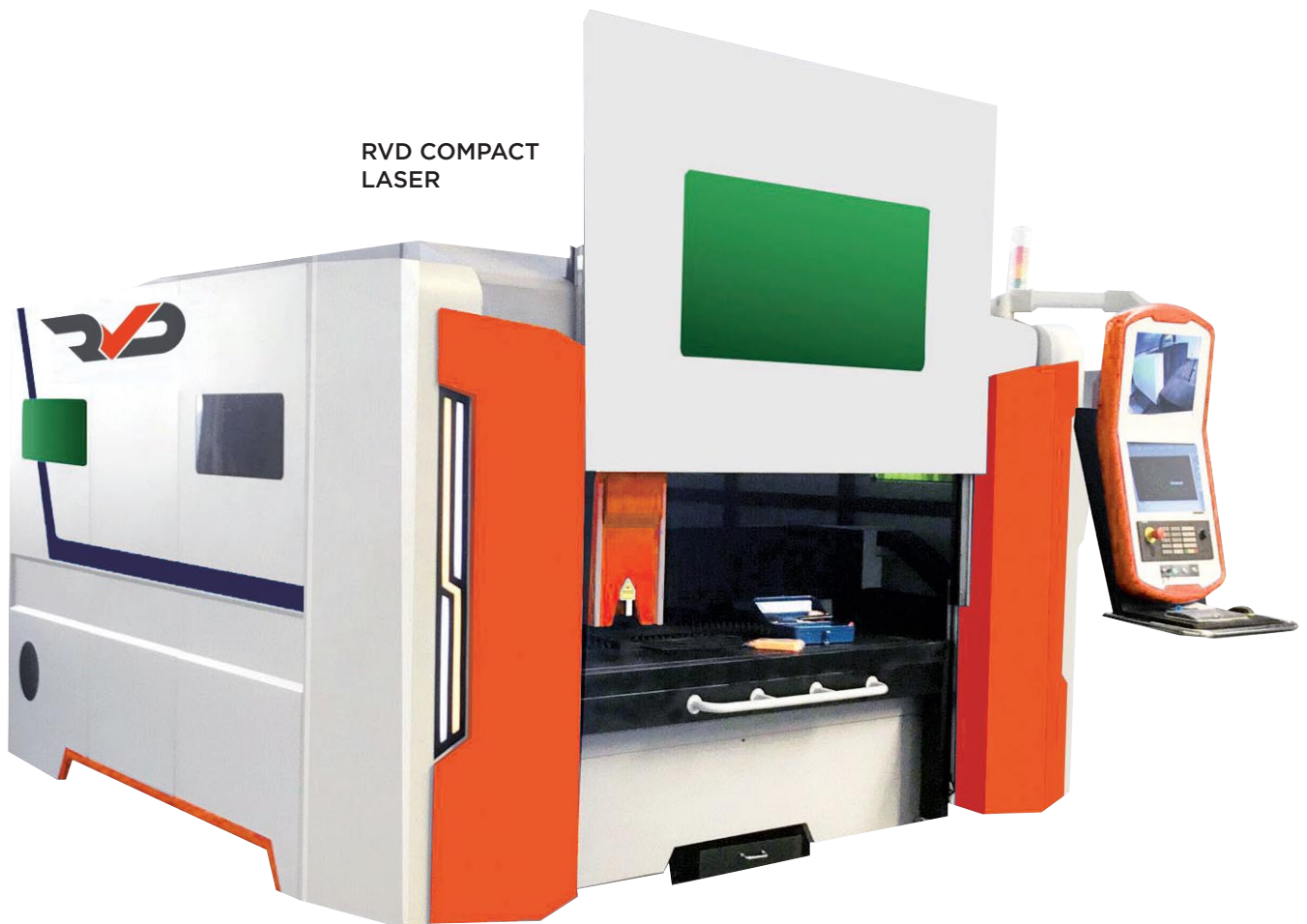


The RVD precision laser cutting machines include both compact models in small bed sizes as well as fully automated models with shuttle tables for production cutting.

The RVD Laser is a heavy duty work horse manufactured using the world's leading mechanical and electrical components to maximise production but also to minimise downtime due to part failure. The RVD laser has a full enclosure design meeting CE standards resulting in radiation safe production. High precision servo motors and heavy duty ball screw driving systems ensure reliability, cutting accuracy and consistency.

The compact range have a simple pull out drawer tray system which enables easy loading and unloading of material but also easy collection of cut parts. All RVD PR models are supplied with a fast automatic shuttle table with dual pallet changer to increase cutting time. Class leading components have been carefully selected resulting in a fast and reliable machine for production cutting. CCTV is fitted as standard allowing the operator to safely view the cutting action. The optional tube cutting attachment can process round, square and oval tube up to 160mm.

