



STORM POWER COMPONENTS Product Guide 1

BUS BAR DESIGN & FABRICATION

CUSTOM BUSBAR MADE OF COPPER AND ALUMINUM



Storm Power Components Custom Bus Bar Fabrication

How to build the best quality busbar at a lower price

SOURCING - As one of the largest electrical components manufacturers in North America, Storm Power Components sources more than seven million pounds of copper and aluminum every year. This advance sourcing eliminates inventory overhead from your production costs.

FINISHING - Most fabricators can't offer in-house plating and bus bar insulation like Storm. Having these capabilities under one roof reduces transport, waste, pollution, and time. And because we don't finish 75 different types of metal—we finish COPPER and ALUMINUM, and we do it right.

FABRICATION - Storm's precision machining means we can affordably manufacture a single prototype part or the mass-produced parts you need. We do it all, and we specialize in flexibility and responsiveness.

DESIGN AND ENGINEERING SUPPORT - YOU DESIGN OR WE CAN DESIGN
Storm manufactures OEM's designs to precise specifications. Our engineers can liaison between your design team and our manufacturing group, to enable you to focus on strategic projects.

Remember Storm engineers have built bus systems for high-current draw applications for a generation. So if your design engineers have a full plate, Storm can provide critical input that leads to greater design flexibility.

VALUE ENGINEERING IS ANOTHER KEY TO SAVING COSTS
Through our value engineering methods we employ a systematic process designed improve the ratio of function to cost. Value is then increased by 1. improving the function or 2. reducing the cost.

[LINK TO BUSBAR AMPACITY TABLES >](#)

Copper & Aluminum Bus Bar Specifications & Busbar Types

Metal Alloys:

C11000 - Electrolytic Tough Pitch Copper

6101 Structural Grade Aluminum

Structural Differences:

When using Aluminum Bus Bar the WIDTH must be increased by 27%. Ex: To achieve the same temperature rise, a 5" x 1/4" AL busbar will equal a 4" x 1/4" CU bus bar.

When using Aluminum Bus Bar the THICKNESS must increase by 50%. Ex: To achieve the same temperature rise, 4" x 3/8" AL busbar will equal a 4" x 1/4" CU bus bar.

Fabrication Process Paths:

Forming & Bending;
Conventional, Offset & Side

Stamping; Coil Line Process & In-House Die Fabrication

Cold Cutting & Shearing;
High & Low Volume Sawing

Machine Punching: CNC, Automated, & Single Stroke Turret Style

Precision CNC Machining;
Turning & Milling with Multi-Axis Capability

Precision Machining;
Turning and Milling with Swiss-Style Screw Machine

Press/Fused Welding & Brazing

CNC Water Jet

Capacitor Bus Bar

IGBT Bus Bar

Power Distribution Bus Bar

Armature Bus Bar

Drive Bus Bar

Backplane Bus Bar

Circuit Breaker Bus Bar

Router Bus Bar

Multilayer Bus Bar

Laminated Bus Bar

Rack Mounted Bus Bar

Plating Available:

Medium phosphorus electroless Nickel Plating

Full immersion electroplating

Strike plating

Material Choices:

Bright Tin or Matte Tin
Nickel
Silver
100% Lead
Various Tin/Lead Alloys