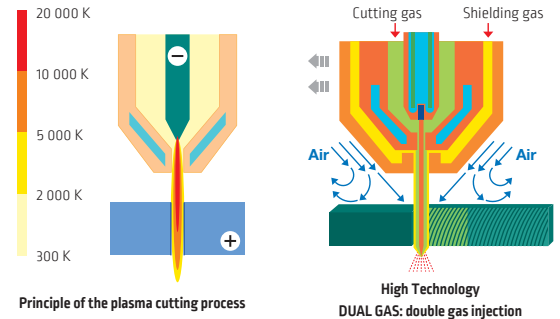


A solution for every application

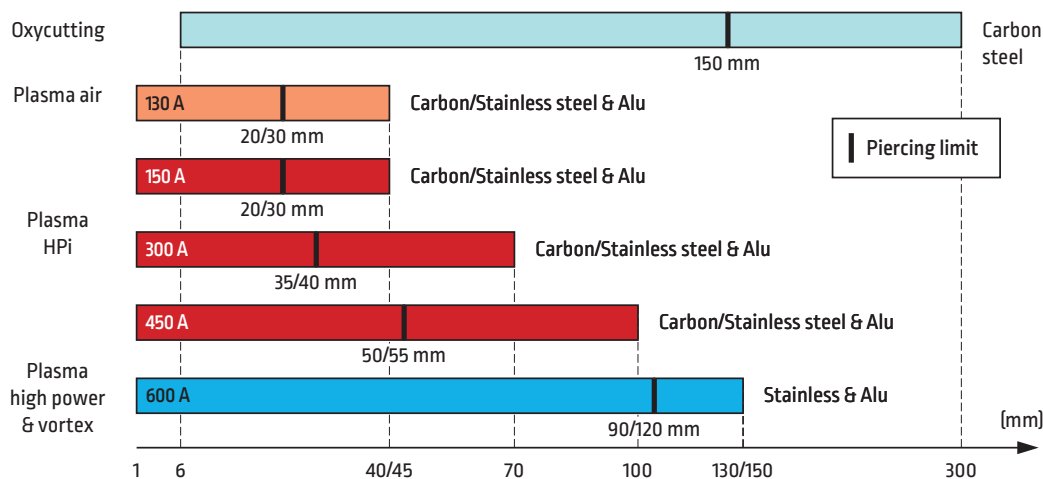
Plasma cutting

The plasma cutting process, as used in the cutting of electrically conductive metals, utilizes this electrically conductive gas to transfer energy from an electrical power source through a plasma cutting torch to the material being cut. The basic plasma arc cutting system consists of a power supply, an arc starting circuit and a torch. These system components provide the electrical energy, ionization capability and process control that is necessary to produce high quality, highly productive cuts on a variety of different materials (carbon steel, stainless steel, aluminum, copper,) and thicknesses (from 0.5 to 220 mm).

Plates, round tubes, H or U beam, Channels, HSS tubes, angles....
Plasma, oxycutting, bevels, straight cuts, High quality Holes,
high quality plasma marking, tube cutting with bevel...



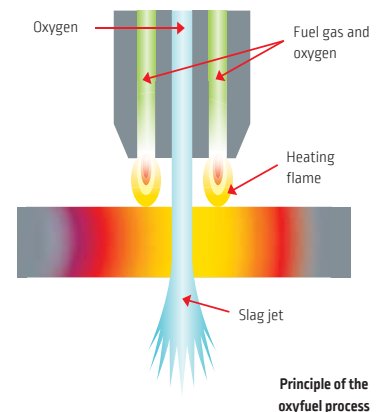
Thickness range



Flame cutting

The oxyfuel process is the most widely applied industrial thermal cutting process. It can cut thicknesses from 3 mm to more than 1000 mm. The equipment is low cost and can be used manually or mechanised. There are several fuel gas and nozzle design options that can significantly enhance performance in terms of cut quality and cutting speed.

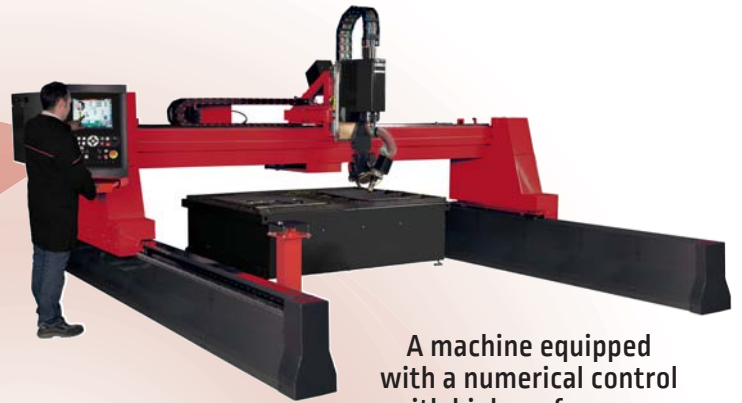
A mixture of oxygen and the fuel gas is used to preheat the metal to its "ignition" temperature which, for steel, is around 1150 °C (bright red heat) but well below its melting point. A jet of pure oxygen is then directed into the preheated area instigating a vigorous exothermic chemical reaction between the oxygen and the metal to form iron oxide or slag. The oxygen jet blows away the slag enabling the jet to pierce through the material and continue to cut through the material.



