

## Fiber Laser Cutting Robot

(Model : PIL3000RC-F )



### Usage

The machine is equipped with imported industrial robot, imported fiber laser, dedicated laser cutting head, laser focus point auto-tracking system. It is widely used for flexible cutting of metal sheets with different thickness and multi-angle depend on dedicated fixture and auxiliary gas.

### Advantage

- 1.Security and reliability: Use the industrial robot which is most widely used in the world. High security and reliability.
- 2.Long using Life: The machine is with long life using the imported fiber laser. Using life is more than 100,000 hours.
- 3.High speed: Acceleration and deceleration performance is be optimized by using the unique motion control technology.
- 4.High accuracy: With the best trajectory accuracy and repetitive positioning accuracy (RP=0.04mm) .
- 5.High protection : Suitable for terrible production environment with IP67 protection grade.
- 6.High universality : Flexible motion and cutting base on 20kg payload and 1650mm arm length.

### Applications

It is widely used for 3D laser processing such as machinery manufacturing and auto parts production.



Automotive sheet metal



Cutting for bevel of steel plate



Circular tube



Square tube



## Technical Parameters

| Specifications of Fiber Laser Cutting Robot |                            |  |
|---|----------------------------|--|
| Model                                       | PIL3000RC-F                |  |
| Laser Type                                  | Imported Fiber Laser       |  |
| Laser Power                                 | 500W/1000W/2000W           | According to the material type and thickness of workpiece                              |
| Robot specifications                        | IRB2600-20-1.65            |  |
| Weight bearing of arm                       | ≤20kg                      |  |
| Max radius of arm span                      | 1650mm                     |  |
| 2D Working Area                             | 3000mmX1500mm              |  |
| Axis1 (Rotation)                            | 180° to -180°              | 175°/S   |
| Axis2 (Arm)                                 | 155° to -95°               | 175°/S   |
| Axis3 (Arm)                                 | 75° to -180°               | 175°/S   |
| Axis4 (Wrist)                               | 400° to -400°              | 360°/S   |
| Axis5 (Bending)                             | 120° to -120°              | 360°/S   |
| Axis1 (Turn over)                           | 400° to -400°              | 360°/S   |
| Robot repetitive of positioning accuracy    | ±0.04mm                    |  |
| Cutting Speed                               | 0-12m/min                  | According to the power of the selected laser, material type and thickness of workpiece |
| Cooling Mode                                | air cooling/ water cooling | According to the power of the selected laser   |
| Robot protection lever                      | IP67                       |  |

