The Third Generation Aviation Aluminum Beam

1st generation steel beam

2nd generation cast aluminum

3rd generation aviation aluminum beam

It is manufactured with aerospace standards and formed by 4300 tons of press extrusion molding. After aging treatment, its strength can reach 6061 T6, which is the strongest of all beams. Aviation aluminum has many advantages, such as good toughness, lightweight, corrosion resistance, anti-oxidation, low density, and greatly increases the processing speed.

The Segmented Rectangular Tube Welded Bed

The internal structure of the bed adopts the aircraft metal honeycomb structure, which is welded by a number of rectangular tubes. Stiffeners are arranged inside the tubes to increase the strength and tensile strength of the bed. It also increases the resistance and stability of the guide rail so as to effectively avoid the deformation of the bed.

- High strength, stability, tensile strength, ensuring 20 years of use without distortion;
- Thickness of rectangular pipe wall is 10mm and weighs 4500 kg.
Exchanging Platform
- It adopts an up and down exchange platform;
- The system is responsible for controlling the exchange motor;
- The machine is able to finish the platform exchanging within 15s.

Without Manual Operation, It Can Focus Automatically
- **Without manual focusing**
  The software automatically adjusts the focusing lens to realize automatic focus, focusing and cutting plates of different thickness. The speed of automatically adjusting focus lens is ten times of the manual adjusting.
- **Bigger adjustment range**
  Adjustment range -10 mm ~ +10mm, precision 0.01mm, suitable for 0 ~ 30mm different types of plates.
- **Long service life**
  Collector lens and focus lens both have water cooling heat sink which reduces the temperature of the focusing head to improve the life of the focusing head.

Transmission and Precision

**German Tech Quality**

G-WEIKE fiber laser cutting machine is equipped with German Atlanta rack, Japanese Yasakawa motor and German Neugart reducer. The positioning accuracy of the machine tool can be 0.02mm and the cutting acceleration is 1.5G. The working life is up to 10 years.

Technical Parameters

<table>
<thead>
<tr>
<th>Machine Model</th>
<th>LF3015G/C</th>
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<tbody>
<tr>
<td>Laser Power</td>
<td>1000W, 2000W, 3000W, 4000W, 6000W, 8000W (opt. max.)</td>
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<tr>
<td>Dimension</td>
<td>800<em>632</em>2192mm</td>
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<tr>
<td>Working Size</td>
<td>3000mm * 1500mm * 4000mm * 1500mm * 6000mm * 1500mm</td>
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<tr>
<td>Repeated Positioning Precision</td>
<td>±0.02mm</td>
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<tr>
<td>Max Running Speed</td>
<td>100m/min</td>
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<tr>
<td>Max Acceleration</td>
<td>&lt;1500W</td>
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<tr>
<td>Specified Voltage and Frequency</td>
<td>380V/50Hz/60HZ/60A</td>
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Industry Applications

LF3015GC fiber laser cutting machine can carry up to 8000W laser power, so cutting some thick plate, it is a very good choice. For example, agricultural machinery, textile machinery, food machinery and construction machinery and other large machinery and equipment manufacturing, usually use high power fiber laser cutting machine for processing.