TOTAL SOLUTION PROVIDER



Advance cutting process and improved data base parameters



A machine equipped with a numerical control with high performance



Technician with cutting expertise

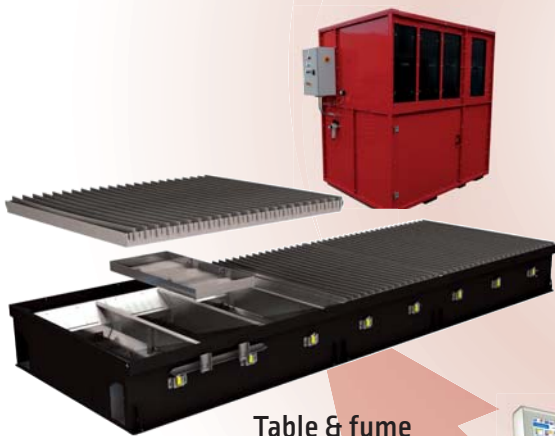
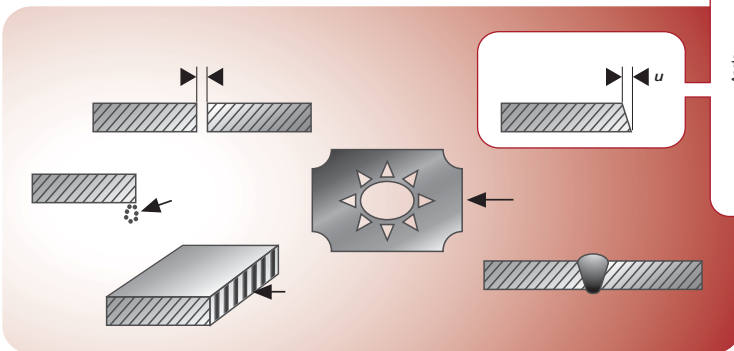


Table & fume extraction



Efficient software and post processor

ISO 9013: Main cutting quality criteria

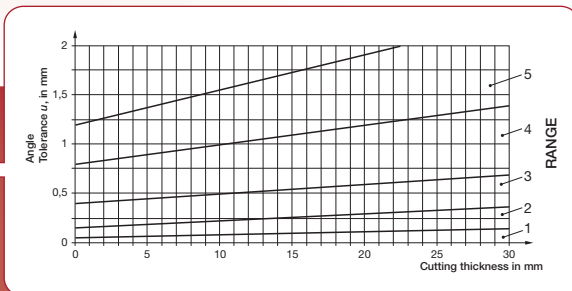


Various features can be evaluated to understand the cutting quality.

EN standard ISO 9013 retains mainly three:

- Geometric accuracy,
- Roughness surface,
- Angle / concentricity.

This last criteria determines, based on the thickness, the perpendicularity tolerance in five classifications (ranges 1 to 5).



HPi Plasma cutting complies with EN 1090 infrastructure manufacturing standard.



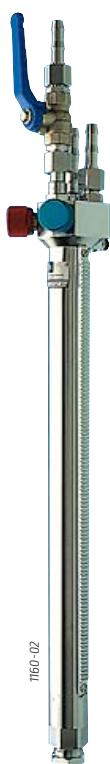
It sets the requirements for the execution of steel structures to ensure appropriate levels of mechanical resistance, stability, service ability and durability. Thermal cutting and particularly plasma cutting HPi is identified as a process that can be used in the realization of steel structure: cuts & bolt holes

OXYCUTTING RANGE

A large range of oxyfuel cutting torches with performance and flexibility

For oxycutting of non or low alloyed steels from 3 to 300 mm, Lincoln Electric offers a full range of oxyfuel cutting torches: OXYCUT G1, OXYCUT MACH, MACH HP or MACH HPI to install on semi automatic machines (gantry machines) or fully automatic machines (gantry machines type OXYTOME HPC).

According to your needs, you will choose, mixing nozzles with the OXYCUT G1, and cutting torches internal mixing with high speed and high quality with OXYCUT MACH, MACH HP or MACH HPI.



OXYCUT G1

- Cutting capacity from 3 to 300 mm.
- Torch in short or long version.
- Robustness.
- According to the price level and the quality needed, possibility to use nozzles from manual torch.



OXYCUT MACH OXY

- Cutting capacity from 6 to 300 mm.
- Cutting quality.
- Robustness.
- Easy to use.



OXYCUT MACH HP

- Cutting capacity 6 to 300 mm.
- Productivity.
- Cutting quality.
- Fitting of consumables without tools: easy & quick.
- Lifetime.
- Piercing up to 150 mm.



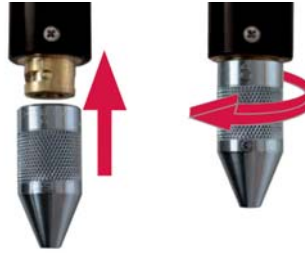


OXYCUT MACH HPI

- Internal ignition.
- Cutting capacity 6 to 300 mm.
- Productivity.
- Cutting quality.
- Fitting of consumables without tools: easy & quick.
- Lifetime.
- Piercing up to 150 mm.

