

Custom Extruded Aluminum Heat Sink High Density Fin Aluminum Skived Heatsink for Electronic IC Power Module Cooling

Our Product Introduction

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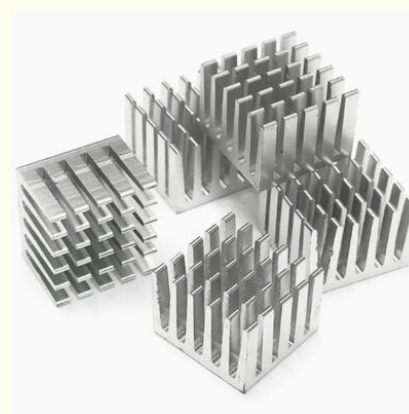
Basic Information

- Certification: RoHS, ISO, CCC
- Minimum Order Quantity: 500
- Price: 1.99

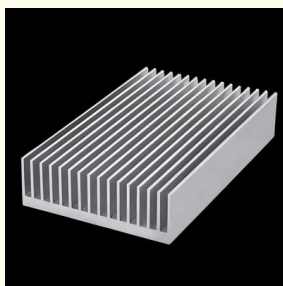


Product Specification

- Fin Type: Integrated Skived Fin
- Material: 6000 Series Aluminum (T4/T5/T6/T66)
- Surface Treatment: Anodizing
- Shape: Round
- Tolerance: Precision Machining
- Process: CNC Machining & Skiving
- Package Size: 45.00cm X 45.00cm X 45.00cm
- Package Gross Weight: 15.000kg
- Tensile Strength: ≥ 160 MPa (6063-T5)
- Yield Strength: ≥ 110 MPa (6063-T5)
- Elongation: $\geq 8\%$
- Max Outer Diameter: 350mm
- Max Profile Diameter: 600mm
- Punching Pressure: 50-100 Tons
- Max Profile Length: 6 Meters



More Images



Product Description

Custom Skived Fin Aluminum Heat Sink for Electronic IC and Power Module Cooling

Our custom CNC-machined aluminum skived fin heat sinks are manufactured in-house from high thermal conductivity 6000-series aluminum. The skived fin process produces thin, dense, integrated fins without bonding gaps, delivering superior heat dissipation for electronic equipment, power modules, amplifiers, and other thermal management projects.

As a professional aluminum manufacturer, we supply high-performance skived fin heat sinks with fully customizable dimensions, surface treatments, and CNC precision machining. Contact us with your drawings for a quotation.

Product Specifications

Product Name	Aluminium / Aluminum Heat Sink (ISO 9001:2015, TS16949:2016)
Material	6000 Series aluminium, T4 / T5 / T6 / T66
Color	Multiple color options available
Shape & Size	According to customers' technical drawings
Surface Finish	Profile extrusion, cutting, deburring, CNC processing, stamping (drilling, tapping, chamfering, milling), brushing, sandblasting, soda boiling, polishing; surface treatment (anodizing, painting, e-coating, nickel plating); 100% inspection (function and cosmetic); assembly and packaging
Deep Processing	Cutting, punching, milling, drilling, welding, CNC machining
Applications	Computers, data servers, new energy vehicles, SVG / SVC / APF, frequency converters, inverters, charging devices, welding machines, welding controllers, power supplies (induction heating, rectifier, inverter, electroplating, SMPS, laser), power regulators, soft starters, broadcast communication equipment (base stations, signal shielding, broadcast transmitters, power amplifiers), and other electronics
On-site Service	Customized aluminum extrusion heat sink and machining solutions — from mold design and making, profile extrusion, machining, thermal resistance testing, thermal imaging, and power dissipation design optimization through to finished heat sinks, all completed in our own factory to shorten lead times and improve quality

Technical Support

Our company employs more than 600 staff, including 50 R&D and structural design personnel, enabling us to prepare initial design drawings and heat sink specifications within the shortest possible time. Once a design is signed off, quotation and actual lead time are confirmed to the client.

