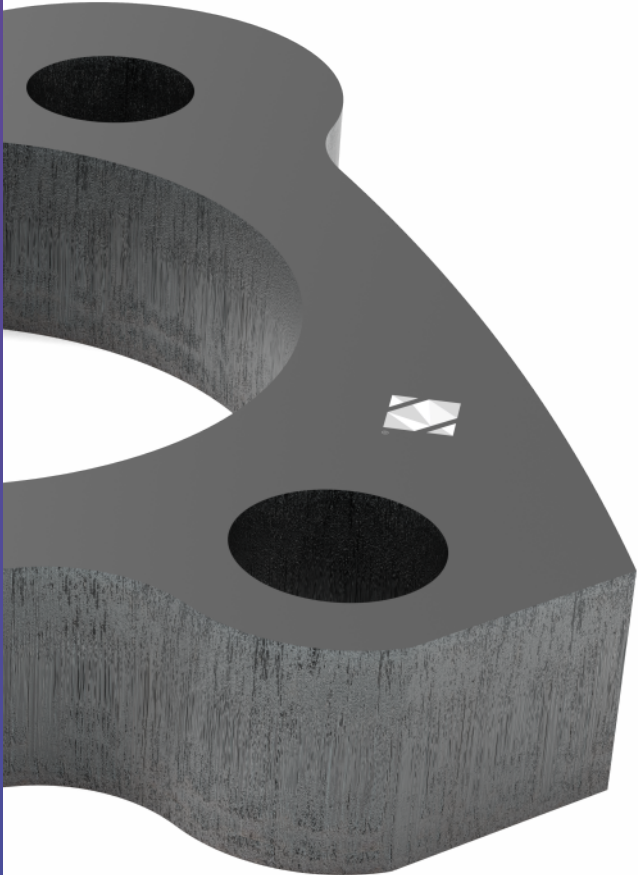


INNOVATIVE ULTRA HIGH POWER FIBER LASER CUTTING TECHNOLOGY



FIBER LASER



SLTL Group's Infinity F1, a remarkable engineering masterpiece is designed to deliver exceptional craftsmanship, productivity, and quality laser cutting experience. With its intelligent features and attention to every detail, Infinity F1 offers 5X faster laser piercing speed, regardless of material and thickness, setting a new benchmark for laser cutting machines.

Infinity F1 is equipped with advanced high-power motors and EtherCAT system that ensure dynamic position-based tasks, providing enhanced speed and precision. With power ranging from 3 kW to 30 kW, this intuitive and technologically advanced machine can be remotely accessed through Wi-Fi and cloud server connectivity, enabling high-speed communication while processing various materials, resulting in efficient cutting in a shorter time.

Its smartly engineered mechanical parts allow Infinity F1 to achieve highly accurate processing to micron tolerances making it ideal for precise cutting even on reflective metals. It eliminates the need for post-processing, enabling rapid growth and increased productivity. Infinity F1 performance is further enhanced by the "e-Tron" technology, promising to exceed expectations and deliver unrivalled performance, making it a class-leading laser cutting solution.

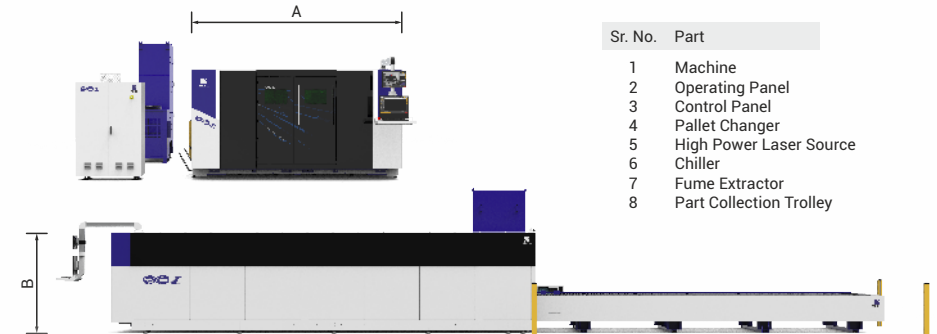
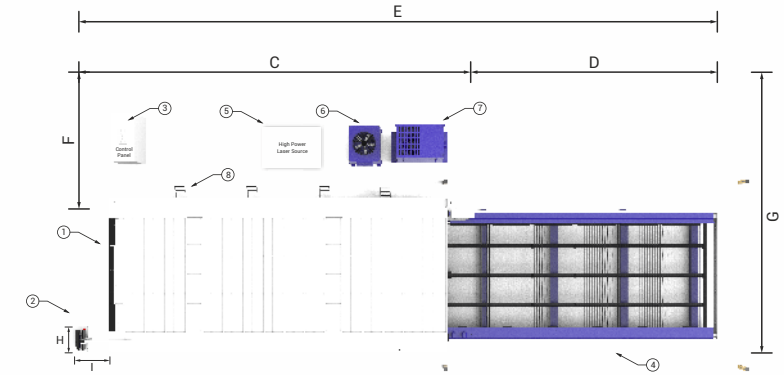
SPECIFICATION