MACH HP & MACH HPI

Tool free nozzle change

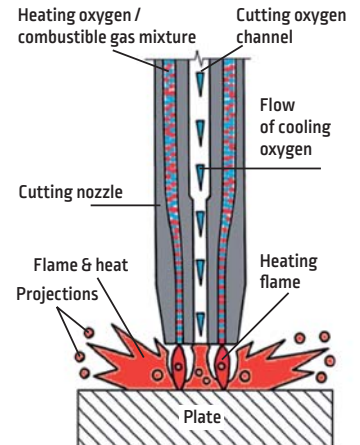


Thickness
6 to 300 mm

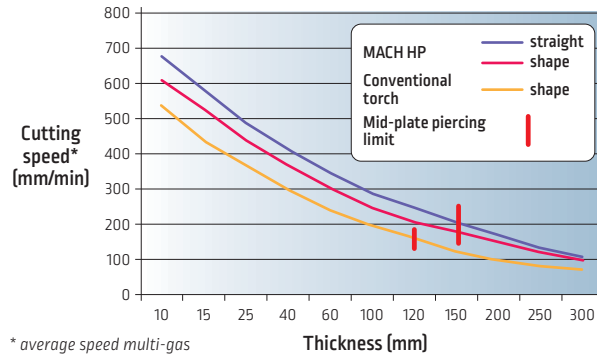
High speed
cutting nozzles



System OxyCOOL



Type of cut



* average speed multi-gas

Systems of gas regulation fully controlled by HPC 2 with full automatic cycle:

	OXY Essential	OXY HPI
Number of torches	4 (1 module of 4)	12 (up to 3 modules of 4)
Gas regulation	Automatic gas	
Maximum thickness: Cutting / Piercing	200 / 150 mm	300 / 150 mm
Tool holders	150 mm stroke	Yes
	250 mm stroke	-
	Cable chain	-
	Speed	2 m/min
Oxy torches	MACH OXY	✓
	MACH HP	✓
	MACH HPI	✓
Fixed electric ignitor*	Option	-
OXY SAFE PIERCING Including choc sensor (Probe detection) (igniter* and retractable probe)	Option	Standard
Beveling tool with tilting nozzle**	✓	
Strip cutting tool**	✓	
VXK cutting tool	1	2

* : integrated ignitor with MACH HPI / ** : use without capacitive probe & automatic ignition



EQUIPMENT FOR OXYFUEL PROCESS

Bevel tool for oxyfuel torch

This tool easy to install and use gives the possibility to realize different kind of simple bevel following a straight line: standard V bevel or tapered bevel (bevel over 45° cut on plate edge)

Tapered bevel (bevel over than 45°)

This tool is well adapted to realize tapered bevel on plate edge with or without the assistance of a mechanical sensor to follow the distortion of the plate.

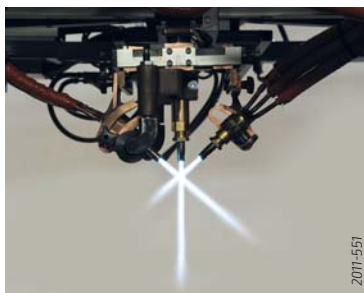


Beveling block V X K

For bevels parallel to the axes using mechanical sensors. It allow to work on thicknesses up to 70 mm.

The system is equipped with 3 short oxyfuel torches and give the possibility to realize V, Y, X and K bevels. Each side oxyfuel torches can be adjust following an angle from 10 to 45°.

The two robust rollers of the mechanical sensor are cooling by compressed air. In option, the VXK can be fit on electrical tool holder with a quick mechanical exchanger. It gives the possibility to work with a standard straight cutting torch or with a VXK beveling block.



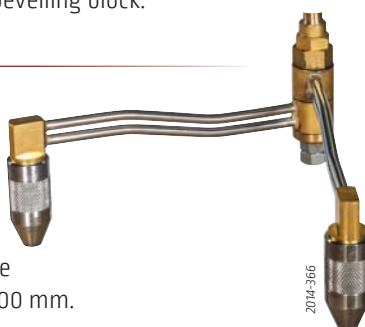
Strip cutting systems

Tools to realize strip cutting. Two systems are available:

One system to fit directly on the oxy-fuel torch.

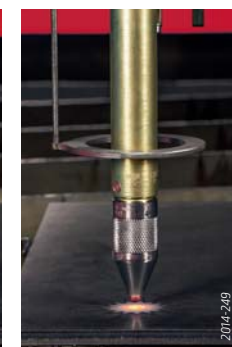
The system use two set of nozzles.

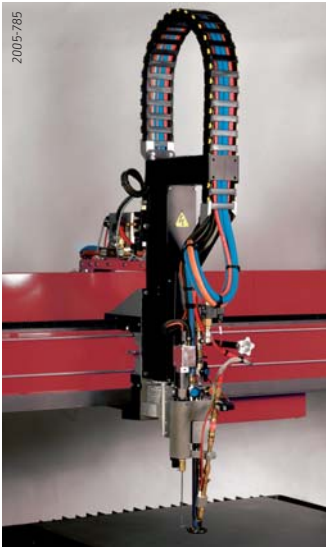
The distance between each other is adjusted by opening more or less the tool. Distance between the 2 nozzles: from 40 to 400 mm.