We then move to the sample stage: MetalPlus extrudes the profiles and CNC-machines a sample for testing. Upon approval, the prototype is sent to the client. After prototype confirmation, production follows. This is the most cost-effective customization method for achieving high heat

sink performance.

Application Overview

Anyone familiar with electronic products knows that heat dissipation is a concern in devices such as video cards, CPUs, and chassis power supplies — these typically use aluminum alloy electronic radiators, which represent only the application of heat sinks in ordinary consumer products.

In addition, many industrial high-power devices that receive less attention are equally important and also rely on electronic radiators. Main applications of high-power electronic heat sinks include: audio equipment, UPS power supplies, EPS power supplies, inverters, transformers, monocrystalline and 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, and thyristors.

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
- Highly skilled manufacturing process

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 Properties

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

For customers with design capabilities, our professional R&D team analyzes and optimizes designs based on customer 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 covering 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 production, delivering high-quality products.

Factory Equipment

Extrusion

Equipped with 44 aluminum extrusion lines, MetalPlus produces commercial and industrial aluminum profiles with a maximum outer diameter of

350 mm. The lines feature PLC control systems and precision molds. The largest extruder in the factory is a 6,800-ton unit used for industrial profiles in various shapes with a maximum diameter of 600 mm, satisfying diverse customer requirements. Products include radiators, industrial fan blades, motor enclosures, solar cell frames, doors, and windows.

MetalPlus can produce custom molds according to customer requirements and has the ability and experience to produce aluminum profiles with complex structures. Our in-house R&D team provides reasonable suggestions to help customers create superior products at affordable prices.



Anodizing

Anodizing forms a layer of aluminum oxide on the surface of aluminum alloy products when placed in an electrolyte solution and subjected to electrical current. Oxidized aluminum profiles feature improved corrosion resistance, allowing surfaces to withstand various weather conditions, while the aluminum oxide also increases hardness and wear resistance. MetalPlus operates 6 anodizing production lines. Profiles processed in our lines feature uniform oxidation film thickness and color for a beautiful appearance. Color options include 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, and products with uneven color are de-coated and re-anodized until they meet requirements, ensuring no color difference between batches.



Painting

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

CNC Machining

MetalPlus is equipped with highly advanced machining equipment, and all fine machining processes are performed by technicians with extensive industry experience. Strict industrial standards are applied throughout production to ensure fine machining precision and product quality.

12 PRATIC machining centers for milling, drilling, and tapping of profiles from different angles, especially suitable for long profiles up to 6 meters; the equipment enables machining of complex profiles with the simplest methods.

Fully automatic cutting machines from Wegoma for precise cutting with automatic and continuous material feeding, featuring low labor cost and high production efficiency — resulting in cutting prices significantly lower than other enterprises in the industry.

30 punching machines with punching pressure ranging from 50 to 100 tons, suitable for relatively thick profiles over 5 mm; 10 stretch bending / bending machines for bending profiles to arcs or different angles with high precision; and 10 milling machines for machining different planes, bevels, or grooves to meet diverse customer requirements.



Packing and Shipping



Finished products are packaged manually and prepared for delivery. MetalPlus follows strict warehouse management procedures: the finished product warehouse is divided into sections for storing specific products, all in-and-out transactions are recorded, and each product is examined before delivery.

Certifications



Company History

2004 — Recognized as "The Recognized Brand of the Building Industry Material Market"

2006 — Awarded "Certificate for Product Exemption from Quality Surveillance Inspection" and ISO 9001 certification

2009 — Recognized as "Advanced Company"; awarded "Jiangsu Famous Brand Certificate" and "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 baseboard heater products

2019 — Cooperated with the world's largest heater manufacturers, supplying aluminum shells and earning a strong reputation

2023 — Expanding overseas distributors to grow the market for win-win benefits

Project References

Soccer City Stadium in Johannesburg is one of South Africa's major projects. The 94,000-seat stadium is the largest-capacity stadium in Africa. We are honored to have participated in its construction as a main supplier of aluminum. The stadium received unanimous praise after completion.

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



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