		Unit	Working Range 2D					
			1515	3015	4020	6520	6525	8025
Maximum Working Range	X Axis	mm	1525 (60.03")	1525 (60.03")	2100 (82.6")	2100 (82.6")	2550 (100.3")	2550 (100.3")
	Y Axis	mm	1525 (60.03")	3100 (122")	4100 (161.4")	6600 (259.8")	6600 (259.8")	8050 (316.9")
	Z Axis	mm	150 (5.9")		300 (11.8")			450 (17.7")
	Z Axis (UHP)	mm	150 (5.9")		300 (11.8")		450 (17.7")	
Maximum Workpiece Weight***		kgs	220	900	1650	2650	3100	7800
	(UHP)	kgs		1100	3150	5100	6350	
Positioning Precision		mm/m	±0.05					
Repeatability		mm/m	±0.02					
Maximum Rapid	Simultaneous	m/min	120	170			125	
Maximum Acceleration		m/s ²	20			15		

THICKNESS & POWER CONSUMPTION

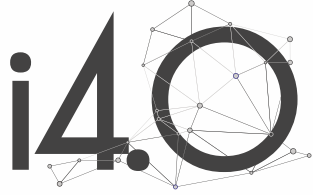
Laser Power	3 kW	4 kW	6 kW	8 kW	10 kW	12 kW	15 kW	20 kW	30 kW
Cutting Thickness on Metals mm (inch)									
Mild Steel (MS) (O ₂)	20 (3/4")	22 (7/8")	25 (1")*	28 (9/8")*	30 (19/16")*	40 (25/16")*	45 (7/4")*	50 (31/16")*	60 (19/8")*
Mild Steel (MS) (N ₂ / Air)	6 (1/4")	6 (1/4")	8 (5/16")	10 (3/8")	12 (1/2")	12 (1/2")	16 (5/8")	20 (13/16")	25 (1")*
Stainless Steel (SS) (O ₂)	10 (3/8")	10 (3/8")	10 (3/8")	10 (3/8")	10 (3/8")*	10 (3/8")	10 (3/8")	10 (3/8")	10 (3/8")
Stainless Steel (SS) (N ₂ / Air)	8 (5/16")	10 (3/8")	16 (5/8")*	20 (13/16")	25 (1")*	30 (19/16")*	32 (5/4")*	35 (11/8")*	40 (25/16")*
Aluminum (AL) (N ₂)	8 (5/16")	10 (3/8")	16 (5/8")*	20 (13/16")	25 (1")*	30 (19/16")*	32 (5/4")*	35 (11/8")*	40 (25/16")*
Brass (Br) (N ₂)	6 (1/4")	8 (5/16")	12 (1/2")	16 (5/8")	20 (13/16")	25 (1")*	30 (19/16")*	32 (5/4")*	35 (11/8")*
Copper (Cu) (O ₂)	5 (3/16")	6 (1/4")	8 (5/16")	10 (3/8")	12 (1/2")	16 (5/8")	18 (11/16")	20 (13/16")	22 (7/8")
Galvanized Iron (GI) (N ₂ / Air)#	3 (1/8")	3 (1/8")	3 (1/8")	3 (1/8")	3 (1/8")	3 (1/8")	3 (1/8")	3 (1/8")	3 (1/8")
Power Consumption**	20 kW	24 kW	32 kW	40 kW	48 kW	56kW	68kW	85kW	120kW

* The quality of the cut depends upon the attributes of the metal, its surface properties and the conditions in which cutting operations are done. Metals with high thickness tend to have striation at lower edges.
 ** The power consumption indicated in the table is measured by the machine's peak performance. It includes the connected load of the laser source, controller, fume extractor and chiller.
 *** Maximum thickness of full-size sheet is limited by weight capacity of respective variant
 # Galvanized Iron (GI) only comes up to 3mm thickness in market.

