

Benefits of Laser Cutting Brackets Over Other Methods

laser Capabilities

Laser cutting offers multiple benefits like speed of manufacturing, material compatibility, and precision over other methods. When [laser cutting manufacturers](#) are asked to produce brackets, these mentioned benefits along with others, do apply. Laser cutting is still a big mystery to many seeking a precision manufacturing process. Precision is a key term in this technology, as even the simplest form of component will have a high degree of precision done during the laser cutting process. Lasers come in different system types and technologies like [fiber](#), [ultraviolet](#), CO2 and infrared. Each has its own technological advantage, but they all have unique characterized [benefits by using laser technology](#). For consideration the following are some of the benefits to use of laser technology:

Feature	Laser Cutting	Die-Cutting	Stamping
Speed	High-Excels on thinner material gauges- hard to handle and process by other methods	High for large quantities, slower for setup	High for large quantities, slower for setup
Precision	Excellent, can achieve tolerances of 0.0127mm to 0.0254mm	Good for consistent shapes, limited to die geometry. Tolerances of 0.127mm to 0.254mm	Good for consistent shapes, limited to die geometry. Standard tolerance 0.127mm to 0.381mm
Material Compatibility	Wide range of materials, including metals, plastics, ceramics, polyimides, brazing materials, and wood	Limited to sheet materials, often paper or thin metals	Limited to sheet metals, often ductile materials
Waste	Minimal, as cutting is precise and material utilization is good	Can be high due to material scrap and die wear	Can be high due to material scrap and die wear
R&D - Production	Rapid prototyping, design flexibility of 2D profiles, quick production setup	Slow prototyping, limited design flexibility, long setup	Slow prototyping, limited design flexibility, long setup times

Though the table shows some good benefits to using laser cutting technology for brackets or other [precision components](#), there are limitations to laser technology like the thickness of the materials that can be processed and cost considerations. As bracket designs and their intended functions will vary greatly, determination if [laser cutting methods](#) can be done with further research and communication with selected service providers. It is the best way to learn of the potential challenges and potential benefits by speaking directly to the experts in each field. That is, in my perspective, the satisfaction we can achieve by helping with a project even if it is not within one's

manufacturing capacity. The result is to develop that business relationship with you, the customer, that will pay back with goodwill and perhaps future business opportunities.

Please read more at:

[Benefits of Laser Cutting Brackets Over Other Methods - A-Laser Precision Laser Cutting](#)

[A-Laser Precision Laser Cutting - Laser Ablation, UV and IR Lasers](#)