Set capacitive sensor/automatic ignition for OXY torch with OXY SAFE PIERCING

Proposed in the basic version on OXYTOME 2, OXYTOME RS HPI, OXYTOME TWIN HPI and in option on EUROTOME 2, this unique system on the market, allows to retract during phases of piercing both the sensor and the igniter. OXY SAFE PIERCING authorizes mid plate piercing up to 150 mm thickness in automatic cycle without any disassembly of the probe or the igniter.





2005-785

Torch holder PO 150 for oxyfuel

Torch holder 150 mm travel, robust and specially designed for the implementation of thermal processes. Also available in 250 mm travel.



2014-059

High temperature torch holder

It is especially adapted for cutting very thick material in flame cutting. Its robust design enables it to support the high temperatures found on flame cutting applications up to 900 mm thick.

HPC Automatic indexing

Numerical automatic adjustment of the distance between two or many cutting tools. This option can be managed automatically with the nesting software. Inside a same program, different distances can be adjusted between the torches depending the parts sizes to cut. This option is mainly used with oxy-fuel process. Possibility to use it from 2 to 8 torches. This option is fully managed by HPC thanks to a very nice control interface.



2014-204

Machine thermal protection

The machine can be equipped with different thermal protection able to work in the more hostile condition especially when customer cut with oxyfuel process with many tools or on very big thicknesses.



2016-490



2015-545

Electric clamping

System to clamp(s) tool(s) holder(s) from the CNC console or on the tool holder. It is possible for example to deselect slaves tool holders and to park them directly from the CNC console. Maximum 2 tool Holders. For more, use automatic indexing.

CUTTING MACHINES RANGE

A wide range from the simple mechanised carriage to fully automatised large capacity machines, from torch for straight cut to the 3D plasma cutting tool.

The complete offer of Lincoln Electric can answer to all your cutting needs with oxycutting and/or plasma process.

The various tools and options will enable you to produce parts with shapes, with or without bevel for occasional use or intensive production, on small or large format sheet metal.

OXY/PLASMATOME 2 HPi

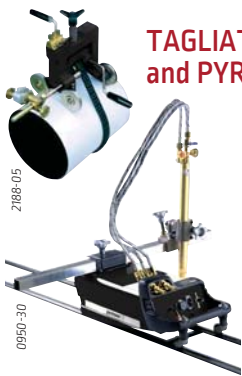


EUROTOME 2



2016-318

TAGLIATUBI, and PYROTOME SE



2188-05

0950-30

PYROTOME CNC



2015-486

TORCHMATE



2012-581

EASYTOME



2015-483

Examples of equipment and options:

- CNC HPC digital process,
- NERTAJET BEVEL HPi,
- Cutting of tube,
- Numerical drilling unit,
- Micro-percussion marker,
- etc...



2007-489



2015-679



2012-581



2012-570



2011-173



2010-282

OXY/PLASMATOME HPI RS & Twin



2011-545

CYBERTOME



2011-014

ALPHATOME 2 HPI



2011-049

OPTITOME 2 HPI



2014-685

Main characteristics, equipment and options

MACHINES	Transversal stroke											Useful longitudinal stroke	PLASMA (maximal number)			OXY (maximal number)		Main technological options			Table				
	1 m	1.5 m	2 m	2.5 m	3 m	3.5 m	4 m	4.5 m	5 m	5.5 m	6 m		6.5 m	...12 m	Air	HPI	High Power	Manual	Auto	Tube	NERTAJET BEVEL HPI	Drilling unit 2.5	Dry	Water	
PYROTOME CNC														3	1	-	-	1	-	-	-	-	-	X	X
TORCHMATE														2.5	1	-	-	-	-	-	-	-	-	-	X
EASYTOME														1.5 to 4	1	-	-	-	-	X	-	-	-	X	-
OPTITOME 2														1 to 6	1	1 (300 A)	-	1	-	X	-	-	-	X	-
ALPHATOME 2														3 to 24	-	2	-	-	-	X	-	-	-	X	X
EUROTOME 2														3 to 15	2	1	-	-	4	X	-	-	-	X	X
OXY/PLASMATOME 2 HPI														3 to ...		2		-	6	X	-	-	-	X	X
OXY/PLASMATOME RS HPI														3 to ...		2		-	8	X	-	-	-	X	X
OXY/PLASMATOME TWIN HPI														3 to 24		2		-	3	X	X	X	X	X	X
CYBERTOME														3 to ...		2		-	12	X	X	X	X	X	X

Portable carriages

TAGLIATUBI & PYROTOME SE

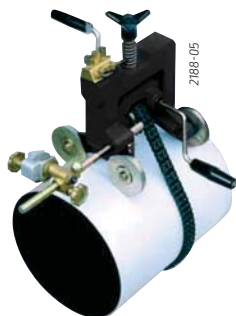
Two practical and functional carriages for ancillary cutting jobs in the workshop and on site.

TAGLIATUBI

The TAGLIATUBI carriage allows the mechanised oxycutting of tubes with outside diameter varying from 6" (150 mm) to 48" (1 200 mm) and having a thickness from 5 to 50 mm.

