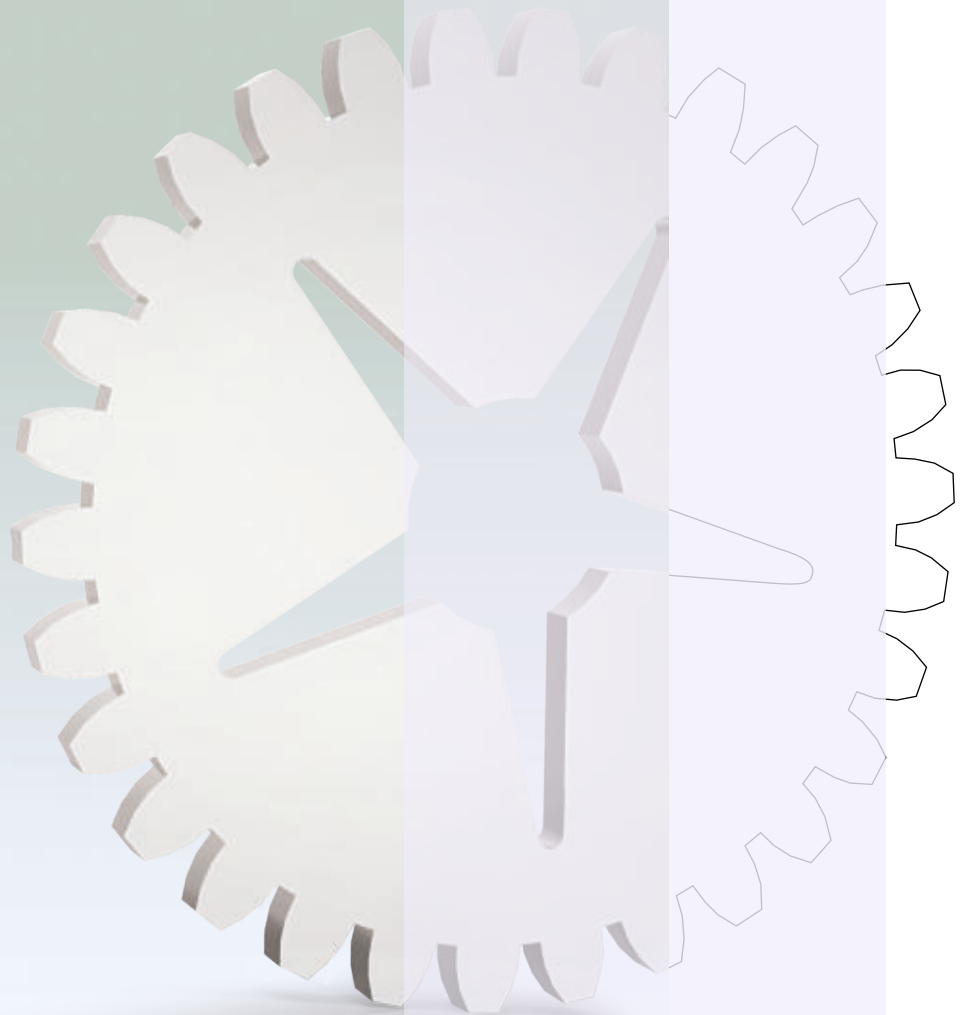


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Experience the new generation of laser cutting



BRAMA**STRA**
Laser Cutting System
Vector



Introduction

About SLTL

Sahajanand Laser Technology Ltd. (SLTL) is the **largest manufacturer of laser systems in India** and the **World's first manufacturer** of fiber laser cutting machine for sheet metal application.

SLTL uses wide range of lasers for varied application such as Laser cutting, Marking, Welding, Micro Machining, Solar Cell Scribing/Cutting, Scanning, Diamond Processing, Medical Surgeries, Medical Stent Cutting, etc.

SLTL is a world leader in offering Laser based Diamond processing solutions. The product offerings extend from medical stent manufacturing machines to hi-end CNC based turnkey automation solutions.

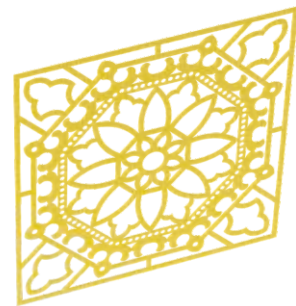
With an expertise of more than **29 years in research and development**, the company has catered to numerous industrial segments and more than **10000 systems installed** throughout the globe.

