

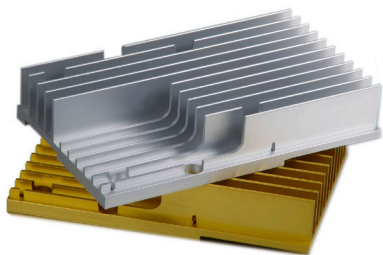


The Way Too Cool

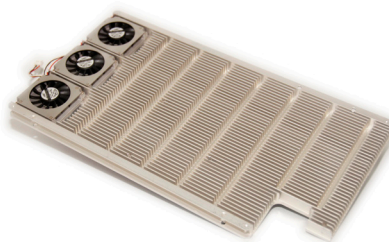
Thermal Management

Heat Sink Design, Engineering and Manufacturing

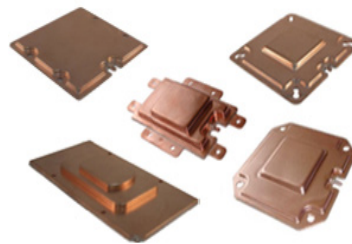
*Natural
Convection*



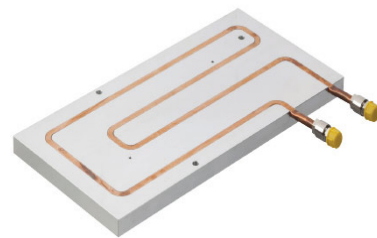
*Forced
Convection*



*Phase Change
Cooling*



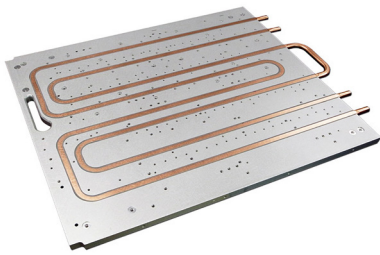
*Liquid
Cooling*



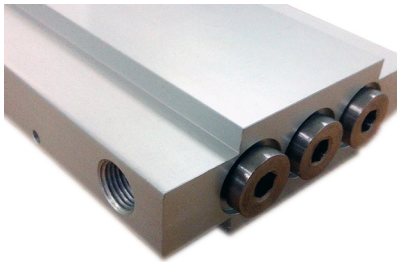
**Liquid Cold Plates
When Conventional
Cooling Is Just Not
Enough**

For very high power, high heat dissipation needs, in today's most demanding designs, liquid cooling has become the choice of designers striving to manage rising heat loads. Whether it's energy storage, lasers, power generation & conditioning, medical equipment, transportation or military electronics, liquid cold plates offer performance advantages over air cooled solutions in high watt density designs.

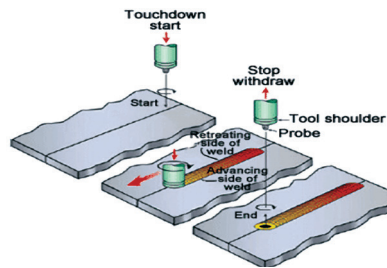
*Tube
Cold Plates*



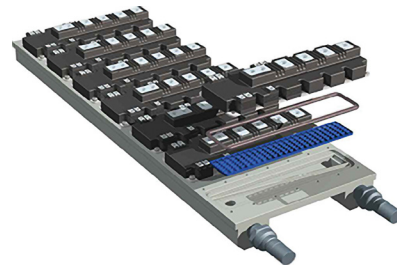
*Welded
Cold Plates*



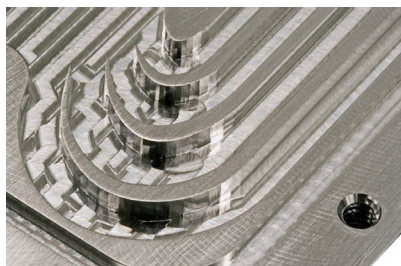
*Friction Stir
Welding*



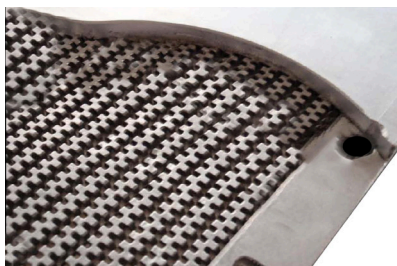
*Brazed Cold
Plates*



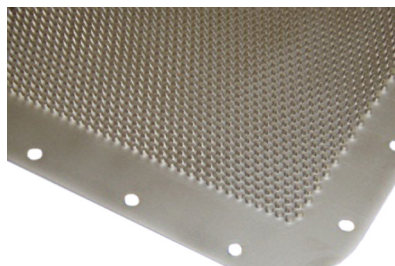
*With
Micro Machined Channels*



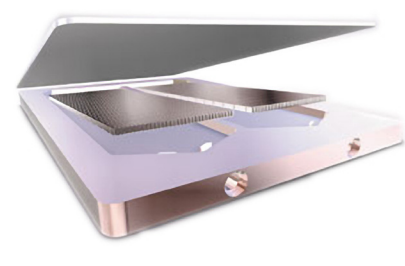
*With
Turbulators*



*With
Pin Fin Channels*



*With
Extruded Channels*



By constantly improving our technical expertise and investing in new capabilities, Baknor is globally competitive in both high volume-low mix demands and low volume-high mix requirements.