It is adapted for the execution of cuts:

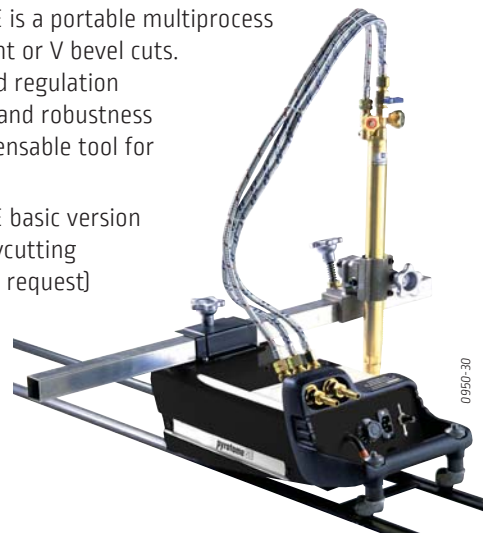
- Straight and with bevel +/- 45° with one oxyfuel torch,
- X and Y bevel when the machine is equipped with two torches and its additional accessories (in option).



PYROTOME SE, the carriage on rails

The PYROTOME SE is a portable multiprocess carriage for straight or V bevel cuts. Its electronic speed regulation (10 to 125 cm/min) and robustness make it the indispensable tool for intensive use.

The PYROTOME SE basic version is equipped for oxycutting (plasma cutting on request)



PYROTOME CNC



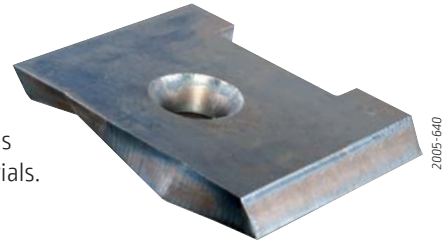
PYROTOME CNC is a small mechanised machine integrating a digital controller for cutting on metal sheets format of 1 000 x 2 000 mm or 1 500 x 3 000 mm. The programming is carried out from a library of standard shapes integrated in the digital controller or from the nesting software (in option). Equipped with one oxycutting torch or one plasma air installation, PYROTOME CNC is simple to implement, versatile, rugged and economical.

Version	1020	
Cutting width (mm)	1 000	
Cutting length (mm)	2 000	
Total width (mm) *	1 400	
Total length (mm) *	2 500	
Total height (mm) *	500	
machine Weight (kg) * Excluding table	85	
Traverse Speed	6 m/min	
Cut capacity / piercing capacity	FLEXCUT 125	40 mm / 20 mm
	OXYCUT G1	80 mm / 30 mm

* Excluding safety zone & cutting table

NERTAJET BEVEL HPI

NERTAJET BEVEL HPI is an efficient tool for all cuts that require particular preparation for welding, or any other applications requiring bevels. It thus makes it possible to make V, Y, X and K bevels in a large range of thicknesses and materials.



2005-640

Precise and robust

- "Machined robot wrist" technology offering:
 - High positioning accuracy: 3 axes are used to ensure the inclination and orientation of the torch.
- High robustness with low sensitivity to shocks:
 - High mechanical conception robustness base on rotation axis,
 - The bottom of the arm is quite far from the plate and tilting parts,
 - Multi-directionnal choc sensor with large clearance.
- Fully controlled by digital control HPC BEVEL EtherCAT.
- EtherCAT motorization with absolute encoders.
- Compatible with NERTAJET HPI 300 & 450.

AC System integrated intelligent database

- Integrated in the numerical control, AC System automatically corrects the paths to compensate the angular and dimensional deviations generated by the plasma cutting process.
- Allows even when the requested chamfer is not known, to obtain a proposal of parameters defined by extrapolation of the existing data,
- The intuitive & user-friendly IHM gives quick and easy access to the database to refine or create new operating points.

Function CDHC (Cutting Digital Height Control)

- Allows control of torch height during cutting phases. It is particularly important for the respect of the dimensions of the parts and the quality of realization of the chamfers.
- Automatically adjusts the torch position to always be at optimal height to generate the best cutting quality.
- Automatically compensates the wear of plasma consumables especially the electrode. Without this compensation, the dimensions of the chamfered parts would derive of several millimeters.

Advanced features NERTAJET HPI

- Cycle Boost and Instant Marking: to increase productivity.
- Hole Master HPI to increase cutting quality.
- Twin Detect for cutting on dished end.

Function TSB (Trajectory Strategy for Bevel)

- Optimized cutting strategy for a excellent dimensional result.
- Optimized learning cycle for accurate acquisition of sheet position.
- Specific torch orientation cycle for multi-pass chamfers for optimum dimensional results.



2005-679

	PLASMATOME / OXYTOME RS or TWIN	CYBERTOME
NERTAJET BEVEL HPI 300 or 450	✓	✓

Type of bevel	V, Y, X and K Dimensional and angular accuracy according to ISO 9013
Rotation axis	+/- 455° 30 rpm/min
Tilt torch	+/- 52° 40 tr/min Allows cutting angles of up to 50°
Z axis slide	250 mm 5 m/min
Options	Tube cutting, cuts on dished end, Z axis slide of 800 mm, mechanical sensor for evolutive chamfering on standard plates

OPTIONS

Pneumatic drill unit

Pneumatic drill system:

This option is a pneumatic drilling mounted on a pneumatic slide equipped with ball bearing rails giving it rigidity and precision. It can be used to produce holes or centering holes.