SLTL is headquartered in Western **India** with its operations extending to

 **UK**  **USA**  **Germany**  **China**

Industry Served

Aerospace; Agricultural Machinery; Earth Movers; **Electronics**; Food and Beverages; Panels; Racks; **Ship Building**; Coach Building; **Sheet Metal Fabrication**; Food Processing Equipments; **Medical**; Oil & Gas; **Pipes and Fittings**; Textile; **Transportation**; Construction; **Pharma**; White Good; Rapid Prototyping; **Packaging**; Elevators and Escalators; **Tooling**; Gems and Jewellery; **Railway Manufacturing** Architecture; **Automobile**; Cookery; Tools and Measurements; Signage; Consumer Goods.

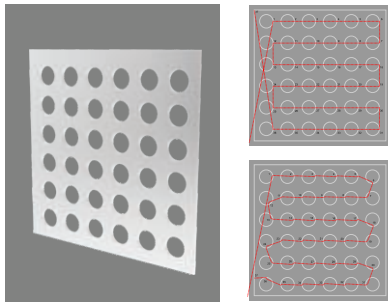


Features

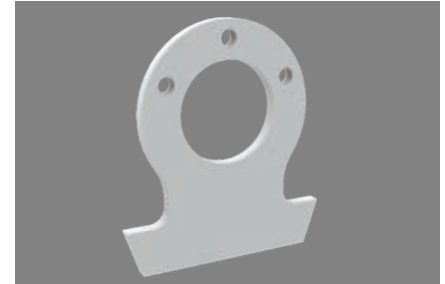
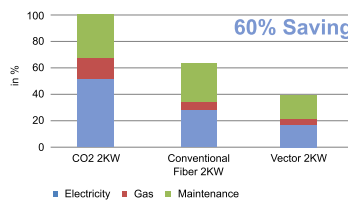
Cost saving

Fiber laser technology integrated with smart mechanisms makes the machine Most Cost Efficient in performance.

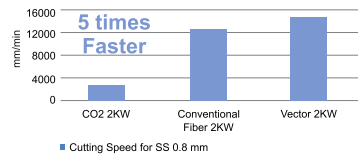
Cost efficiency of the machine extends till the quality of performance in long run. Fiber lasers offer butter finish on thin sheets with absolutely no carbonization effect on the edges. No post processing required



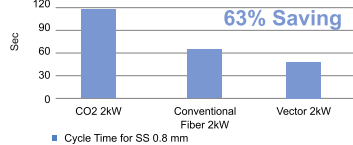
Operating Cost Comparison



Cutting Speed Comparison



Cycle Time Comparison



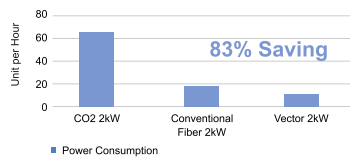
Time saving

Time involved in positioning, axis movement and drive movement are major concern for continuous operation. The Servo drive integrated in Vector provides comparative high synchronized speed of 20 m/sec² and Acceleration as fast as 12 m/sec².

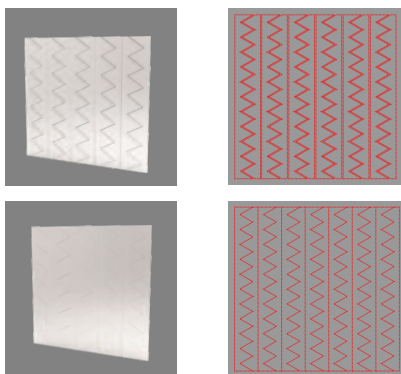
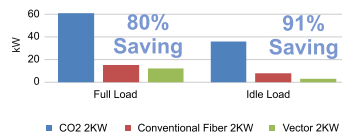
Power efficient operation

Vector offers 50% energy savings among other laser cutting technologies. The Eco friendly Vector comes with the most power efficient technology consuming less than 10 units of electricity per hour. The state of the art fume suction technology exceeds the conventional methodology by removing more than 90% of fumes from the laser cut environment.

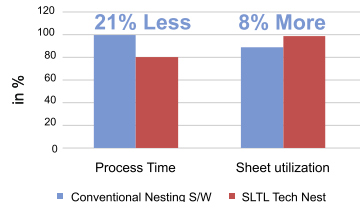
Power Consumption



Efficiency of Power



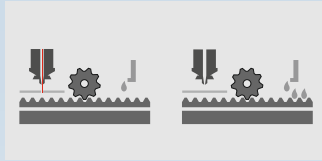
Efficiency in Nesting



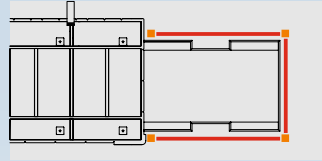
Intelligent Nesting

The optimized nesting software has a greater role to play in reducing the material wastage and working time. Features like Common Cut, Dream Sequence, Late Cut, Corner Loop & much more provides the most efficient planning of the profile.