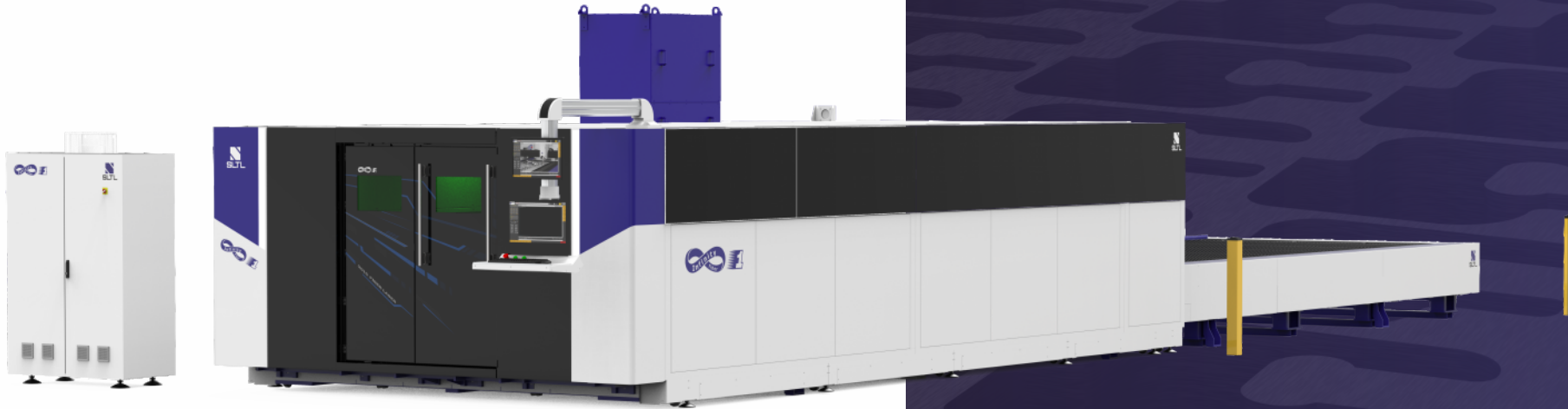


Sr. No.	Dimension (mm)	Dimension (mm)					
		1515	3015	4020	6520	6525	8025
	Type						
A	Machine Width	2820	2280	3400	3300	3900	3900
B	Machine Height	2300	2190	2200	2200	2200	2350
C	CNC Gantry	4700	6000	6700	9300	9300	10900
D	Dual Pallet	NA	3300	4400	6900	6900	8500
E	Total Machine Length	6700	9300	11100	16200	16200	19400
F	Space Required for Accessories	2000					
G	Total Machine Width with Accessories	3300	4280	5900	5900	6500	6500
H	Width of Operating Panel	600					
I	Length of Operating Panel	430					

*All the above Figures are in mm (Millimeters).
 Sahajanand Laser Technology Ltd. reserves the right to make changes without any prior intimation or notice.



“ REAL TIME OPTIMIZATION OF THE ENTIRE MANUFACTURING PROCESS TO GAIN OPERATIONAL AND PERFORMANCE INSIGHTS ”



OPTIONAL FEATURES & ACCESSORIES

- Light Curtain
- Countersink
- Smart Camera
- Nozzle Cleaning
- Calibration | Vision Check
- Auto Nozzle Changer, Centering
- Filter Dust Collector
- Pneumatic Laser Safety Door
- QR Code / Barcode Scanner

PRECISION.PRODUCTIVITY.PROFIT.