Main characteristics:

- Capacity diameter for carbon steel: 8 mm,
- Capacity diameter for aluminium: 10 mm,
- Feed force: 350 N,
- Max power: 0.22 kW, - speed: 1100 rpm,
- Maximum stroke: 80 mm,
- Max air flow: less than 6 l/s,
- Standard drill chuck.



2014-223

Numerical drilling unit

Drilling unit can be fitted on cutting machine to combine drilling, thermal cutting and marking in one operation:

- Sheet metal press system,
- Tool length measure system,
- Automatic tool exchanger.



Fully interfaced with the HPC DIGITAL PROCESS System, the management of the drilling unit is simple and user friendly.

Fully automatic management of the drilling unit. Simple and user friendly database of parameters for drilling unit. This database (spindle speed, rotated speed, ...) can be updated by the operator depending on the tool used. Minimum and maximum sheet metal thickness depends on the application and cutting machine.

Material could be drilled: carbon, stainless steel and aluminium.

	Technical characteristic
Drill diameters	up to 30 mm
Tool type	ISO 40
Max. spindle motor power	up to 20 kW
Automatic tool exchanger	up to 30 tools
Machine compatible	OXYTOME / PLASMATOME TWIN HPI CYBERTOME

Tube cutting

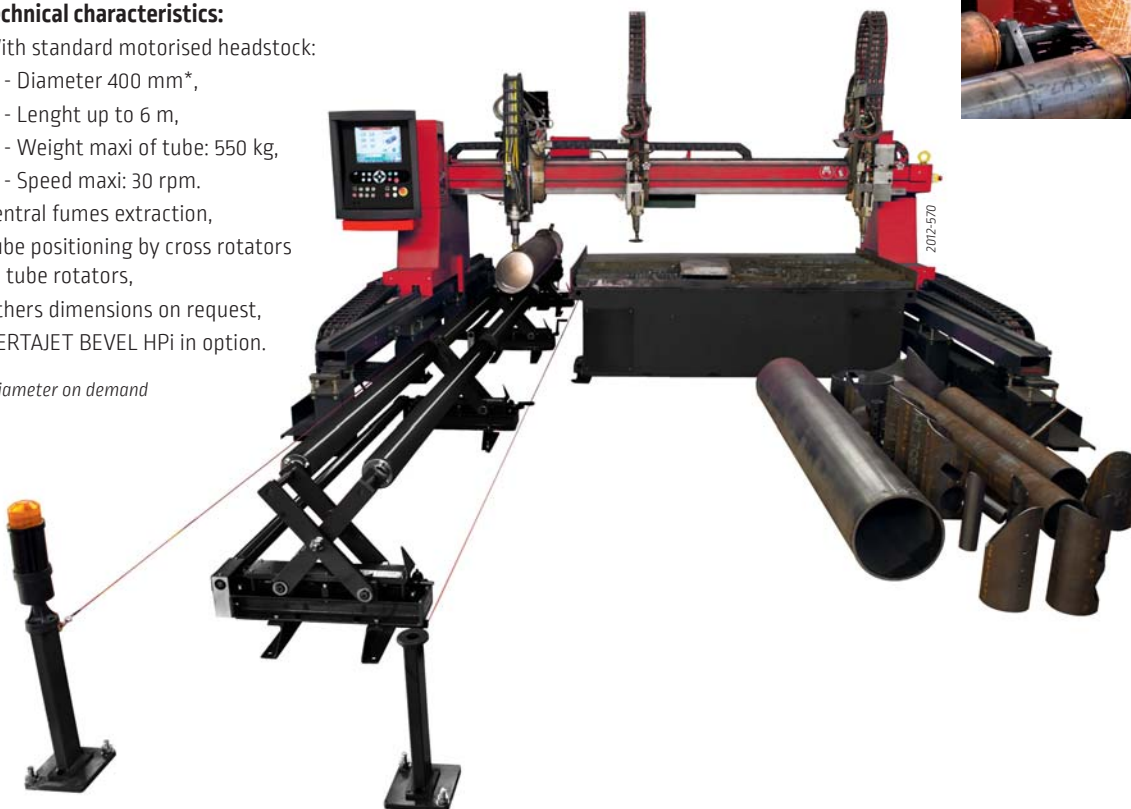
This option has been developed to meet many cutting applications on round tube from small to large diameter. Thanks to its software interfaces, the machine is able to cut different types of geometry on tube: stitching, cod mouth, separation cut, straight or evolutive bevel etc...

The option is composed of a cabinet control interconnected to the HPC DIGITAL PROCESS, of a motorised headstock with fume extraction duct and an adjustable positioning system according to the diameters of tubes. The positioning of the tube offers many advantages including that the cut piece remains in position after cutting thus avoiding potential risk to safety or damage.

Main technical characteristics:

- With standard motorised headstock:
 - Diameter 400 mm*,
 - Length up to 6 m,
 - Weight maxi of tube: 550 kg,
 - Speed maxi: 30 rpm.
- Central fumes extraction,
- Tube positioning by cross rotators or tube rotators,
- Others dimensions on request,
- NERTAJET BEVEL HPI in option.

* Other diameter on demand



2nd numerised transversal axis

Automatic adjustment of the distance between cutting tools done with two CNC axes. This option can be managed automatically with the nesting software. Inside a same program, different distances can be adjusted between the two torches depending the parts sizes to cut.

