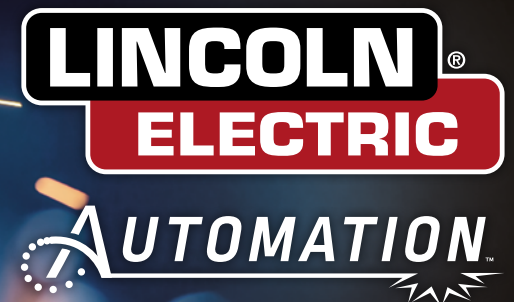


# TORCHMATE® EU SERIES

---

**AIR & HIGH** DEFINITION  
PLASMA CUTTING TABLES



# 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.



TIME/COST  
INTENSIVE



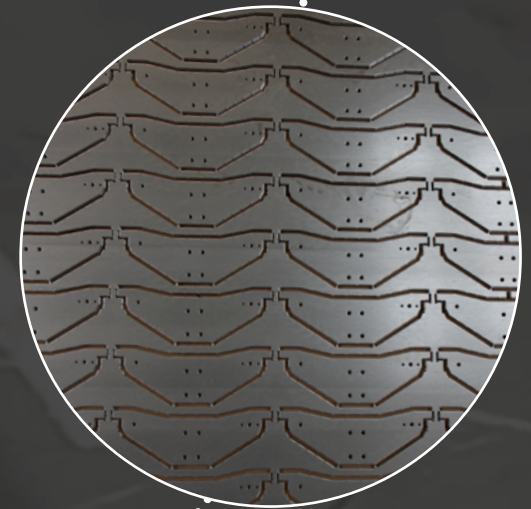
LABOR  
SHORTAGES



QUALITY  
CONTROL



HEALTH AND  
SAFETY RISKS













# TORCHMATE®

A COMPACT RANGE OF DEDICATED  
PLASMA CUTTING MACHINES,  
AIR OR HIGH DEFINITION

- Cut High Quality Parts Faster
- Spend Less Money Cutting Parts
- Ready To Run Quickly (compact machines optimizing the floor space)
- Easy To Set up with minimal learning curve for operators



	TORCHMATE® w	TORCHMATE® d	TORCHMATE® HD
 Plate format (mm)	1000x2000 / 1500x3000		1500x3000
 Max load (Kg)	400	900	1800
 Max Thickness	Air Plasma Tomahawk® 1538 (20mm*) Air Plasma FlexCut® 125 (25mm*)		HD Plasma FineLine® HD 170 (30mm*) HD Plasma FineLine® HD 300 (45mm*)
 Carbon Steel	V	V	V
 Aluminum	X	V	V
 Edge Quality*	Good	Good	Excellent
 Angle* ISO9013	Range 4-5	Range 4-5	Range 2-4
 Concentricity			
 Table technology	Water	Down Draft Table	
 Production	Light Industrial	Industrial	Intensive

\* Carbon Steel performance.



# TORCHMATE® Air Plasma Cutting Table

- Complete cutting system with high quality single-source components
- 2 year warranty
- Air plasma piercing\* 20mm (80A) or 25mm (125A)
- For mild steel and stainless steel (aluminum with down-draft table version)
- Sheet metal 1000 x 2000mm, 1500 x 3000mm
- Compact machine optimizing the floor space
- Ready quickly for operation after delivery and installation

## APPLICATIONS:

- Metal fabrication shops
- Sheet metal contractors
- Custom vehicle fabricators
- Prototyping
- Locksmith
- Education & training
- Hobbyists & artists



## WATER TABLE VERSION

The water table makes it possible to capture the dust released during cutting\*\*. The reinforced structure provides a good rigidity and stability to the machine

Air Plasma Cutter 80 or 125A with 15m torch leads

## DOWN-DRAFT TABLE VERSION

The fume extraction table has compartments and a mechanical cam activates the extraction sections according to the position of the beam. It is connected to a fume extraction filter.

