LINC-CUT™ FIBER

YOUR NEXT **BIG UPGRADE.**

LASER CUTTING SYSTEM







WHAT IS THE CHALLENGE?

It's not only expensive to hand-cut or outsource hundreds of parts, but relying on inferior processes or third party vendors to deliver high quality parts in a timely manner, is inefficient and time consuming.

Steel fabricators are facing several challenges globally, including fluctuating steel prices due to trade tensions and changes in demand, labor shortages, stricter environmental regulations, competition from alternative materials, and the need to invest in new equipment and training to keep up with technological advancements.



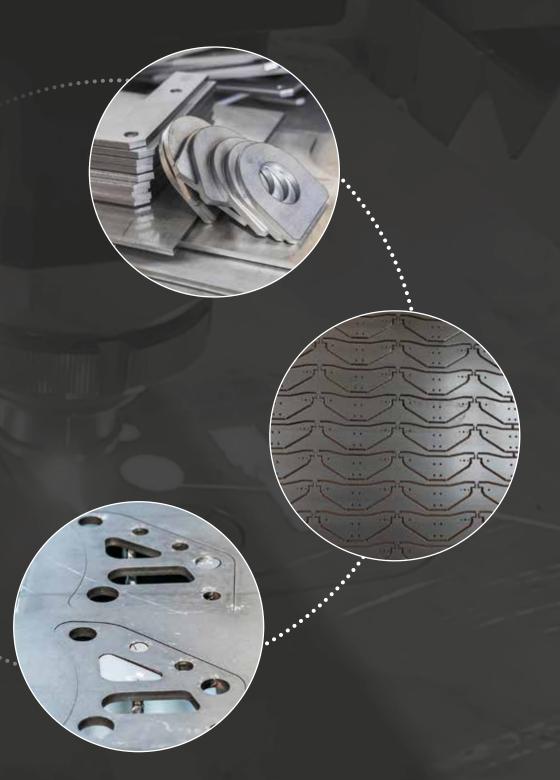




QUALITY CONTROL



HEALTH AND SAFETY RISKS



THE LINC-CUT™ FIBER SOLUTION

The LINC-CUT™ FIBER CNC laser cutting system was developed to offer exceptional and repeatable cut quality for sheet metal fabrication needs, and do so more safely and cost effectively.

They say: Quality over Quantity. We asked: Why not both?

With motion speeds up to 110m/min and laser output up to 12kW, the Linc-Cut[™] FIBER CNC Cutting system can production cut up to 40mm carbon steel quickly, easily and with no compromise to quality.















	LINC-CUT™ D	LINC-CUT™ A	LINC-CUT™ HP
	Single Table	Double Shuttle Table	Double Shuttle Table
***	3 or 6kW	3 or 6kW	12kW
<u></u>	2000x1000 - 3000x1500mm	1500x3000 - 2000x4000 - 2000x6000mm	1500x3000 - 2000x4000 - 2000x6000mm
	Up to 25mm	Up to 25mm	Up to 40mm

LINC-CUT™ FIBER VALUES. **FLEXIBILITY** MULI FORMAT PLATE AND LASER POWER **USER-FRIENDLY EXCELLENT CUT HUMAN MACHINE QUALITY** INTERFACE (HMI) **ECONOMIC** HEALTH LINC-CUT INVESTMENT AND **SAFETY SAFETY SIMPLE ONLY ONE**

EASY OPERATION

OPERATOR NEEDED

MATERIAL LOADING

TURN KEY **SOLUTION**









Protective Enclosure

- Safety Windows for better monitoring
- Security Laser Head Access Door
- Centralised Control Panel
- Integrated CAD/CAM Software
- Fiber Laser Pack up to 12kW; 40mm thickness
- Sheet Format from 1000x2000 to 2000x6000mm
- Manual Drawer Table or Automatic Shuttle Tables with light barrier protection
- Fume extraction with PRISM™
- 2-year warranty*









HIGH CUT QUALITY

MULTI POWER



PRODUCTIVITY

No compromise on safety:

- Compliant with Machinery Directive 2006/42/EC
- Safety Labeling with EN 12254 window marking
- A set of guards prevents cutting and moving the machine with the doors open, ensuring protection against laser radiation and injuries related to machine movements
- CE-Certified Components
- Safe Table Cycle for Shuttle Model
- Exhaust Filter Interconnection

^{*} Refer to the conditions of application of the automatic warranty charter on your Lincoln Electric site

LINC-CUT™ FIBER **DRAWER**

COMPACT LASER CUTTING MACHINE WITH SINGLE DRAWER TABLE



FEATURES & BENEFITS:

- Compact machine with quick installation
- Limited floor space used in a workshop
- Full access to the table with a locking system
- Sheet loading is compatible with an overhead crane or forklift
- Easy access to the cutting head thanks to its sliding doors
- Doors closing controlled by a dual-channel sensor







Carbon Steel, Stainless Steel. Aluminum











1000x2000 400kg 900kg 1500x3000

100m/min

3000W Carbon Steel up to 20mm 6000W Carbon Steel up to 25mm

LINC-CUT™ FIBER **SHUTTLE TABLE**

LASER CUTTING MACHINE WITH DOUBLE SHUTTLE TABLE UP TO 12KW







Carbon Steel.

Aluminum

Stainless Steel.



1500x3000

2000x4000

2000x6000



2x1000kg

2x1600kg

2x2400kg



110

m/min



























Carbon Steel. Stainless Steel. Aluminum

2x2000kg 1500x3000 2x3000kg 2000x4000 2x4000kg 2000x6000

110 m/min

12000W

Carhon Steel up to 40mm

FEATURES & BENEFITS:

- Machine with double shuttle table with automatic change
- Pneumatic table lock
- Loading area secured by a light barrier
- Table movements in the cutting enclosure through a rigid secured door
- Double motorization allows heavy sheets to be moved (for 12kW)
- Large access door for rapid intervention in the protection cabin





HIGH QUALITY LASER PROCESS

GET THE BEST PERFORMANCE WITH A READY TO CUT DATA BASE

A plug and play system with a build-in cutting data hase for various material and thickness.

Controls your costs of operation with an excellent cut quality and cost of produced parts.

- Range 1 angularity range ISO9013
- Small contour and holes capability
- Designs simplified with mortise tenon
- Close to zero dross under parts
- Flexible adaptation for custom material and technical support





Max Cutting Performances*:

	Steel (mm)	Stainless steel (mm)	Aluminum (mm)
3kW	20	10	5
6kW	25	15	12
12kW	40	25	20



Optimal Fiber Laser Package:

- Autofocus laser head with automatic gas and cutting height calibration for optimum quality and repeatability
- Laser source with fiber core diameter adapted to the applied power, from 75 to 100µm for superior cutting quality
- A gas console with automatic adjustment and selection
- Ethercat technology CNC interconnected with the laser source, laser head, height control, and axes, integrating all advanced control and monitoring functions, as well as a ready-to-use cutting parameter database; a single interface to control the entire machine

^{*} For intensive production, max thickness is reduced

COMPUTER NUMERICAL CONTROLER

- It is equipped with a large control screen integrating visualization of 2 monitoring cameras: 1 for general view and 1 directly on the laser head
- It includes automatic drawing and nesting software and database parameter for all thicknesses on mild steel, stainless steel and aluminum materials
- Programs can be downloaded via USB stick or network via our ETIC remote service module
- The CNC integrates various general functions: jog mode, test and cutting, resuming cutting after a job interrupt, automatic plate alignment, cutting of leftover plate, contour verification, etc

Its advanced functions:

- Flycut: Increase cutting productivity by set of small interior contours on thin thickness
- **Fast Cutting:** Reduce the time between cuts
- Smooth MicroJoint: bridging small parts to prevent them from falling over
- **Frame Border:** Simply check if a set of parts can be cut on a scrap
- Circle Centering: Find the center of a disk
- Avoid Collision in travel: Manage intelligently the rise of the laser head when moving
- Multi-level piercing cycle for thick material
- Cleaning function for slag located on the sheet metal surface



AIR FILTRATIONSYSTEM

The Prism[™] fume extraction system from Lincoln Electric uses intelligent fan control technology, maximizes fume extraction, conserves energy and extends equipment life.