LIMITLESS FLEXIBILITY
IN TERMS OF FORMAT,
POWER AND DESIGNS



EFFECTIVE CUTTING
WITH NEGLIGIBLE
PRODUCTION DOWNTIME

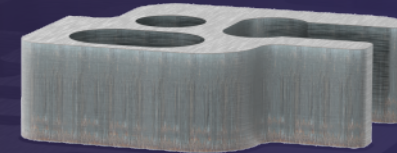


INTUITIVE OPERATION
WITH CLEVER FUNCTIONS
AND INTEGRATED EXPERTISE



HIGH-QUALITY RESULTS
IN ALL SHEET THICKNESSES
AND COMPLEX CONTOURS

Infinity F1 - Full Enclosure
Dual Pallet (6.5x2.5 m)



ECONOMICAL AND
COST-EFFICIENT
WITH ENERGY EFFICIENCY
AND PREDEFINED
PRIME PARAMETERS



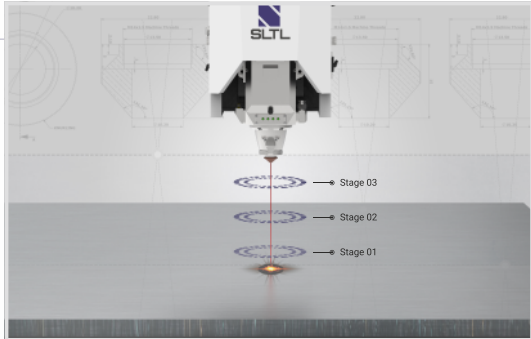
MAXIMUM GAINS
WITH INTELLIGENT
FEATURES



TOP CUTTING EDGES
WITH DYNAMIC
EDGE CONTROL

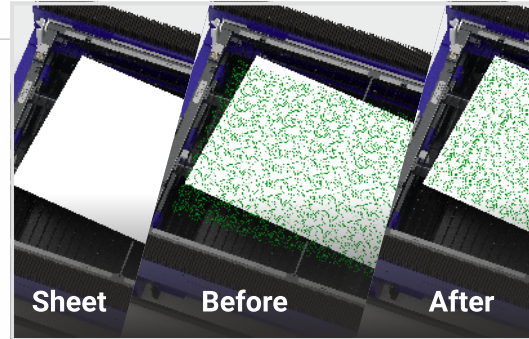
MATERIALS

- Mild Steel (MS)
- Stainless Steel (SS)
- Aluminium (Al)
- Copper (Cr)
- Brass (Br)
- Galvanized Iron (GI)
- Speciality Alloys
- Coated / Textured Sheets



MULTI STAGE PIERCING

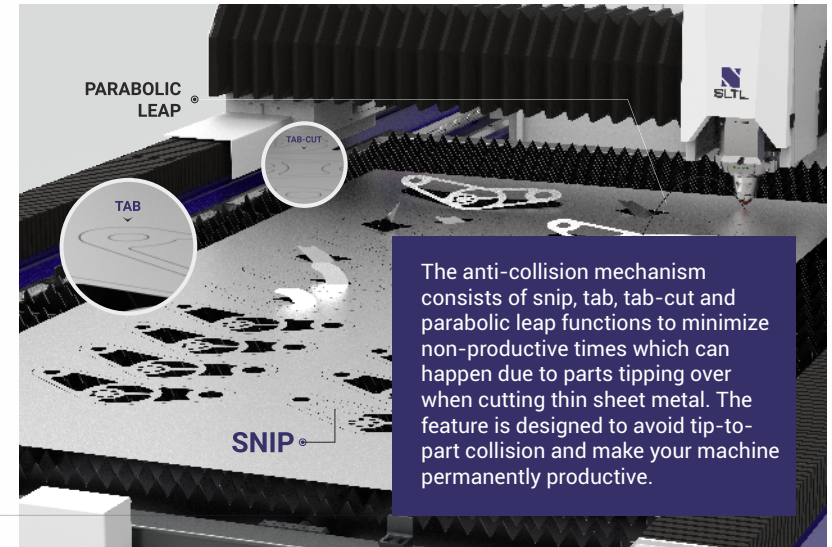
Multi-stage piercing is one of the Infinity F1 Laser Cutting Machine's most advanced features, for applications intending to processing thicker sheet metals. By minimizing thick sheet piercing time Infinity F1 will massively boost laser-cutting machine productivity.



AUTO SHEET ORIENTATION

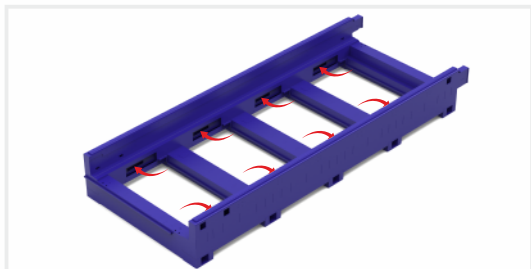
The cutting process accelerates with an auto-sheet orientation by avoiding manually positioning the sheet before each cut. The 4-point corner system automatically aligns the sheet using an inner quadrant locate mechanism. The auto-sheet orientation function allows for quicker laser-cutting operations.