This option is mainly used with plasma system but can also be adapted with oxy-fuel process. This option is fully managed by a very nice control interface.



OPTIONS

Cooling systems

Electrical cabinet cooler vortex system

Cooling done by vortex effect with air pressurized. It cools the electrical cabinet and limit the introduction of dusts due to the over pressure. Designed to work in hostile environment.



Air cooling system for electrical cabinet

Air Cooling system with heat exchanger reducing drastically the temperature inside the electrical cabinet. Designed to work in countries where temperature reach 50 °C and more.



Operator visual protection

Curtain easy to adjust to protect the operator against the plasma electric arc.



Voltage inverter

This option is developed to protect the CNC or the machine against the fluctuation and hazard on the voltage supply. It can be propose in two version:

- One able to protect the CNC,
- One able to protect the machine & CNC *



* oxyfuel process will be cover but flot the plasma

Cutting table lighting

Lighting of the cutting table with 2 leds projectors place on each side of the machine.



Gas driven single point automatic lubricators

The units are supplied ready-to-use connected to ball bearing transversal carriages and filled with lubricants. Tool-free activation and time-setting allow easy and accurate adjustment of lubrication flow.

Flexible dispense rate from 1 to 12 months.

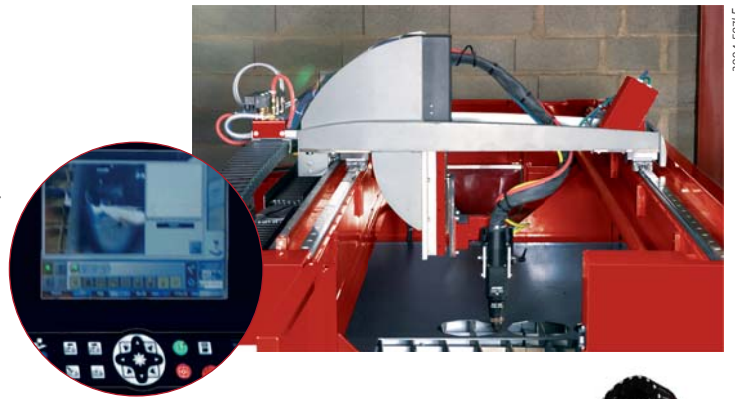
Stoppable or adjustable if required.

It's simplified the maintenance of the machine and increase life time of the ball bearing carriages.

Positioning

Visioproces

A camera is used to display the torch position on a control screen. The monitored area is about 250 mm in diameter and promotes correct positioning before and during cutting. The device also monitors the arc. The operator can control cutting operations and position the torch no matter where the control console is located. The camera is protected by an anti-dazzle device to protect it from the effects of the plasma arc. The operator can choose between a monochrome or colour display.

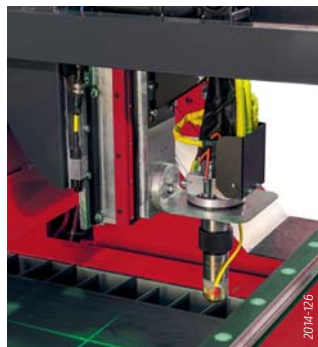


2004-697/E

Positioning

Positioning laser with greencross

Controlled by the interface of the HPC, this tool helps the operator to position the machine to start cutting program or make the alignment of the sheet metal.



2014-126

Laser to detect the position of the plate

This option is a laser for automatically positioning a cutting program according to the position of the sheet. It works following one axis.



2011-019

Markers

Pneumatic marking

For punching and engraving plates. The depth of marking is controlled by varying the compressed air pressure and the speed. Recommended for use on plates thicker than 15 mm.



2007-382



2010-335

Wen marker

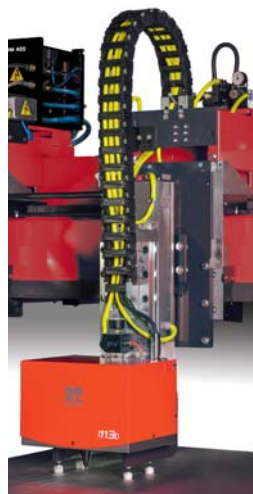
This pneumatic vibrator engraves sheet metal by slightly scoring the surface finish. Well adapted for thin and medium thicknesses.

Micro-percussion marking

It allows a fast and accurate marking. This system can carry out several lines marking with small characters (less than 10 mm). To perform the marking, the micro marker box is automatically positioned above the sheet metal. Then it drives a pen following its 2 axes dedicated to draw characters and mark the sheet with the desired power (marking depth).



2009-173



2014-053

Felt marking

This marker uses a felt tip which has been especially selected for its strength.

It operates by gravity and does not alter the surface finish of the material. It is intended for use on galvanized steels, aluminium, stainless and black prepainted steels, depending on the quality of their surface finish.



1115-01

HPC DIGITAL PROCESS 2

The most intuitive and efficient numerical control on the market.

It fully manages the cutting machine, from the trajectory to the processes.

The ergonomics of the HMI and its large 19" touch screen make it a user-friendly and easy-to-use tool.

In particular, it includes all the important functions suited to the thermal cutting business such as: Cutting recovery menu, parametric shapes, sheet metal alignment, test menus, automatic adjustment of parameters...

