

CNC Machined Electronic Skived Fin Heat Sink with High Performance

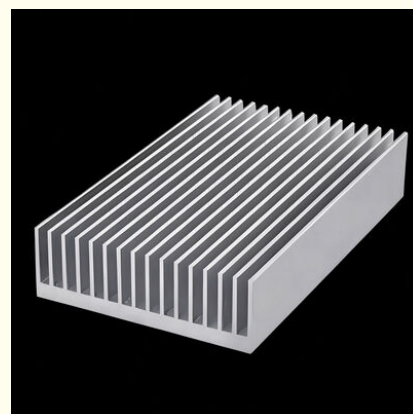
Basic Information

- Minimum Order Quantity: 500
- Price: 1.99

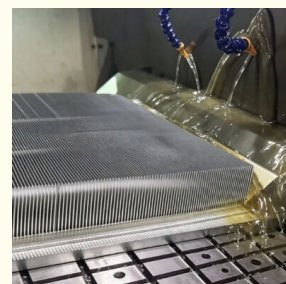
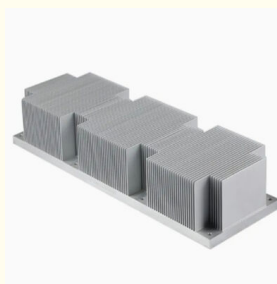
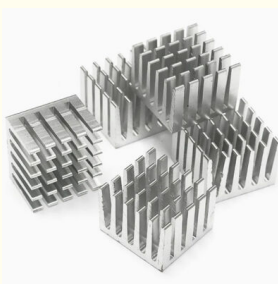


Product Specification

- Material: 6000 Series Aluminum (6063/6061/6060/6005)
- Temper: T4, T5, T6, T66
- Shape: Round
- Fin Type: Integrated Skived Fin
- Manufacturing Process: Aluminum Extrusion + CNC Machining & Skiving
- Tensile Strength: ≥ 160 MPa (6063-T5) To ≥ 265 MPa (6061-T6)
- Yield Strength: ≥ 110 MPa (6063-T5) To ≥ 245 MPa (6061-T6)
- Elongation: $\geq 8\%$
- Surface Finish: Anodization, Painting, E-coating, Nickel Plating
- Color: Black (custom Colors Available)
- Package Size: 45.00cm x 45.00cm x 45.00cm
- Package Gross Weight: 15.000 Kg



More Images



Product Description

CNC Machined Electronic Skived Fin Heat Sink — High-Performance Thermal Management

Custom CNC machined aluminum skived fin heat sinks engineered for electronics cooling. As a professional aluminum manufacturer, we deliver high-performance skived fin heat sinks with thin, dense fins and excellent thermal conductivity for reliable electronic device cooling. Custom sizes and designs are available.

Our custom CNC machined aluminum skived fin heat sinks are produced in our own factory from high thermal conductivity aluminum. The skived fin design creates thin, dense, integrated fins without bonding gaps, delivering superior heat dissipation for a wide range of electronic equipment. We support fully customized dimensions, surface treatments, and CNC precision machining. MetalPlus supplies dependable skived fin heat sinks for industrial electronics, power modules, amplifiers, and other thermal management projects. Contact us for drawings and quotations.

Product Specifications

Product Name	Aluminium / Aluminum Heat Sink (ISO 9001:2015, TS16949:2016)
Material	6000 Series aluminium — T4, T5, T6, T66
Color	Different colors available to suit your requirements
Shape & Size	According to customers' technical drawings
Surface Finish	Profile extrusion, cutting, deburring, CNC processing, stamping (drilling holes, tapping, chamfering, milling), brushing, sandblasting, soda boiling, polishing; surface treatment (anodization, painting, e-coating, nickel plating); 100% inspection (function, cosmetic), assembly, packaging, etc.
Deep Processing	Cutting, punching, milling, drilling, welding, CNC
Application	Computers, data servers, new energy vehicles, SVG/SVC/APF, frequency converters, inverters, charging devices, welding machines, welding controllers, power supplies (induction heating / rectifier / inverter power / electroplate power / SMPS / laser power supply), power regulators, soft starters, broadcast communication (base stations, signal shielding broadcast transmitters, power amplifiers), electronics, and more.
One-Stop Service	Providing a one-stop customized aluminium extrusion heat sink and machining solution — from mold design, mold making, profile extrusion, machining, thermal resistance testing, thermal imaging, and power dissipation design optimization through to the finished heat sink, all completed solely by our factory. This greatly reduces the supply cycle and improves product quality to better meet user demand.

