PROBLEMS AND SOLUTIONS OF LASER ENGRAVING IN DENIM FABRIC PROCESSING

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Category: Laser Engraver News

Laser processingLaser engraving machine art finishing, its principle is to use computer to carry out pattern design, typesetting, and make PLT or BMP files, and then use CO2 laser engraving machine, so that the laser beam of CO2 laser engraving machine follows the computer typesetting instructions, on the clothing The surface of the fabric is etched at high temperature, the yarn at the high-temperature etched part is ablated, the dye is vaporized, and different depths of etching are formed to produce patterns or other washing finishing effects. These patterns can also be embellished with materials such as embroidery, beads, ironing sheets, metal ornaments, etc. to enhance the artistic effect.

Use laser engraving machine technology to artistically arrange denim fabrics, and produce artistic patterns on the fabrics. These patterns can include characters, numbers, slides, signs, images, and can also be cut by laser engraving machines to produce monkeys, cat whiskers, Dilapidated, worn and other effects.

At present, the pattern design, parameter selection and operation technology of the 3D galvanometer denim laser spray laser engraving machine are completed by Jinyun Laser Textile and Garment Technology Research and Development Center. Now this technology has been widely used in Zhejiang, Jiangsu and Guangzhou, where major textile and garment industries gather. Some products in Europe, Japan, South Korea, and Hong Kong clothing markets have adopted 3D galvanometer denim laser spraying laser engraving machine laser elements to add to popular styles.

The textile industry is a traditional industry and a large industry. Continuously using high technology to connect with traditional industries is an important way to improve the technical content of traditional industry products.

Apparel fabrics can be dyed and printed to achieve good wear and aesthetic effects. Traditional clothing fabrics with artistic patterns mainly use various printing and dyeing processing techniques to make different dyes color on the fibers of the fabric to form patterns through flower plates. In addition, there are other chemical methods or thermal transfer and digital printing methods to form flower patterns on clothing fabrics. However, a large number of them are still the traditional printing method of textile fabrics. The production process is long, the pattern is single, the change procedure is complicated, and the production process is more related to environmental protection restrictions. In particular, it cannot realize the growing demand for personalized artistic effects of clothing fabrics. In view of the disadvantages of traditional finishing techniques, using laser engraving machine technology and computer-aided design technology to artistically finish denim fabrics and endow them with special printing effects has important promotional value.

The common faults and solutions of CNC laser engraving machines are introduced as follows:

The computer cannot output

1. Check whether the software parameter settings are normal (reset);

2. Whether the engraving machine starts according to the positioning first and then outputs (re-outputs);

3. Check whether the machine has not been reset beforehand (re-correct);

4. Check whether the output serial port is consistent with the serial port set by the software (reset);

5. Check whether the ground wire is reliable and whether the static electricity interferes with the data line (re-ground);

6. Replace the computer serial port output test;

7. Reinstall the software and reset the test;

8. Format the computer system disk and reinstall the software for testing;

9. The motherboard serial port is damaged and needs to be repaired or replaced.
The engravings are of different depths or the engraving is not deep

10. Check whether the water flow in the water circulation system is smooth (the water pipe is bent or the water pipe is broken);

11. Check whether the focal length is normal (re-calibrate);

12. Check whether the optical path is normal (re-calibrate);

13. Check whether the paper on the plate is too thick and whether the water is too much (re-correct);

14. Check whether the beam is parallel (adjust the belts on both sides);

15. Check whether the lens is broken (replace);

16. Check whether the lens or laser tube emitting end is polluted (re-clean);

17. Check whether the water temperature is higher than 30°C (replace the circulating water);

18. Check whether the laser head or focusing lens is loose (tighten);

19. The laser current and light intensity must reach 8mA;

20. Laser tube aging (replacement: no charge during the warranty period);