The night laser source is available in various power ratings from 500W and upwards. Additional features include a cutting head supplied by RayTools of Switzerland and high quality linear motion system with servo drives. Standard bed sizes range from 1300x900mm to 2000x6000mm.



01432 346 580

RVD
Compact Fiber Laser

Metalworking
Solutions
Supplied

LASER



COMPACT MODEL WITH
PULL OUT TABLE

Metalworking
Solutions
Supplied



CUTTING CAPACITY TABLE

Laser power		500W	700W	1000W	1200W	1500W	2000W	2500W	3000W	4000W	6000W
Material	Gas	cutting limit clean cut	cutting limit clean cut	cutting limit clean cut	cutting limit clean cut	cutting limit clean cut	cutting limit clean cut	cutting limit clean cut	cutting limit clean cut	cutting limit clean cut	cutting limit clean cut
Carbon steel	O ₂	8MM	10MM	12MM	14MM	14MM	16MM	20MM	22MM	25MM	25MM
		6mm	8mm	10mm	12mm	12mm	14mm	18mm	20mm	20mm	22mm
Stainless steel	N ₂	3MM	4MM	5MM	6MM	6MM	8MM	10MM	12MM	12MM	20MM
		2mm	3mm	4mm	5mm	5mm	6mm	8mm	10mm	10mm	16mm
Aluminium	Air	2MM	3MM	4MM	5MM	5MM	6MM	8MM	10MM	12MM	16MM
		1mm	2mm	3mm	3mm	4mm	5mm	6mm	8mm	10mm	12mm
Brass	N ₂	2MM	3MM	4MM	4MM	5MM	6MM	8MM	8MM	12MM	14MM
		1mm	2mm	3mm	3mm	4mm	5mm	6mm	8mm	10mm	12mm
Copper	O ₂	0.8MM	2MM	3MM	3MM	4MM	4MM	6MM	6MM	6MM	10MM
		0.5mm	1mm	2mm	2mm	3mm	3mm	4mm	5mm	5mm	8mm
Galvanized	N ₂	2MM	3MM	3MM	4MM	5MM	6MM	6MM	8MM	10MM	14MM
		1mm	2mm	2mm	3mm	4mm	5mm	5mm	6mm	8mm	12mm



TECHNICAL SPECIFICATIONS

Laser Power	700w - 1.2kw - 1.5kw - 2.5kw - 3kw - 4kw - 5kw - 6kw
Laser Source	USA nLight
Processing Surface (L x W)	1500 x 1000mm - 1500 x 1500mm - 3000 x 1500mm - 4000 x 2000mm - 6000 x 2000mm
CNC Control	Standard: Shanghai FISCUT CypCut Optional: Performance Pack: Beckhoff (German)
Laser Head	RayTools Switzerland
Servo Motor and Driver	Standard: Yaskav Optional: Italian Motor Power with Performance Pack
Liner Guide	Hiwin
Ball Screw	Abba
Gas Proportional Valve	SMC
Chiller	Tong Fei
Power Supply	415v (3 phase)
Position Accuracy X, Y and Z Axis	±0.03mm
Repeat Position Accuracy X, Y and Z Axis	±0.02mm
Maximum Position Speed of X and Y Axis	Standard: 100mm/min Standard Performance Pack: 120mm/min
Acceleration	Standard: 1g Performance Pack: 1.5g
Max Load of Shuttle Table	1000kg
Shuttle Table Exchange Time	20s

* Raytools height controller - Raytools auto focus laser cutting head
Auto focusing is an option on 0.7kw and 1.2kw models

Machine Features

- CCTV cameras to watch cutting progress from the control panel
- RayTools auto focusing cutting head
- Voltage stabiliser
- Starter consumable kit
- Full radiation protection enclosure
- Twin shuttle table - 20 second shuttle table exchange (PR models)
- Gantry system run on heavy duty linear rails with quality servo motors
- Removable draw system for small part removal and scrap clearing
- High quality branded components
- N -Light laser source: A world leading brand manufactured in the USA



Performance Pack Features (Highly Recommended)

- Increases cutting speed and axis acceleration speed by 25%
- Includes the Beckhoff Control (German) (Beckhoff has a UK Service Centre)
- Includes Motor Power speed motors (Italian)
- Sigmaest software

nLIGHT alta compact fiber lasers are the next generation of high power fiber lasers designed to meet the performance and reliability requirements for industrial applications. nLIGHT alta™ compact is the highest power, smallest footprint fiber laser.

Improved Cutting and Welding Performance: nLIGHT alta™ is capable of delivering a modulation rate up to 100 kHz and rise and fall time of less than 5 nS. Enabled by next generation electronics, these capabilities allow faster piercing, faster processing of fine features, and smaller heat affected zones.

Back Reflection Isolation: nLIGHT's novel back reflection isolation technology allows uninterrupted full power processing of highly reflective materials.