Technical Support

Our company has more than 600 employees and 50 R&D and structural design personnel, enabling us to arrange the initial design drawing and heat sink specification within the shortest time. Once the design has been signed off, the quotation and actual lead time can be confirmed to the client.

We then move to the sample stage: MetalPlus extrudes the profiles and CNC machines a sample for testing. Once approved, the prototype can be sent to the client. After the prototype has been confirmed, we proceed to production. It is the most cost-effective customization method to achieve high heat sink performance.

Application

Anyone who has used electronic products knows that heat dissipation is involved in products such as video cards, CPUs, and chassis power supplies — these products use a radiator, generally an aluminum alloy electronic radiator, which represents only the application of radiators in ordinary civil products.

In addition, there are many industrial high-power devices that receive less attention but are very important, and they also use electronic radiators. The main applications of high-power electronic radiators include: audio equipment, UPS power supplies, EPS power supplies, inverters, transformers, monocrystalline silicon, polycrystalline silicon, battery packs, new energy electronic controllers, charging piles, inverter power supplies, switching power supplies, IP power supplies, welding machines, communication transmitters, base stations, control cabinets, power regulators, thyristors, and more.

Company Advantages

ISO 9001:2008 certified

Extrusion machines, powder painting line, anodizing line, wire-cut EDM machine, CNC, milling machine, turning machine, and grinding machine

Advanced equipment and an excellent R&D team

Professional designers and experienced workers

Strict quality control system

Primary Technical Data

1) Chemical Composition

Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Impurity	Al
6063	0.2–0.6	0.35	0.1	0.1	0.45–0.9	0.1	0.1	0.1	0.15	Rest
6061	0.4–0.8	0.7	0.15–0.4	0.15	0.8–1.2	0.04–0.35	0.25	0.15	0.15	Rest
6060	0.3–0.6	0.1–0.3	0.1	0.1	0.35–0.6	—	0.15	0.1	0.15	Rest
6005	0.6–0.9	0.35	0.1	0.1	0.40–0.6	0.1	0.1	0.1	0.15	Rest

2) Mechanical Property

Alloy	Temper	Tensile Strength	Yield Strength	Elongation
6063	T5	≥ 160 MPa	≥ 110 MPa	≥ 8%
6063	T6	≥ 205 MPa	≥ 180 MPa	≥ 8%
6061	T6	≥ 265 MPa	≥ 245 MPa	≥ 8%

Technical Support Services

Based on the customer's requirements, we help design the appearance of extruded profiles, provide CAD drawings and 3D models for customer confirmation, customize the molds, and extrude aluminum profiles that meet the customer's requirements.

For customers with design capabilities, our professional R&D team analyzes and optimizes the design based on the customer's drawings and our extrusion processing experience, using the most reasonable design to reduce production costs and improve product performance.

Our company adopts a "one-stop" service and production model, including product design, customized molds, aluminum bar melting and casting, extrusion profiling, precision machining, and surface treatment. We effectively control the alloy composition of raw materials and maintain product accuracy throughout the production process, providing you with high-quality products.

Factory Equipment

Extrusion

Equipped with 44 aluminum extrusion lines, MetalPlus is capable of producing various standards of commercial aluminum profiles and industrial aluminum profiles with a maximum outer diameter of 350 mm.

MetalPlus has 44 aluminum profile extrusion lines equipped with PLC control systems and precise molds. The largest extruder in the MetalPlus factory is a 6800-ton unit, used for the production of industrial profiles in various shapes with a maximum diameter of 600 mm. This allows us to satisfy the different requirements of our various customers. Some of the aluminum products produced by MetalPlus include radiators, industrial fan blades, motor enclosures, solar cell frames, doors, and windows.