Baknor The Way To Cool.

Custom Extruded Heat Sink Solutions - Baknor extruded heat sinks, allow for a much broader range of natural convection solutions. We can create complex fin profiles which allows for greater heat dissipation through increased surface area. With standard products and a focus on custom solutions, Baknor is the vendor of choice.

The Right Solution - In addition to extruded heat sinks, Baknor also offers additional manufacturing capabilities to ensure your requirement has the best solution.

Extruded



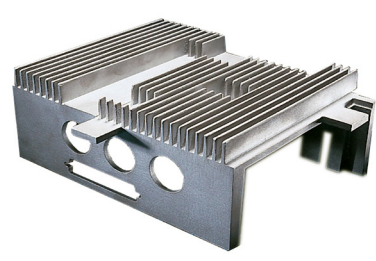
Machined



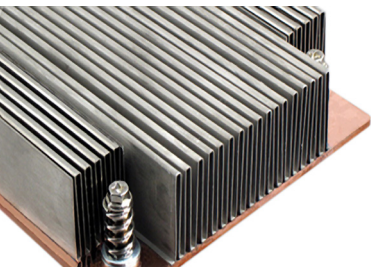
Forged



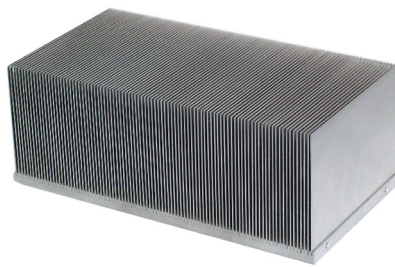
Casted



Folded Fin



Bonded Fin



Skived



Brazed



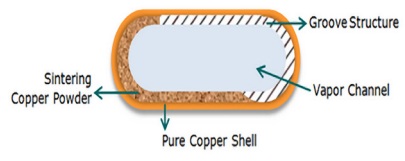
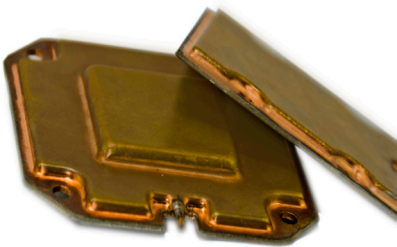
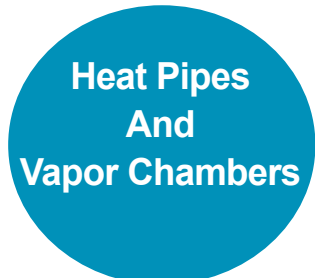
There are several manufacturing methods and techniques for cooling, including various styles of heat sinks, forced air systems with fans, heat pipes, and others. Baknor can not only provide the most cost effective solution, but the right solution based on your specific needs, through our standard products and custom designs.

Forced Air - Active heat sinks make use of a dedicated fan or blower that is fitted either to a specific heat sink or to a group of heat sinks. Fan and heat sink(s) are carefully matched, and may be designed to blow air either across the fins or directed at the heat sink. This method provides faster, localized air movement than with semi-active heat sinks, and can be used to remove more heat from a smaller area than with a semi-active heat sink.

Heat Pipes

Vapour Chambers

Ultra Thin Heat Pipes

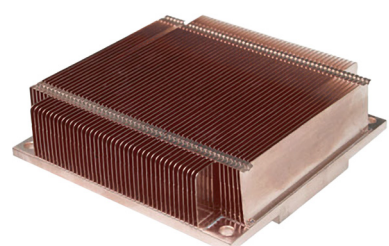
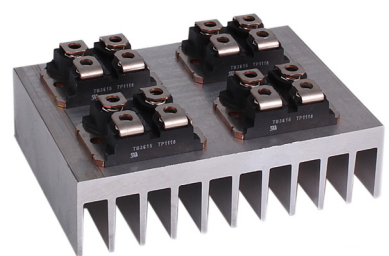
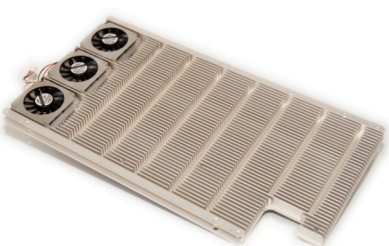


Forced Air

For Power System

Stamped And Zipped Fin Heatsink

Swage High Fin Density



A heat pipe and vapour chamber are heat-transfer devices that combine the principles of both thermal conductivity and phase transition to efficiently manage the transfer of heat between two solid interfaces.