ANTI COLLISION MECHANISM



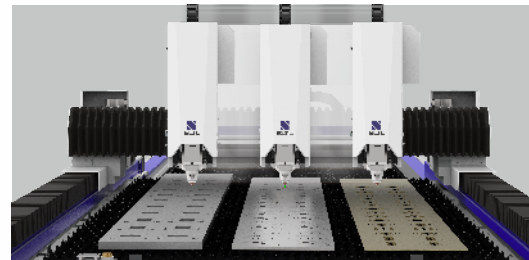
The anti-collision mechanism consists of snip, tab, tab-cut and parabolic leap functions to minimize non-productive times which can happen due to parts tipping over when cutting thin sheet metal. The feature is designed to avoid tip-to-part collision and make your machine permanently productive.

DYNAMIC FUME SUCTION

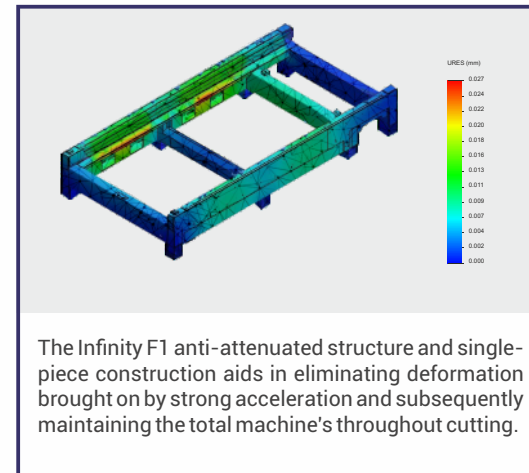


The SLTL's Infinity F1 Fiber Laser Cutting Machine has a built-in dynamic fume extraction system that opens the fume collecting vault of the machine base just above the area of operation making it smart and energy efficient. Toxic fumes created during production are sent down these fume ducts and passed into the collecting unit.

AUTO FOCUS



With an alert auto-focusing function, the laser head can automatically adjust the focus to most suitable position when processing different materials and thicknesses. This will remarkably improve efficiency of the laser cutting machine, and reduce the processing time significantly.



The Infinity F1 anti-attenuated structure and single-piece construction aids in eliminating deformation brought on by strong acceleration and subsequently maintaining the total machine's throughput cutting.

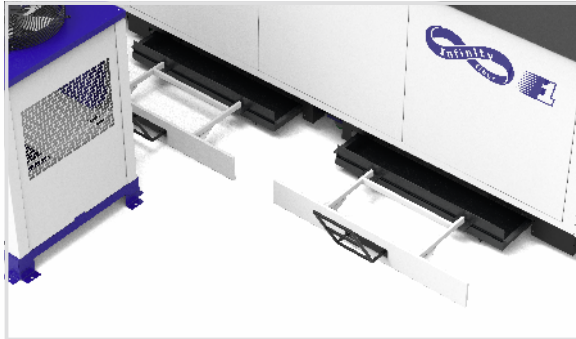
**ANTI ATTENUATED
STRUCTURE**

USER FRIENDLY HMI



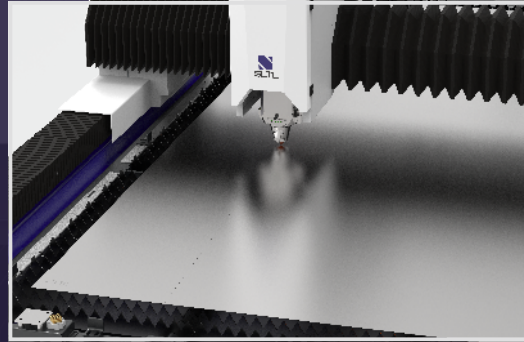
Our Infinity F1 series' Human-Machine Interface is incredibly adaptable to the needs of the machine user. It allows for manual input, touch screen capabilities, and a wireless remote system, which together provide the machine operator the greatest flexibility possible while operating the machine and live in action.