QUIET OPERATION

Silencer and sound deadening materials drastically reduce airflow noise. Equipped with a variable speed drive that adjusts extraction airflow to application.

ADDED SAFETY

Integrated spark arrestor.

REDUCED FOOTPRINT

Can be placed directly next to a cutting table, reduced footprint for areas with space constraints.

SIMPLE MAINTENANCE

Automatic cleaning process once pre-set pressure differential is reached. Particulate is collected into the 113 liters dust bin.

EASY INSTALLATION

Quick and seamless wire connectivity to the system. Connect power, compressed air, and duct sensor for fan speed control.



SERVICE & SUPPORT

LINCOLN ELECTRIC SERVICES: A COMPLETE OFFER FOR YOUR PRODUCTION TOOLS



Far beyond the simple recommendation of processes or equipment, Lincoln Electric work with you in the service field by offering advice and expertise, demonstrations, feasibility studies, installation and commissioning of facilities, training and assistance to the start of production, maintenance, after-sales service and even upgrade of your equipment.



CALL CENTERS

A large team of technicians can answer to every question and keep your manufacturing tools to their best perfomance levels.

REMOTE SERVICE

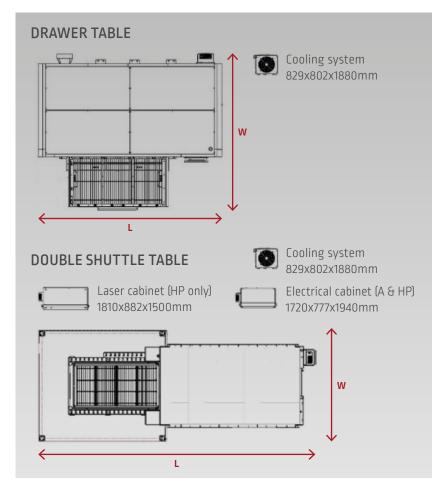
Lincoln Electric offers innovative services with securely connected machines in order to increase performance of your tool:

On line intervention
allowing reduction of machines' down time.
On line assistance and training
for optimisation of your productivity.

ADVICES AND EXPERTISES



On the basis of a personalized diagnosis, our technical specialists will analyse your needs, identify potential improvements, build solutions along with you, define action plans and give you the support you need.



Dimensions & Weight

Туре	Machine* W x L x H (mm)	Cutting area	Max load of the table	Machine weight
2010 D	3750x4200x2080	1030x2050	400kg	5.5T
3015 D	4300x5200x2080	1530x3050	900kg	7T
1530 A	4250x10270x2387	1530x3050	2x1000kg	7T
2040 A	4750x12270x2387	2030x4050	2x1600kg	9T
2060 A	4750x16270x2387	2030x6050	2x2400kg	11T
1530 HP	4300x10800x2681	1530x3050	2x2000kg	9T
2040 HP	4800x12800x2681	2030x4050	2x3000kg	11T
2060 HP	4800x16800x2681	2030x6050	2x4000kg	15T

^{*} Excluding Safety Corridors (800mm), Automation team will supply a detailled layout for each projects

Electrical & Gas Supply

Laser power	Primary Protection*	Input Power*	O₂ 9 bars 99.5%	N₂ 25 bars 99.995%	Air 13 bars ISO 8573-1 - Class 1-4-1
3kW**	33.8kW / 61A	16.5kW / 28A	10m³/h	130m³/h	60m³/h
6kW**	43kW / 78A	23.5kW / 40A	10m³/h	185m³/h	80m³/h
12kW	56.8kW / 102A	40kW / 73A	10m³/h	185m³/h	145m³/h

^{*} Excluding Filtration System

CUSTOMER ASSISTANCE POLICY

The business of Lincoln Electric is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrantoguarantee or assume any liability with respect to such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change — This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectriceurope.com for any updated information.





^{**} For the drawer type model, reduce the consumption by 2.5kW / 5A