## OPTIONS:



Longitudinal  
Beveling Tool 45°



Pneumatic  
Plate Marker



Separate Console  
with 20" multi-touch  
screen and VMD CNC

\* Carbon Steel performance.

\*\* The residual gases which escape remain below the exposure limit values in workshop conditions of sufficient dimensions with air renewal and an average effective cutting time of 2 hours.

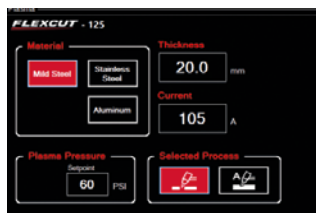
# ACCUMOVE

ACCUMOVE motion control technology offering advanced machine control and combining all functions to simplify use. It provides increased processing power and synchronization of each component on the table. Height control, motors and cutting process are all managed with a single operating system keeping the entire communication loop under one display.

## VISUAL MACHINE DESIGNER (VMD)

VMD is the human-machine interface (HMI) of all ACCUMOVE® CNC controllers. Its user-friendly design and appealing layout is very easy to learn. A full set of new features has been installed directly in the controller to simplify the cutting process:

- **Process management** -all parameters are controlled from the interface depending on **the simple choice of material and thickness** simplifying the implementation of plasma cutting. Several functions increase cycle productivity and automatically compensate for consumable wear.
- **Plate alignment** - simplifies material loading, especially when dealing with thicker metal sheets. Regardless the orientation of the sheet, the ACCUMOVE controller adjusts the trajectory accordingly.
- **Laser positioning mode** - simplifies the use of the machine for aligning the sheets, defining the starting point or in test mode
- **36 standard shapes** - comes pre-loaded into the software, and includes a set of adjustable shapes from a basic rectangle to complex circular flanges.



**TOMAHAWK®  
1538**



**FLEXCUT®125**



Versatile and economical version with the Tomahawk® 1538 or more powerful the FlexCut®.

	<b>TOMAHAWK® 1538</b>	<b>FLEXCUT® 125</b>
Air Pressure	6.5 to 7bars	6.2 to 8.3bars
Air Flow Rate	180l/min at 6.5bars	260l/min at 6.2bars
Output Range	20 - 80A @65%	20 - 125A @100%
Plate Piercing Limit*	20mm	25mm
Sheet Metal Edge*	25mm	35mm
Manual torch	LC 105 included	PT 130 in option
Plasma marking	X	V

\* Carbon steel performances.

# TORCHMATE® HD Plasma Cutting Table

- High-Definition Plasma Cutting Table with built-in filtration control
- 2 year warranty
- FineLine® HD plasma systems, offering high-quality cutting
- HD plasma piercing\* 30mm (170A) or 45mm (300A)
- A machine specifically designed for intensive production
- Its robust, one-piece design allows for quick and easy installation

## APPLICATIONS:

- Metal fabrication shops
- Sheet metal contractors
- Custom vehicle fabricators
- Locksmith
- Structural
- General industries



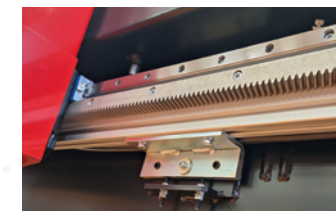
Separate Console with 22" 16/9 touch screen HPC III interface controls all movements, cutting process, and the fume extraction with "Digifilter inside" system



This integrated fume extraction table is designed for intensive production. HPC III directly controls the pneumatic suction doors

Dual ball bearing rails on digital tool holder 15m/min speed, for precise and dynamic torch positioning with magnetic torch breakaway

Ball bearing and rack drive helical guaranteeing smooth guidance and positioning accuracy. Rails protected by the edge of the table against falling parts or sheets and rack is mounted downwards for additional protection. The dual motorization gives smooth machine drive



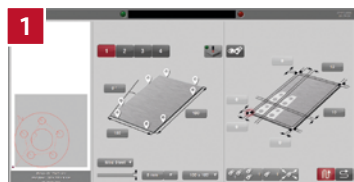
\* Carbon Steel performance.