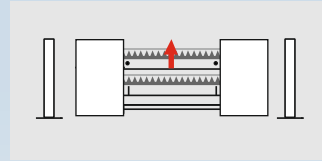
Features



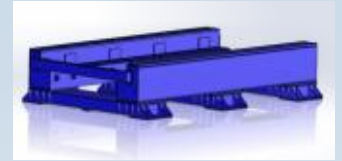
Smart lubrication:
The self diagnosis system automatically lubricates the RP drive based on the movement of axis.



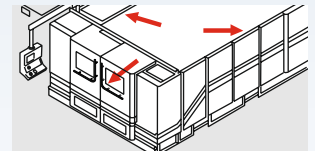
Light curtain:
The pallet's movement is sensitive to any breach of the light curtain.



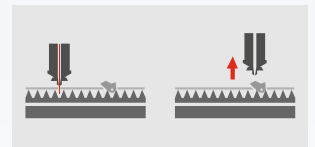
Dual pallet:
The pallet's in-out movement takes place in <30 sec.



Rigid gantry:
Gantry fitted with Dual motors for Y axis drive movement offers the most robust structure withstanding a high speed and reinforcement.

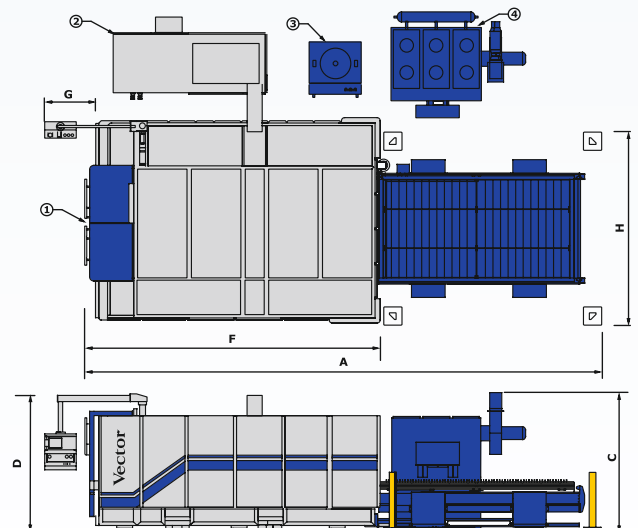
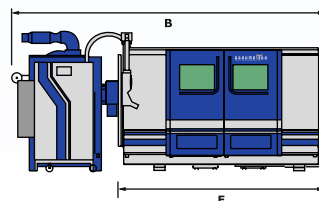


Laser safety:
Class one enclosure restricting the exposure of laser outside the machine.



Head crash protection:
The laser head is designed to have a cushion effect and also the head's movement will be stopped in case of any collision.

Sr.No.	Part	Sr.No.	Dimension 3015	Sr.No.	Dimension 4020
1	Machine	A	8500 mm	A	9856 mm
2	Control Panel	B	5115 mm	B	5115 mm
3	Chiller	C	2290 mm	C	2290 mm
4	Fume Extractor	D	2245 mm	D	2331 mm
		E	3377 mm	E	3721 mm
		F	4860 mm	F	6085 mm
		G	835 mm	G	850 mm
		H	3175 mm	H	2965 mm



Specifications

Technical Specifications

Laser Power	4 kW	6 kW	8 kW	10 kW	12kW	15kW
Cutting Thickness on Metals* mm (inch)						
Mild Steel	20 (3/4")	25 (1")	25 (1")	25 (1")	25(1")	25(1")
Stainless Steel O2	10 (3/8")	10 (3/8")	10 (3/8")	10 (3/8")*	10(3/8")	10(3/8")
Stainless Steel N2	10 (3/8")	16 (5/8")	20 (3/4")	25 (1")	30(19/16")	30(19/16")
Aluminium	10 (3/8")	16 (5/8")	20 (3/4")	25 (1")	30(19/16")	30(19/16")
Brass	8 (5/16")	12 (1/2")	16 (5/8")	16 (5/8")	20(3/4")	20(3/4")
Copper	6 (7/32")	8 (5/16")	10 (3/8")	12 (1/2")	12(1/2")	12(1/2")
Power Consumption**	24 kW	32 kW	40 kW	48 kW	56 kW	68 kW

Working Range	3015	4020	6520	6525
X Axis	1550 (61")	2050(80")	2050 (80")	2500 (100")
Y Axis	3100 (122")	4100 (161")	6500(256")	6500(256")
Z Axis	160 (6")			
Max. Acceleration	2G	2G		1G
Simultaneous Speed	140 m/min	140 m/min		70m/min
Precision Accuracy	(±) 0.050) mm (0.002")			
Repeatability	(±) 0.020) mm (0.001")			
Max. Workpiece Weight	1000 kg	1300 kg	3100 kg	3100 kg

* Higher thickness are possible. The quality of cut depends upon the attributes of metal, its surface properties and the conditions in which the cutting operation is done.

