

SHEET METAL FABRICATION

PRODUCTS

OSFP Thermal Solutions

Passive Cooling (Heatsink)

Bonded Fin Heatsink
Crimped Heatsink
Extruded Heatsink
Skived Fin Heatsink
Stacked/Zipper Fin Heatsink
BGA Heatsink

Active Cooling (Fan)

AC Fans
DC Fans
DC Blowers
DC Impellers
Crossflow Fans
Frameless DC Fans

Metal Fabrications

CNC Machining

Sheet Metal Fabrication: Materials, Types, and Applications

Sheet metal is a versatile material formed into thin, flat pieces through specialized fabrication processes. It is an essential component in manufacturing and metalworking, available in a wide range of thicknesses—from ultra-thin foils to heavy-gauge plates. Common base materials include steel, aluminum, copper, brass, and tin, each offering unique mechanical and corrosion-resistant properties for different industries.

Common Types of Sheet Metal

- **Cold Rolled Steel (CRS)** – Offers a smooth surface finish, tight tolerances, and excellent strength. Commonly used in **precision manufacturing**, automotive components, and industrial equipment.
- **Hot Rolled Steel (HRS)** – Cost-effective with a slightly rougher finish, ideal for **construction, framing, and heavy-duty structural applications**.
- **Galvanized Steel** – Zinc-coated to resist rust, making it perfect for **outdoor use, roofing, siding, and corrosive environments**.
- **Stainless Steel** – Highly resistant to rust, staining, and heat. Frequently used in **kitchen appliances, food processing, medical equipment, and architectural projects**.

Industries That Use Sheet Metal

- **Automotive & Aerospace** – Body panels, engine parts, brackets, and structural components.
- **Construction** – Roofing panels, siding, framing, HVAC ductwork, and architectural cladding.
- **Consumer Goods** – Appliances, enclosures, and decorative fixtures.
- **Industrial Equipment** – Machinery housing, conveyor systems, and manufacturing enclosures.
- **Art & Design** – Custom furniture, signage, and metal sculptures.

Sheet Metal Fabrication Processes

- **Cutting** – Shearing, laser cutting, plasma cutting, and water jet cutting.
- **Bending** – Press brakes, roll forming, and stamping.
- **Punching** – Creating holes, slots, or cutouts with punch presses.
- **Forming** – Deep drawing, spinning, and precision roll forming.
- **Joining** – Welding, riveting, and adhesive bonding for structural strength.

Advantages of Sheet Metal Fabrication

- **Versatility** – Can be shaped into custom designs for almost any application.
- **Strength & Durability** – Provides excellent structural integrity while remaining lightweight.

Die Casting

Extrusion

Plastic Injection
Molding

Sheet Metal

Cold Plates

Heat Pipes

Vapor Chambers

Air Filtration

Friction Stir Welding

Thermal Pad / Grease

MCPCBs

- **Cost-Efficiency** – Scalable production and wide material availability lower manufacturing costs.
- **Sustainability** – Fully recyclable, supporting eco-friendly manufacturing practices.

Product Information

- Process: Bending, Cutting
 - Material: Aluminum
- Application: Power Supply
 - Finish: Anodizing
- Part No: 10.09.00012



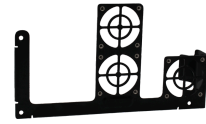
Product Information

- Process: Bending
 - Material: Aluminum 5052
- Application: Power Supply
 - Finish: Clear Anodizing
- Part No: 10.08.00015



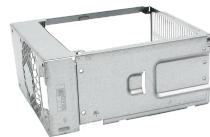
Product Information

- Process: Bending, Punching
 - Material: Aluminum 5052
- Application: Power Supply
 - Finish: Anodizing
- Part No: 10.07.00019



Product Information

- Process: Bending, Cutting
 - Material: Aluminum 5052
- Application: Power Supply
 - Finish: Clear Anodizing
- Part No: 10.04.00029



Product Information

- Process: Bending, Punching
 - Material: Aluminum 5052
- Application: Power Supply
 - Finish: Clear Anodizing
- Part No: 10.07.00031



Product Information

- Process: Bending, Punching
 - Material: Aluminum 5052
- Application: Power Supply
 - Finish: Clear Anodizing
- Part No: 10.08.00042



– COFAN'S SHEET METAL –