## HPC DIGITAL PROCESS III

All has been designed to be intuitive and easy to use.  
It fully manages the cutting machine, from the trajectory to the processes, and also the fume extraction system.

- 22" 16/9 touch screen
- 66 standard shapes with cutting quality management
- Possibility to add customized shapes
- Scale, rotation, mirror
- SMART DATA BASE with up to 10 qualities per parameter
- Control of processes
- 17 languages available

How does the automatic adjustment of processes work on HPC III ?



Program selection material, thickness, sheet format



The adjustment of all parameters is done automatically



HPC III offers one or more cutting solutions



ULTRA SHARP2 function integrated database offering up to 10 cutting qualities

## FINELINE® HD 170 & 300

- Dimensional and geometrical accuracy of pieces cut, on a wide range of materials
- Remarkably straight holes on carbon steel
- Low O<sub>2</sub> gas consumption unlike other plasma HD systems or laser
- Compatible with EN1090 requirements
- Warranty 3 years on power source
- SMART DATA BASE with up to 10 qualities per parameter



	FineLine® HD 170	FineLine® HD 300
Output Range	20 - 170 A @100%	20 - 300 A @100%
Production Piercing*	30mm	45mm
Sheet Metal Edge*	50mm (max capacity of the table)	

\* Carbon steel performances.

### OPTION: H17 GAS MIXER

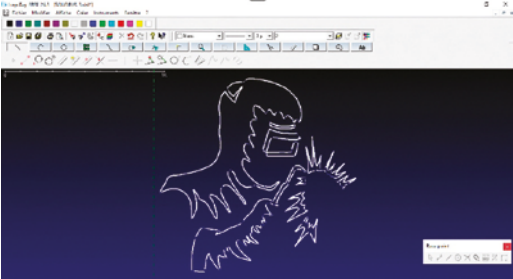
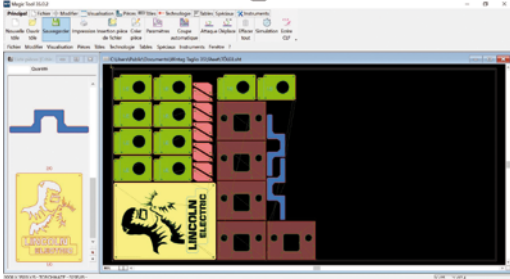
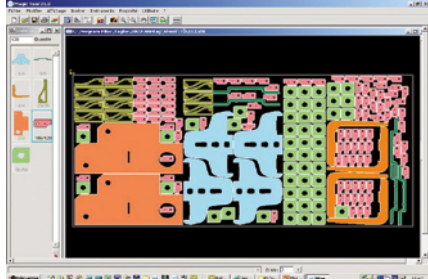
To produce the best cut quality on stainless steel, FINELINE® HD uses H17 gas producing faces white to pink. To simplify the supply of this gas mixture, we offer a bi-gas mixer recomposing the H17 from nitrogen and 35% hydrogen argon





# CUTTING SOFTWARE

A well adapted software help increases the automation and the return on investment of machines fitted with the CNC.  
Lincoln Electric can supply software specially designed for thermal cutting CAD, pressure vessel shapes developed flat, interleaving, plate stock control, communication, translation of external files and files produced by other CAD systems (DXF, DWG, DSTV...).

