

HOW TO MEASURE THE STABILITY OF FIBER LASER CUTTING MACHINE

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How to measure whether the stability of a fiber laser cutting machine is good or not is a problem that many buyers are concerned about. Now the common laser cutting machine on the market is mainly composed of mainframe, guide rail, gear rack or ball screw, transmission mechanism and other components.

The main engine is composed of a beam and two longitudinal end frames. The gantry of the machine is composed of an end frame and a crossbeam. The crossbeam is of rectangular square tube structure, tempered to remove internal stress, and has high strength and rigidity. Multiple mobile trolleys can be installed on the crossbeam. The horizontal moving device adopts drag chain. The mechanical part realizes high-precision gear and rack transmission. The guide rail is refined from high-precision special imported guide rail. The precision processed sliding guide rail is fastened on the concrete or steel frame foundation with support, and is equipped with adjusting bolts for installation and adjustment. The longitudinal drive system is installed in the longitudinal end frame, and the low position design makes the transmission more reasonable and stable. At the bottom of the longitudinal end frame, there are two front and rear rolling wheels that can roll smoothly along the guide rail. The front and rear ends are equipped with guide rail scrapers to ensure that there is no debris on the surface of the guide rail. At both sides of the bottom, there are eccentric clamping wheels with guiding effect. In order to ensure the guiding accuracy of the machine, the laser cutting machine is driven horizontally. The cutting torch lifting and lowering are equipped with high-strength linear guide rail (horizontal drive or high-precision precision grinding guide rail). The precision machined gear and rack ensure the vertical and horizontal transmission accuracy of the machine and eliminate the gap.