Facilities

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