SCRAP TROLLEY



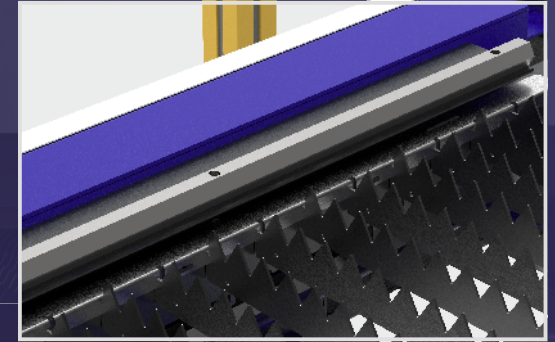
A built-in swapping scrap trolley system allows for flexible part collecting after cutting from either side.

PERMANENT MARKING



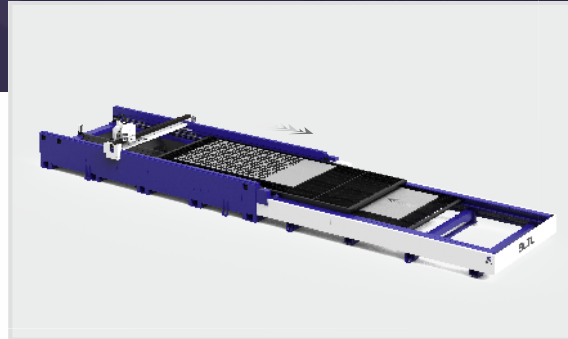
SLTL Infinity F1 series fiber laser cutting machine comes with the solution of permanent marking with the principle of metal cutting application. This machine provides solutions like marking of bending line, and identification text with numerous possibilities and no restrictions of the design, alphanumeric, textures, etc. marking with our Infinity F1 fiber laser cutting machines.

2 PHASE SLAT



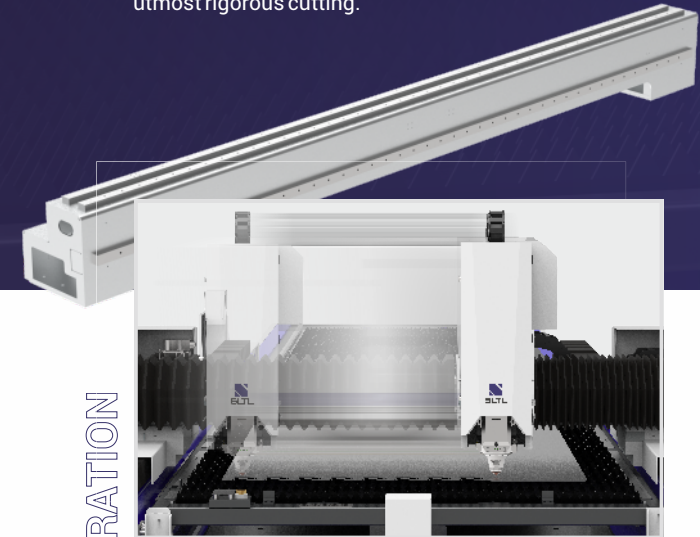
Experts created the slat lock mechanism for a rigid 2 phase slat base design which ultimately results to utmost rigorous cutting.

PALLET CHANGER



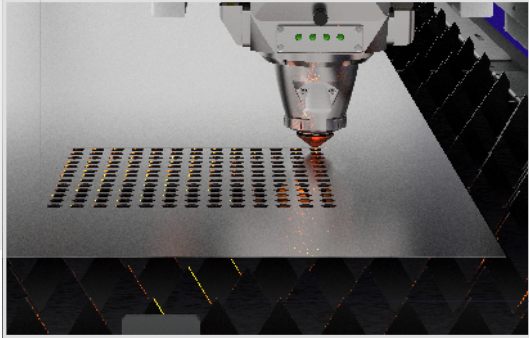
To ensure faster processing, SLTL experts are providing a dual pallet Laser Cutting Machine to ensure the brisk loading and unloading of sheets without hampering the cutting process happening in the machine.

HIGH ACCELERATION



There are tonnes of helpful, time-saving, and productivity-boosting features built into the Infinity F1 laser cutting machine. Aimed to achieve quicker cycle times on all parts, with the Aluminum Gantry, Infinity F1 runs at higher acceleration speed for rapid traverse movement between cut paths and all the areas.