The nLIGHT alta fiber laser platform is designed and manufactured in the U.S, leveraging nLIGHT's vertically integrated high brightness laser diode and fiber technology, and is supported through a global network of sales and service staff.



RAYTOOLS LASER
CUTTING HEAD

CUTTING SPEED (mm/min)

Material	Gas	Thickness (mm)	Fibre Laser (m/min)										CO2 Laser (m/min)
			500w	700w	1000w	1200w	1500w	2000w	2500w	3000w	4000w	6000w	
Mild Steel	Air	1	10	13	14	18	25	31	33	34	43	49	18.3
		2	7	8	10	9	11	12	13	14	15	16	7.1
	Oxygen	3	3.3	3.9	4.6	5.3	5.6	5.9	6.6	7.3	8	10	4.3
		4	1.9	2.3	2.6	4	4.5	4.6	4.9	5.6	6.2	7.4	3.0
		5	1.3	1.4	1.7	2.6	3.2	3.4	4	4.4	4.8	5.5	2.9
		6	1	1.1	1.3	2.1	2.8	3.1	3.4	3.8	4.5	5	2.7
		8	0.8	0.9	1.1	1.5	2.3	2.8	3.1	3.2	4.3	4.8	2.5
		10	0.5	0.7	0.8	1.2	1.3	2.1	2.2	2.3	2.7	3.1	2.2
		12	-	0.5	0.7	0.8	1.2	1.5	1.8	2	2.4	2.8	1.8
		14	-	-	-	0.7	0.8	1.1	1.3	1.6	1.9	2.2	1.4
		16	-	-	-	-	1.2	0.9	1.1	1.2	1.3	1.4	1.2
		18	-	-	-	-	-	0.7	0.9	1	1.1	1.2	1.0
		20	-	-	-	-	-	-	0.8	1	1.1	1.2	0.9
		22	-	-	-	-	-	-	0.7	0.9	1	1.1	0.8
		25	-	-	-	-	-	-	-	0.6	0.7	0.8	-

Stainless Steel	Nitrogen	1	13	15	18	19	27	34	35	38	46	57	10.2
		2	3.3	3.7	5.9	6.7	10	13	17	18	21	28	5.8
		3	1.1	1.4	3.9	4.6	6	7.6	11	12	14	20	4.1
		4	-	1.1	1.2	1.8	3.7	4.6	5.3	6	6.6	12	3.1
		5	-	-	-	1	1.7	2.4	4.1	4.2	5.2	8	2.5
		6	-	-	-	-	1	1.1	2.7	3.1	3.4	5	1.9
		8	-	-	-	-	0.7	0.8	1.6	1.8	2	2.5	1.3
		10	-	-	-	-	-	-	0.7	0.8	0.9	1.2	0.6
		12	-	-	-	-	-	-	-	-	0.7	0.8	0.5
		14	-	-	-	-	-	-	-	-	-	0.8	0.4
		16	-	-	-	-	-	-	-	-	-	0.7	0.3
		18	-	-	-	-	-	-	-	-	-	0.6	-
		20	-	-	-	-	-	-	-	-	-	0.4	-

Aluminium	Air	1	7	10	13	15	17	21	38	46	50	64	11.7
		2	1.1	2	2.7	7	10	11	20	21	24	30	5.3
		3	-	1.1	1.3	3	4.1	4.5	9	10	11	15	-
		4	-	0.8	0.9	0.7	2.4	2.7	3.5	4.7	5	6	-
		5	-	-	-	0.6	0.8	1.3	1.7	2	2.2	2.6	-
		6	-	-	-	-	-	0.8	1	1.4	1.5	1.8	-
		8	-	-	-	-	-	-	0.8	0.9	1	1.2	-
		10	-	-	-	-	-	-	-	0.5	0.7	0.8	-
		12	-	-	-	-	-	-	-	-	0.5	0.7	-
		14	-	-	-	-	-	-	-	-	-	0.5	-
		16	-	-	-	-	-	-	-	-	-	0.4	-

Brass	Nitrogen	1	3.6	4.1	6	7	10	13.5	20	26	30	39	-
		2	0.8	1.5	3.9	3.3	4.8	7	10	14	15	20	-
		3	-	0.7	1.4	2.3	3.2	4.4	6.2	7.3	8.3	11	-
		4	-	-	0.7	1.2	2	2.9	3.2	4.6	5.5	7	-
		5	-	-	-	-	0.8	1	2.4	3	3.5	4.1	-
		6	-	-	-	-	-	-	2.4	1.7	1.8	2.1	-
		8	-	-	-	-	-	-	0.5	0.7	0.8	0.9	-
		10	-	-	-	-	-	-	-	-	0.6	0.7	-
		12	-	-	-	-	-	-	-	-	-	0.6	-
		14	-	-	-	-	-	-	-	-	-	0.4	-