

Making Metal Work

PRT Flat-Bed / Tube Combination Laser

The RVD PRT Combination Laser features a fully enclosed protective cover, an exchange shuttle table, and a rotary attachment for tube cutting. It is capable of processing both metal sheets and tubes on the same machine.

The advanced CNC laser cutting system, combined with high-quality components and a meticulous assembly process, ensures safe and stable operation, exceptional cutting efficiency, and high precision.





FULLY ENCLOSED DESIGN

Given the Class 4 Laser in use, as per UKCA and CE Standards the machine is fully enclosed for operator safety - enclosing both the plate cutting table and the tube cutting rotary attachement.



AUTOMATIC LIFT DOOR

- Prevents Laser Radiation Leakage
- Creates a closed cutting environment for easy dust and smoke removal
- Dust-free cutting of highly reflective materials



ONE GANTRY, TWO PROCESSES

The one gantry and laser torch works across the flat bed exchange table and tube laser, saving time, space and costs.



HEAVY-DUTY PLATE WELDED BASE

The thickness of the steel plate is up to 18 mm. The machine tool has better rigidity and is less prone to deformation. The stability of the machine tool is higher, the weight of the equipment is heavier, and the overall service life is increased.





Machine Features

- High performance Max Photonics Laser Source
- Fibre optic beam delivery system
- BOCI Autofocus Laser Cutting Head
- High strength, rigid gantry design to ensure high accuracy and allow high acceleration
- High precision class alpha rack and pinion drive motion system
- Shuttle Exchange Table
- Applicable tube types : Round tube, square tube, rectangular tube, oval tube, D-shaped steel, T-shaped steel, H-shaped steel, channel steel, angle steel, etc.
- CE compliant complete machine enclosure and light barrier system
- CupCut / TubePro CAD/CAM Software
- FSCUT 3000 CNC Controller

Optional Equipment

- 3m / 6m Tube Cutting Capacity
- Filtration & Extraction

AUTOMATIC

TECHNICAL SPECIFICATIONS

PART		PRT 3015		
Laser Power	kW	1.5 - 6		
Processing Surface / Max Sheet Size (L x W)	mm	1500 x 3000		
CNC Control		CypCutE / CypTube		
Laser Head		BOCI		
Position Accuracy X, Y and Z Axis	mm	±0.05		
Repeat Position Accuracy X, Y and Z Axis	mm	±0.03		
Maximum Position Speed of X and Y Axis	mm/min	80		
Acceleration	G	1.2G		
Max Load of Shuttle Table	kg	900		
X Axis Travel	mm	3,050		
Y Axis Travel	mm	1,535		
Z Axis Travel	mm	280		
Front Chuck		Automatic (Pneumatic Type)		
Feeding Chuck		Automatic (Pneumatic Type)		
Tube Diameter	mm	Round - Ø20 - 240 Square - 240 x 240		
Tube Length	mm	6,000		
Length	mm	9,500		
Width	mm	6,500		
Height	mm	2,460		
Weight	kg	7,500		

KEY COMPONENTS

COMPONENT	BRAND		
Fibre Laser Source	Max Photonics		
CNC Controller	FSCUT		
CAM/CAD software Flex3D	CypCutE, CypTube		
Tube nesting cut for option	TubePro & TubesT		
Servo motor and driver	Yaskawa		
Rack and Pinion	үүс		
Linear Guide	Hiwin		
Laser Head	BOCI		
Gas Proportional Valve	SMC		
Reduction Gear Box	Desboer		
Chiller	Tong Fei		
Rotate Chuck System	RVD		
Automatic Support	RVD		
Automatic Bundle Loader	RVD		
Automatic Unloading	RVD		
Electrical Components	Schneider		

LASER SOURCE	kW	1.5	2.5	3	4	6
Cutting Capacity - Mild Steel	mm	14	20	22	25	25
Cutting Capacity - Stainless Steel	mm	6	10	12	12	20
Cutting Capacity - Aluminium	mm	5	8	10	12	16
Cutting Capacity - Brass	mm	5	8	8	12	14
Cutting Capacity - Copper	mm	4	6	6	6	10
Cutting Capacity - Galvanised Steel	mm	5	6	8	10	14