RAPID PIERCING



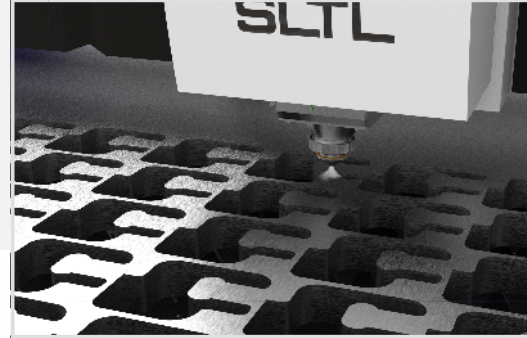
The Infinity F1 cuts designs rapidly without sacrificing quality. Its swift piercing function quickly pierces varying diameter designs, while the Flycut feature maintains constant speed and accurate cutting. This reduces operator hours and increases output.

RAPID GAS SWITCH OVER



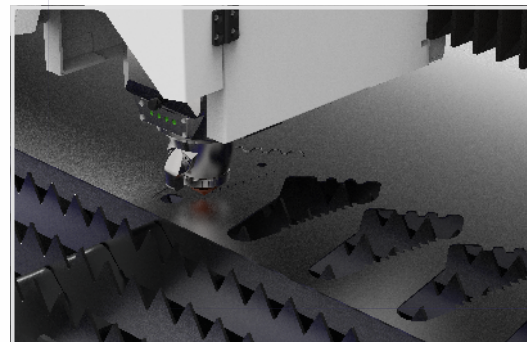
With only one click, Rapid Gas Switchover may switch between gases like O_2 , N_2 , and Air. The ability to cut a variety of materials combined with Rapid Gas Switchover capabilities significantly cut down on the time lost by manually changing the gas each time.

ZERO FILLET MODE



By utilizing the zero fillet mode, it is possible to eliminate issues such as warping, thermal deformation, rough edges, and burrs, resulting in a highly desirable finish that even boasts sharp edges at greater thicknesses.

DYNAMIC EDGE CONTROL



DEC's intelligent function prevents material damage and improves drawing edges with a single click by adjusting laser intensity. Benefits include improved cutting quality, faster processing, flexibility, and lower costs.

UPTO 60

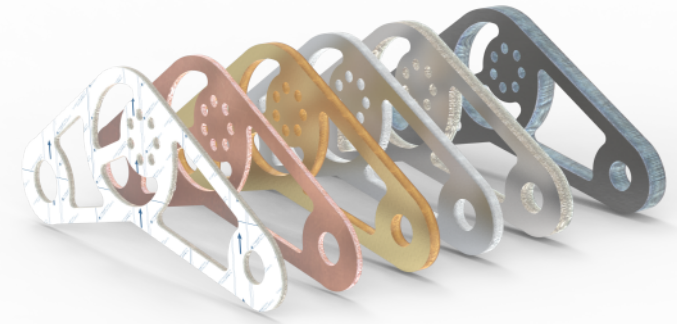
FEATURES

INDUSTRIES

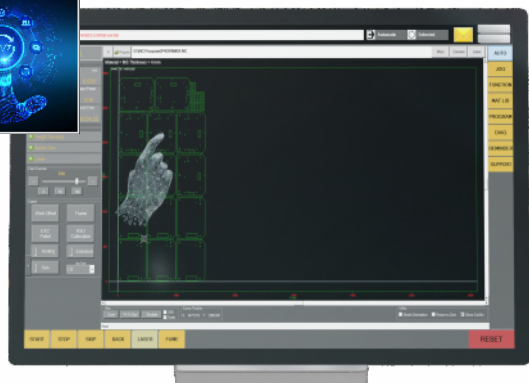
- Sheet Metal Fabrication
- Automobiles & Auto Ancillaries
- Utensils & Kitchenware
- Fitness Equipments
- Clean Room Facility
- Furniture
- Agriculture
- Ducts / HVAC
- Pharmaceutical
- Railways
- Electric Panel Manufacturing
- Elevator / Escalator Manufacturing
- Ship Building
- Dairy / Food Equipments
- Transport Industry
- Engineering Machinery
- Vending Machine
- Interior, Construction
- FMCG / FMCD
- Metal Signage Industry

SMART MATERIALS ENGINEERING

The intelligent sample vault stores the Cutting parameters of all materials and sheet thicknesses for quick and easy processing. With just a few clicks, it can create simple designs in a fraction of a second.