Metals with high thickness tend to have striation at the lower edges.

** The power consumption indicated in the table is been measured on the machine's peak performance. It includes the connected load of laser source, controller, fume extractor and chiller.

Ergonomic features

Class One Enclosure

Prevents laser radiation from escaping

Light curtain- Ensuring Operator safety during pallet movement

Safety interlocks

Minimum operator dependency

Ease of operation

Logic Table

Error detection, diagnosis & solution

Optional Accessories

Touch screen HMI

Auto nozzle changeover

Auto nozzle cleaning

Dynamic motorized lens

Safety interlocks

Maintenance remainder

Scrap removal conveyor

Rotary Axis for Tube cutting

Semi / auto loading & unloading

HSC features

Dynamic edge control

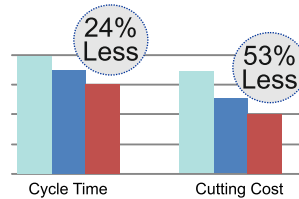
Class One Enclosure; Low Booting Time; Online Clearance Control; Part Number Marking; Swift Material Change; **Dual Pallet**; Automated Lubrication; Auto Head Cooling; Smart Fume Extractor; Rack & Pinion; **Rapid Piercing**; Dual Motors; Rigid Gantry; Light Curtain; Energy Efficient Power Transmission; **Efficient Drives**; Motorized Table Movement; **Cut Cooling**; Online Clearance Control; Feeding Gas Control; Auto Gas Changeover; Hermitically Sealed Cabinet (IP 55); **Auto Ambience Controller**; **Maintenance Reminder**; Satellite Diagnostics; Online Operator Assistance; Minimum Operator Dependency;

Specifications

Technical Specifications

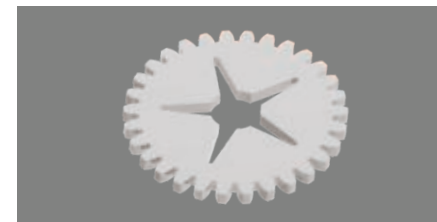
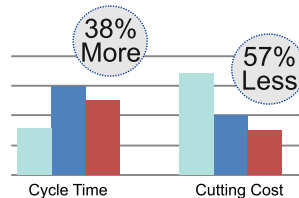
MS 8mm

	CO2	Other fiber	Vector
Laser Power	2kW	2kW	2kW
Electricity	1.04	0.69	0.49
Gas consumption	182.8	70.96	59.13



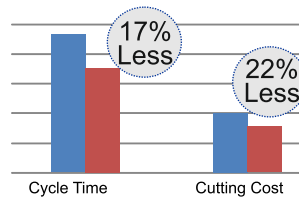
MS 12mm

	CO2	Other fiber	Vector
Laser Power	3kW	2kW	2kW
Electricity	2.89	1.15	0.82
Gas consumption	350.29	118.35	98.03



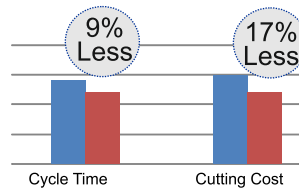
MS 8mm

	Other fiber	Vector
Laser Power	4kW	4kW
Electricity	0.447	0.319
Gas consumption	30.544	25.453



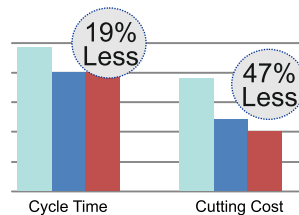
Copper 2mm

	Other fiber	Vector
Laser Power	3kW	3kW
Electricity	0.36	0.28
Gas consumption	220.18	195.83



