NINE ASPECTS OF SIMPLY JUDGING THE PERFORMANCE OF LASER CUTTING MACHINES

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The cutting quality of a <u>laser cutting machine</u> is one of the easiest ways to judge the performance of a laser cutting machine. The following are the nine aspects listed for you

1. roughness. The lower the roughness, the better the cut quality.

The laser cutting section will form vertical lines, and the depth of the lines will affect the roughness of the cutting surface, which affects not only the appearance, but also its friction characteristics.

- 2. Verticality. The higher the squareness, the better the cutting quality.
- 3. Cutting width. Its effect is generally manifested in the formation of particularly fine contours inside the part, and the width of the kerf generally does not affect the quality of the cut.

4. texture.

When cutting thick plates at high speed, the molten metal will not appear in the incision below the vertical laser beam, but will be sprayed out behind the laser beam. As a result, curved lines are formed on the cutting edge, and the lines closely follow the moving laser beam. To correct this problem, reducing the feed rate at the end of the cutting process can greatly eliminate the formation of lines.

- 5. glitch. The degree of burrs is also a factor that directly judges the quality of laser cutting.
 - 6. material deposition
 - 7. Pitting and corrosion.
- 8. heat affected zone. Heat-affected zone refers to the depth of the area where the internal structure changes.
 - 9. out of shape. If the cut heats the part up sharply, it deforms.