QUICK SERVICE
SUPPORT BY SLTL'S ONE-CLICK



QUICK EXECUTABLE MENU BAR



MATERIAL LIBRARY LOCK

SINGLE CLICK BACKUP & RESTORE



- REAL TIME PART STATUS DISPLAY
- DRIVE DIAGNOSTICS
- INTUITIVE JOB MONITORING
- INTELLIGENT REMINDERS

GLOBAL REACH, MULTILINGUAL APPROACH

SLTL Group, the pioneer in innovative laser solutions, provides systems with multi-language support, enabling increased accessibility, expanded market reach, and improved customer experience across diverse cultures worldwide. Our machines come equipped with all essential units, making them user-friendly for everyone around the world.



GRAM	KG	POUND	METER	MM	INCH	MILE	
FEET	BAR	PSI	°C	°F	°	μ	τ (Tau)

IMPACT NESTING

BRIDGES / CHAIN :

When connecting geometric elements, one can choose between open and closed bridge options, which effectively reduce piercing needs and save time significantly.

ECO-PIERCE :

This method is a new way of cutting thicker parts in a nesting that reduces the number of piercings needed. By starting the cutting process in a material-free zone, piercing is quicker and fewer consumables are used, resulting in time and cost savings.

VERIFY PART :

This function allows users to verify and fix geometries, detecting and correcting overlapped and gapped profiles. It can even identify open gaps, to eliminate the need for manual detection.

AUTOMATIC REMNANT GENERATION :

The software can automatically create a remnant from the current nesting and store it in the database. When the user nests the same thickness and material again, the software will prompt the user about all available remnants in the database. Users can prioritize both remnants and sheets for nesting.

MULTI ACCESS :

With just a single click from the home screen, operators can have multiple access to programs, laser details, and feed rates. This feature allows operators to have everything they need on-the-go.

BATCH IMPORT :

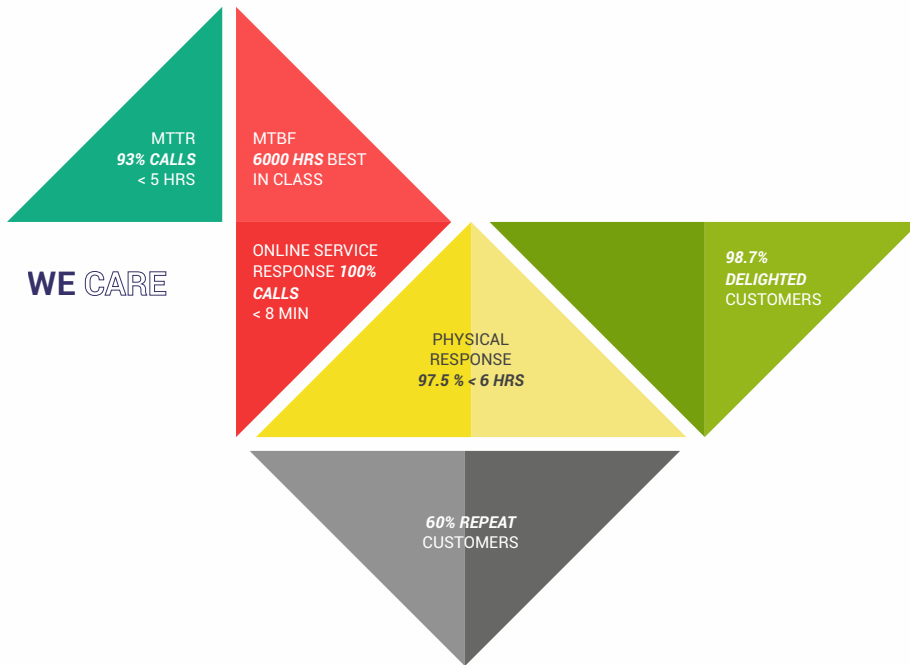
The batch import feature in Impact allows for automatic segregation of parts based on material, thickness, quantity, priority, machine, order, reference, and name.

KIT NESTING :

Users can create different kits and set priorities for urgent projects to be nested first. This feature is particularly advantageous for efficient project management.

AUTOMATIC PROCESSES :

Impact software includes a unique feature called Automatic Processes that enables users to automate specific steps during the nesting process, reducing the time required for nesting. Users can choose which steps to automate, making the nesting process more efficient.



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