



**RK-153FL-PRO**

# FIBER LASER CUTTING MACHINE

THE PERFECT CUTTING SOLUTION IN EVERY WAY



**1500W POWER**

RK-153FL-PRO fiber laser cutting machine is good at processing on common metal items in daily life such as advertising metal letter, kitchenware, environmental protection equipment. Laser cutting machines are widely used in electronics, electrical, mechanical hardware, new energy lithium, packaging, solar, LED, automotive and other industries. Stainless steel, carbon steel, alloy steel, copper, brass, silicon steel, galvanized steel sheet, nickel titanium alloy, inconel, titanium alloy, etc.



**1 YEAR WARRANTY  
AND UNLIMITED SUPPORT**

Max. processing range	1550x3050mm
Power (optional)	1000W/1500W/2000W
X-axis travel	1550mm
Y-axis travel	3050mm
Z-axis travel	80mm
X / Y axis positioning accuracy	±0.03mm
X / Y axis repeat positioning accuracy	±0.02mm
X / Y axis maximum moving speed	40m/min
Transmission type	Dual drive rack
X / Y maximum acceleration	0.6G
Working platform load	600kg
Enclosed laser protection	No
Total power with 1000W	Three phase 9.2kW(14A)
Total power with 1500W	Three phase 11.2kW(17A)
Total power with 2000W	13.2kW(20A)
Machine size	4600x2450x1700mm
Packing size	4580x2250x1800mm
Weight	1800kg

## ADVANTAGE

- ➔ Aviation aluminum gantry
- ➔ Economic price
- ➔ Stainless steel protection design



## QUALITY CONTROL PROCESS

### Incoming quality inspection

- Laser source test
- Laser head test
- Rack detection
- Motor/Reducer testing
- Machine parts qualification and trades certificate

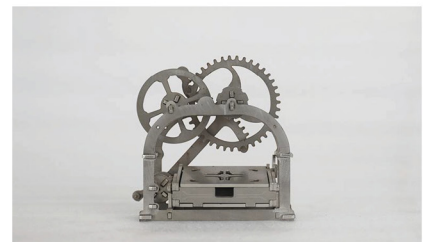
### Production process quality control

- Machine bed welding
- Machine bed heat treatment
- Milling machine
- Accurate installation
- Collimator tests
- Marble square ruler
- Double ball bar test
- Laser interferometer test

### Before package

- Machine running test
- Machine cutting test
- Outlook quality test

## SAMPLES



Name	Quantity	Brand
Laser source	1 set	Raycus laser source
Laser head	1 set	Au3tech laser head
Gear and rack	1 set	Taiwan DXT
Reducer	1 set	Japan Shimpo
Motor on X, Y axis	1 set	Leadshine
Motor on Z axis	1 set	Leadshine
Guide rail	1 set	Taiwan SHAC
Electronic components	1 set	France Schneider//Taiwan Delixi
Pneumatic components	1 set	CKD
Control system	1 set	Au3tech
Water chiller	1 set	Hanli Water Chiller
Machine body	1 set	
Exhaust smoke system	1 set	
3rd Generation aviation aluminum beam	1 unit	
Auto higher	1 unit	
Auto lubrication	1 set	

## LASER SOURCE



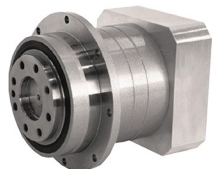
- High Electro-optic conversion efficiency
- High reliability, long service life
- Maintenance-free operation

## LASER CUTTING HEAD



- High efficient and cost-effective
- Reproducibility, high accuracy
- High cutting speed and optimal edge quality

## JAPAN SHIMPO



- Dual cooling function
- Real-time alarm
- Machine protection

## TAIWAN - APEX



- High precision
- Accurate instantaneous transmission ratio
- High transmission efficiency
- Long life

## SQUARE RAIL - SHAC



- High precision
- Accurate instantaneous transmission ratio
- High transmission efficiency
- Long life

## OPERATING SYSTEM



- Easy to use
- Powerful functions
- Complete cutting process, debugging easily
- Real-time alarm, stable and reliable

## S&A WATER CHILLER



- Dual cooling function
- Real-time alarm
- Machine protection



# DETAILS

## RAYCUS 1.5KW LASER CUTTING PARAMETERS

Material	Thickness(mm)	Speed (m/min)	Power(W)	Gas	Air pressure (bar)
Stainless steel	1	25	1500	N <sub>2</sub>	12
	2	8			14
	3	4.5			16
	4.5	1.5			18
	5.5	0.8			18
Carbon steel	1	22	1500	N <sub>2</sub>	12
	3	3.6			0.6
	6	1.4		0.6	
	8	1.2		0.6	
	10	1		O <sub>2</sub>	0.6
	12	0.8		0.6	
	14	0.65		0.6	
	16	0.5		0.6	
Aluminum	1	18	1500	N <sub>2</sub>	12
	2	6			14
	3	2.5			15
	4	0.8			17
Brass	1	15	1500	N <sub>2</sub>	14
	2	5			16
	3	1.8			18
	4	1			20

### Remarks:

The parameters marked in red in the figure are sampling parameters, which are greatly affected by various factors in actual processing, and are only suitable for small batch production. It is not recommended for actual large batch production and processing. It is recommended to us higher power lasers.