<b>TORCHMATE® CAD CAM</b> Dedicated software for Torchmate range	<b>TORCHMATE® CAD CAM+</b> Dedicated software suite for HPC	<b>MAGICNEST 10</b> Software suite for all CNC
		
Drawing module	Drawing module	Drawing module
Importation of dxf / dwg / dstv...	Importation of dxf / dwg / dstv...	Importation of dxf / dwg / dstv...
Lettering tool	Lettering tool	Lettering tool
Vectorization tool	Vectorization tool	Vectorization tool
Nesting module: manual, matrix or automatic	Manual or matrix nesting module & tools path	Automatic nesting & tools path module using best strategy for maximizing material savings
ISO codes programs generator for machine range TORCHMATE® AIR (VMD CNC interface)	Codes programs generator for different CNC machine: HPC, BURNY, VMD...	Codes programs generator for different CNC machine: HPC, BURNY, VMD...
-	-	Multi-torches, bridges, micro junction, pre-piercing, common cutting, scrap recovery...
-	-	Quotation tool
-	-	Plate storage management
-	-	Remaining scrap plate management



# DIGIFILTER AIR FILTRATION SYSTEM

## DOWN-DRAFT TABLE

The table for the TORCHMATE® d and TORCHMATE® HD has compartments at every 600 mm that helps extend the effectiveness of fume extraction.

These compartments are connected to a suction tunnel, opened by a hatch equipped with pneumatic cylinders.

These cylinders are actuated by a mechanical cam attached to the machine beam on the TORCHMATE® d.

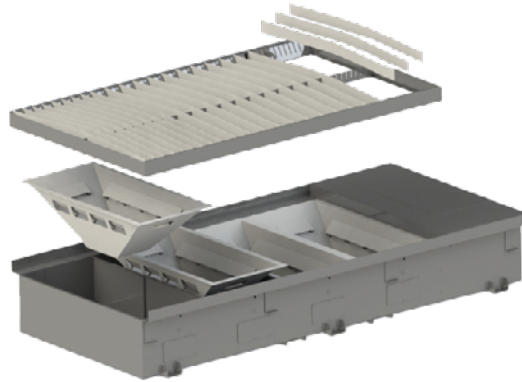
On the TORCHMATE® HD, the CNC HPCIII directly controls the pneumatic suction doors without any mechanical connection, optimizing the suction area based on the torch position, improving cutting quality and reducing the suction unit's consumption.

### A robust design with easy maintenance

The table is a mechanically welded box that is placed on the floor, with a Ø350 outlet for connection to an extraction system.

A removable support frame for the piece to cut, made of expendable plates for plasma cutting, is placed on the box.

The bottom contains cross collectors that are easily removable for cleaning.

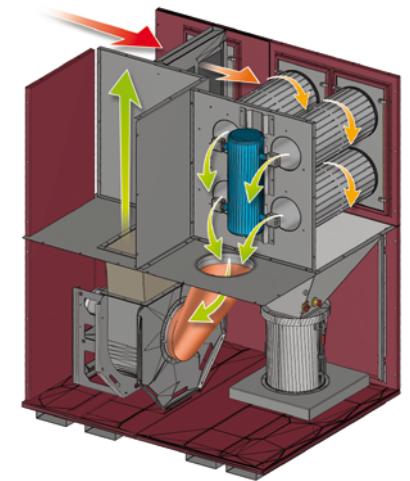


Associated to the downdraft table, the

## DIGIFILTER

provides a clean and safe working environment including:

- A spark arrester
- Cartridges with polyester PTFE membrane for a long life time
- 4 cartridges and 60 m<sup>2</sup> filtration surface for the TORCHMATE® d
- 6 cartridges and 90 m<sup>2</sup> filtration surface for the TORCHMATE® HD
- Container 40 liters for dust collection
- Friendly user interface to control the status of the cartridges and dust container, and help for maintenance with events history
- Automatic cartridge self-cleaning
- Filtration cartridge class H13 in compliance with EN 1822 standard (efficiency 99.9987%)



# 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 performance 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