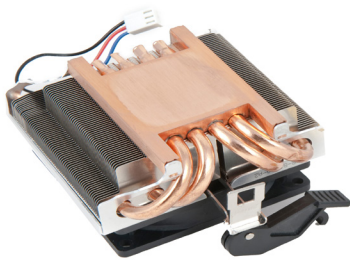
Extruded And Stacked Heatsink



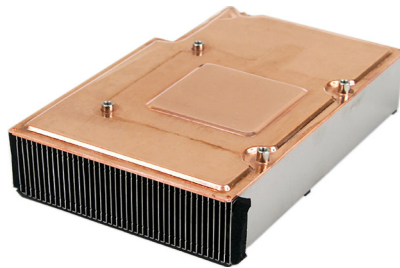
Custom Thermal Assemblies

For better thermal performance and much greater reliability consider a custom thermal assembly. Assemblies include heat pipes, fans, vapour chambers, cold plates and much more.

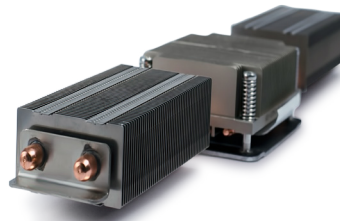
Heat Pipes Assemblies



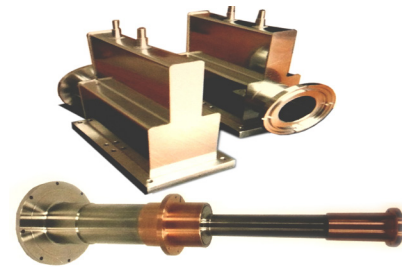
Vapour Chamber Assemblies



Thermal Assemblies

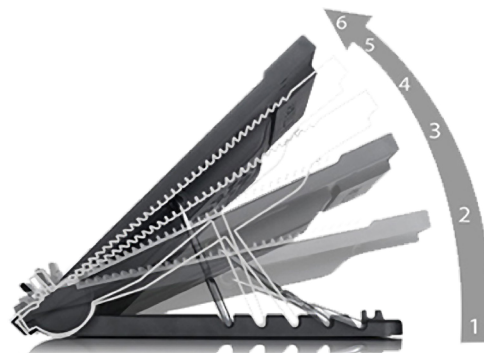


Copper With Steel Assemblies



Custom Metal Fabrication

Your low cost provider of various custom metal fabrication requirements including, stamping, metal injection moulding, forging, casting, machining, and extrusions.



With low cost manufacturing set up for our thermal product lines, Baknor also offers custom metal fabrication requirement for extrusions, machining, forging, castings and metal injection moulding. And for those customers that need a premium stamped metal requirement, let Baknor reduce your overall vendor base for custom metal fabrication.



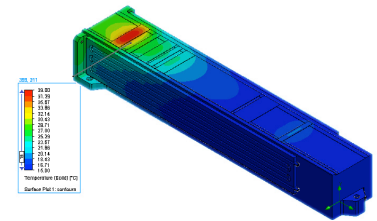
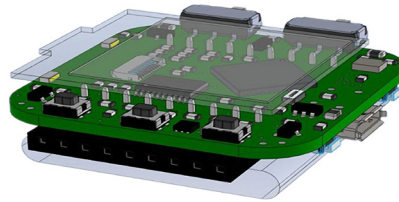
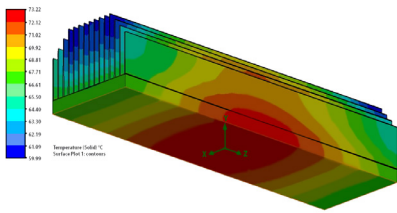
Thermal and Electro Mechanical Engineering - Design

As a support function, Baknor provides engineering services to customers at no charge in anticipation of delivering your thermal solution, custom metal fabrication, and/or electro mechanical assemblies.

Thermal Design Services

Electro Mechanical Design Services

Thermal Analysis And Simulations



Baknor provides innovative thermal and packaging solutions, that work. Engineering talent that provides solutions to dissipate your heat problems in new designs or cost reductions for existing products. With our success in heat sink design and thermal management experience, you can rely on Baknor for heat sinks and cold plate designs for the electronic industry. Our outstanding engineers have special expertise that gets you to market with the best solutions possible.

Engineering - Customer Service
Finance - Logistics
Toronto Ontario Canada

Production Engineering - Quality
Manufacturing - Logistics
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