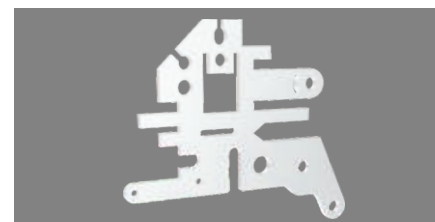
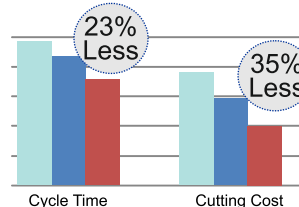
Aluminum 2mm

	CO2	Other fiber	Vector
Laser Power	2kW	2kW	2kW
Electricity	0.59	0.15	0.11
Gas consumption	260.23	246.12	205.1



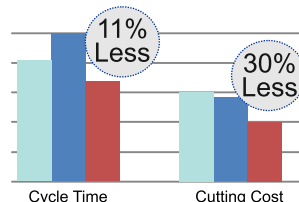
SS 5mm

	CO2	Other fiber	Vector
Laser Power	4kW	4kW	4kW
Electricity	0.758	0.541	1.3
Gas consumption	483	403	404



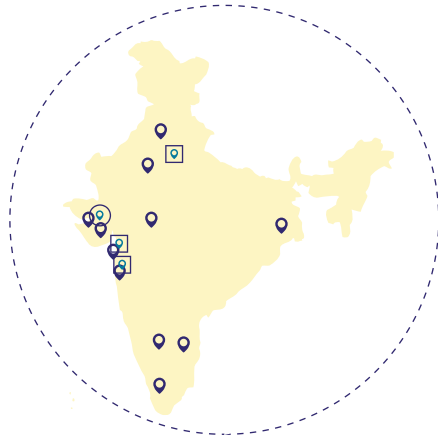
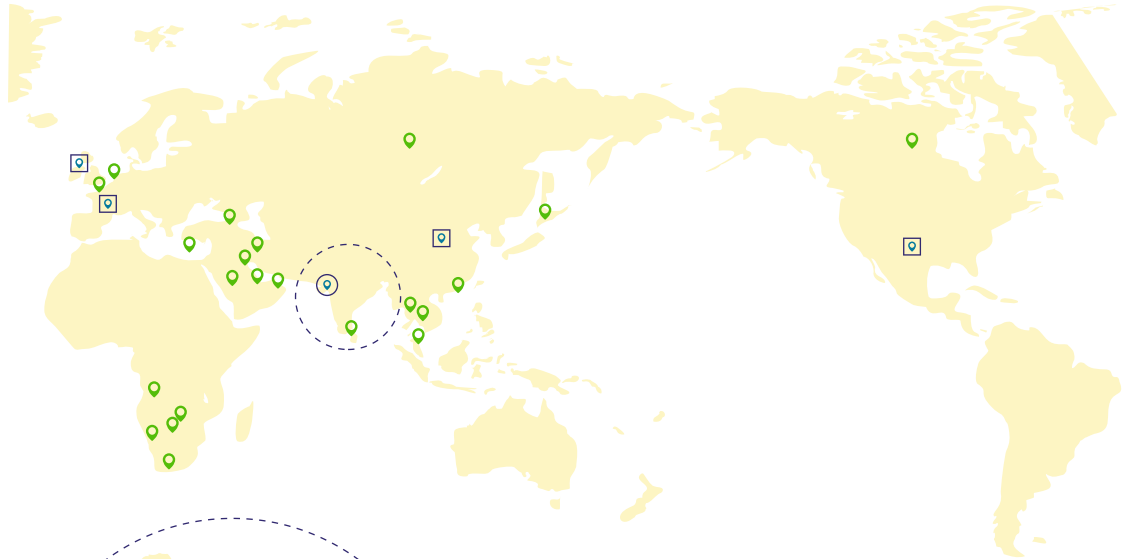
SS 5mm

	CO2	Other fiber	Vector
Laser Power	2kW	2kW	2kW
Electricity	0.345	0.292	0.208
Gas consumption	410	465	387



SLTL PRESENCE

- Angola
- Armenia
- Bahrain
- Botswana
- Canada
- China
- Dubai
- Germany
- Hong Kong
- India
- Iran
- Israel
- Namibia
- Poland
- Russia
- Saudi Arabia
- Singapore
- South Africa
- South Korea
- Sri Lanka
- Switzerland
- Thailand
- UK
- USA
- Vietnam



- Ahmedabad
- Bangalore
- Bhavnagar
- Chandigarh
- Chennai
- Coimbatore
- Delhi
- Gandhinagar
- Indore
- Jaipur
- Kolkata
- Mumbai
- Pune
- Rajkot
- Surat

-  Sales and Services
-  Installation Base
-  Head Office
-  Regional Office



An ISO 9001: 2015 certified company

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