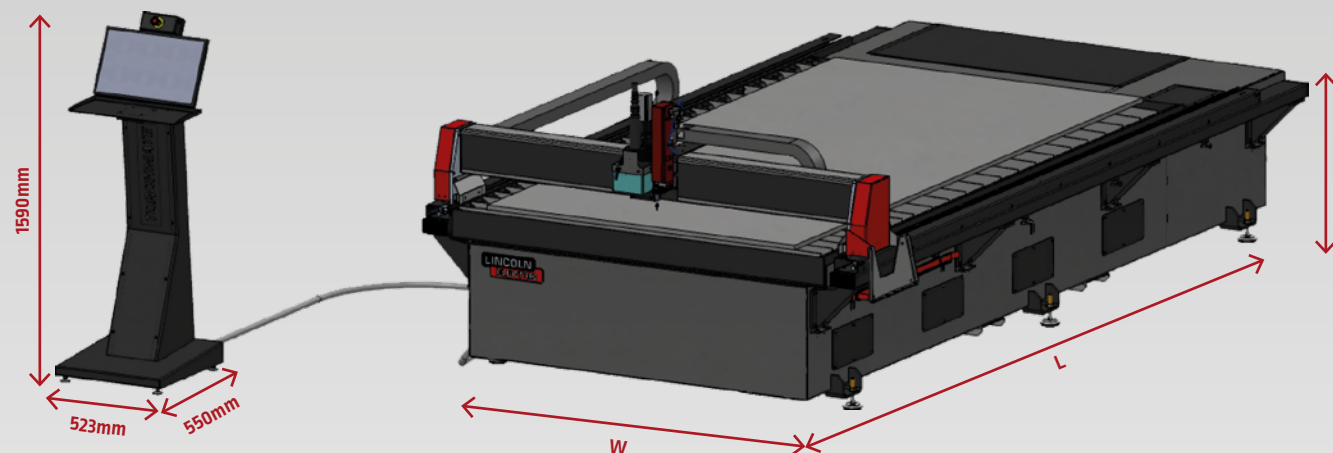
On the basis of a personalized diagnosis, our technical specialists will analyse your needs, identify potential improvements, build solutions along with you, define action plans and give you the support you need.

# TECHNICAL CHARACTERISTICS

	TORCHMATE® w	TORCHMATE® d	TORCHMATE® HD
Plate format [mm]	1000 x 2000 / 1500 x 3000		1500 x 3000
Machine sizes* L x W x H	2900 x 1750 x 1500 3900 x 2250 x 1500	2975 x 1800 x 1350 4100 x 2300 x 1350	4515 x 2580 x 1350
Weight [kg]	950 / 1200	1000 / 1700	1800
Filtration	Water	Digifilter 4CD**	Digifilter 6CD**
Digifilter		1800 x 1480 x 2275mm 900kg	2510 x 1480 x 2275mm 1050kg
Digifilter Input Power		3 x 400VAC-50/60Hz-7A	3 x 400VAC-50/60Hz-14A
Torchmate Input Power	1 x 230VAC-50/60Hz-4A		1 x 400VAC-50/60Hz-10A

	TOMAHAWK® 1538	FLEXCUT® 125
Input Power	380-415V – 3ph – 50/60Hz	
Input Current	23A	40A

	FineLine® HD 170	FineLine® HD 300
Input Power	380-415V – 3ph – 50/60Hz	
Input Current	69A	123A



\* Excluding Safety Corridors (800mm)

\*\* Fume Extraction performance will depend on final application and working environment.

For operators' safety but also for the protection of the environment, user has to collect and filter cutting fumes. Consult us to see the possible options.

## ARC FACILITIES Application Resource Centers

Application Resource Centers, also known as ARC facilities, house Lincoln Electric's latest technologies and professionals, who help develop and deliver productivity solutions that create new opportunities for our current and future customers.

ARC facilities include dedicated spaces and equipment to demonstrate and test welding, cutting, virtual welding, and automation solutions. In addition, each ARC includes classroom areas for instruction on the processes, machines and consumables solutions available to them.



[www.lincolnelectric.com](http://www.lincolnelectric.com)