MetalPlus can produce custom molds according to customer requirements. We have the ability and experience to produce aluminum profiles with complex structures. We have our own R&D team, so we can provide reasonable suggestions for our customers in order to create superior products at affordable prices.

Anodizing

Anodizing is a process in which a layer of aluminum oxide is formed on the surface of aluminum alloy products when they are placed in an electrolyte solution and an electrical current is applied. Oxidized aluminum profiles feature improved corrosion resistance so that the surface can withstand various weather conditions. Meanwhile, the aluminum oxide also increases the product's hardness and wear resistance. MetalPlus has 6 anodizing production lines. The profiles processed in our anodizing lines feature uniform oxidation film thickness and color, giving them a beautiful appearance. The oxidized profiles come in various color options including silver, black, gold, champagne, and imitation steel. Other colors can be customized upon request.

All anodized products are inspected by highly trained professional inspectors. Defective products that cannot be re-processed are directly scrapped. Products with uneven color are de-coated and re-anodized until they meet the requirements. This ensures there is no color difference among each batch of products.

Painting

Our factory is equipped with 4 powder spraying lines, all using high-quality spray nozzles from Gema Switzerland. MetalPlus only uses safe and environmentally friendly paint with strong adhesive force and durable color retention.

CNC Machining

MetalPlus is equipped with highly advanced machining equipment sets. All fine machining processes are accomplished by technicians with rich industry experience. Strict industrial standards are adopted during production to ensure fine machining precision and product quality.

MetalPlus has 12 PRATIC machining centers which can be used for the milling, drilling, or tapping of profiles from different angles. They are especially suitable for the production of long profiles up to 6 meters. The equipment sets can realize machining of complex profiles with the simplest methods.

MetalPlus has fully automatic cutting machines from Wegoma which can accomplish precise cutting with automatic and continuous material feeding, meaning the machines feature low labor cost and high production efficiency. Therefore, the cutting price of MetalPlus is significantly lower than that of other enterprises in the industry.

We have 30 punching machines with punching pressure ranging from 50 to 100 tons. They can be used for punching relatively thick profiles with a thickness over 5 mm. There are also 10 stretch bending / bending machines which can bend profiles to arcs or different angles with highly precise machining angles. The factory is also equipped with 10 milling machines, realizing machining of different planes, bevels, or grooves so that we can satisfy different machining requirements of our customers.

Packing and Shipping

Finished products are packaged manually and ready for delivery. MetalPlus adopts strict warehouse management procedures: the finished product warehouse is divided into sections to store specific products, all in-and-out transactions must be recorded, and each product is examined before delivery.

Certifications

Company History

2004	"The Recognized Brand of the Building Industry Material Market"
2006	"Certificate for Product Exemption from Quality Surveillance Inspection" and "ISO 9001"
2009	"Advanced Company"
2009	"Jiangsu Famous Brand Certificate"
2009	"Certificate for Credible Product of Quality in Jiangsu Province"
2012	Established business relationships with Panasonic and LG
2015	Became an innovative producer and supplying partner for a German client
2017	Developed new products of baseboard heaters
2019	Cooperated with the world's largest heater manufacturers and supplied aluminum shells for them, earning a good reputation
2023	Confidently developing overseas distributors to expand the market for win-win benefits

Project References

The Soccer City Stadium in Johannesburg is one of the major projects in South Africa. The 94,000-seat stadium is the largest-capacity stadium in Africa. We are very honored to participate in the construction of the project as the main supplier of aluminum. The Soccer City Stadium won unanimous praise after it was built.

Lobster Trailers is a Nordic trailer giant, and we are very proud to cooperate with them. Our professional R&D team analyzes and improves upon Lobster's designs and then processes them with our excellent processing equipment and exquisite technology. We minimize production costs

and improve product performance thanks to our optimization proficiencies.



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