The features of HPC 2:

- 50 Parametric Forms,
- Parts directory programmed on external software,
- ISO code editor,
- Scale, rotation, symmetry,
- Choice origin program,
- Management of sheet metal works,
- Sheet metal alignment assistance tool,
- SMART DATA BASE for "intelligent" plasma and flame cutting processes,
- Controls of processes,
- Dynamic visualization of the part and tracking of the trajectory in real time,
- Program recovery menu: forward/backward on trajectory, offset for restart of the off-trajectory cut, zoom,
- Complete setup for machine configuration: Tools, Options, Languages,
- Option: Tube cutting, 2nd digitized transverse axis, NERTAJET BEVEL HPI, digital drilling, automatic indexing, visio-process, laser positioning or measurement...
- 17 Languages available.



Hardware & Communication:

- Robust industrial computer,
- SSD hard drive with large capacity,
- Windows 7,
- Real-time trajectory management system,
- ETERCAT bus management,
- 19" industrial touch screen,
- USB, NETWORK & TELESERVICE.



How works the automatic adjustment of processes on HPC DIGITAL PROCESS ?

Phase 1 :

After selecting the program, the operator chooses the material to be cut.



Phase 2 :

HPC provides one or more solutions adapted to the application.



Phase 3 :

After accepting the proposal, the setting of each parameter is done automatically.



Phase 4 :

When the tool (plasma torch or oxyfuel torch) is equipped with consumables recommended, the machine is ready to cut.



You have chosen to use the data base of HPC or to create your own data base.

JOB function gives you the possibility of attaching this process management to a program loaded and selected in the numerical controller.

This combination can be stored by the JOB function and then used by any operator.



Advanced or Essential control panel:

The Advanced swivel console is equipped with a joystick, ergonomic manual controls and a maintenance mode to simplify the use of the machine. It can be found in particular on the OXYTOME 2 and PLASMATOME 2 range. Also available as a fixed console version with ALPHATOME 2.

The Essential swivel Desk is fully touch-sensitive and is equipped with a maintenance mode that simplifies the use of the machine. It is found in particular on the EUROTOME 2 range. Also available in fixed console with OPTITOME 2.

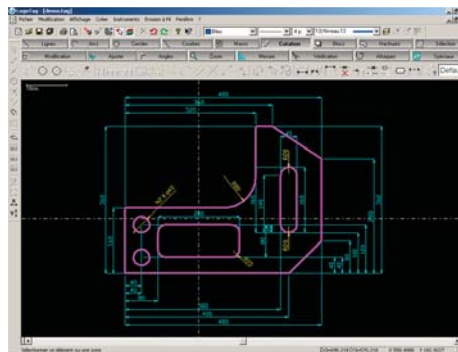


2016-321

Software MAGICNEST JUNIOR for HPC

Module design and programming installed on digital HPC command to:

- Import all type of program (dxf, dwg, dstv...),
- create customized drawing,
- Use a database of standards forms complementary than the HPC propose in standard,
- Customize its own standard forms (optional),
- create a machine program,
- Apply technology for chamfering (optional).



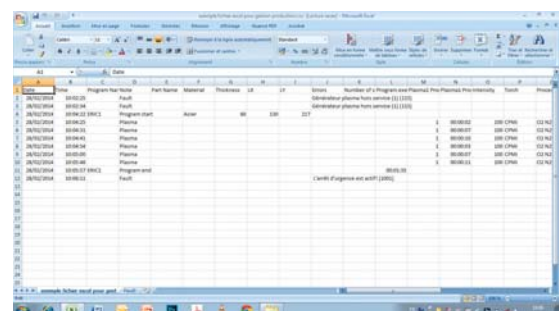
Production monitoring on HPC

Module dedicated for production monitoring. The HPC saves all the actions done during production. Those files can be edited with Excel or can be automatically analyzed by CAD/CAM software.

Those files data can be saved on a USB key or directly on a customer directory if the CNC is connected on his network.

Data available:

- Number of cutting, - time of cutting,
- Material and process chosen,
- CNC default,
- Failed cut part...



CUTTING SOFTWARE

A well adapted computerized 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...).

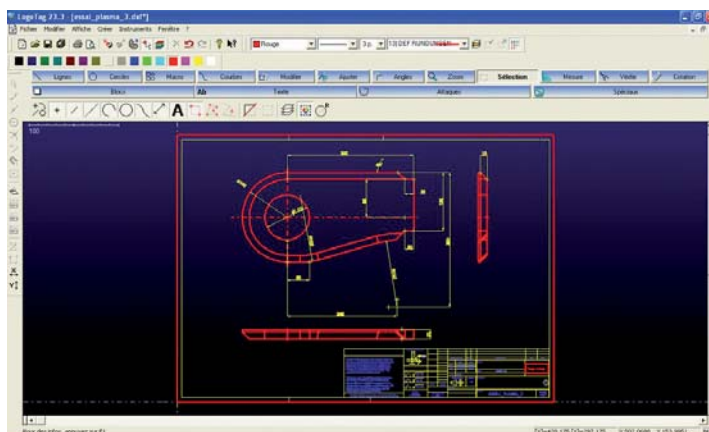


MAGICNEST Software range

Four products that run with the latest Windows operating systems to enable to prepare and control thermal cutting production. The software is designed to be intuitive, simple and user-friendly, while offering powerful and effective functions.

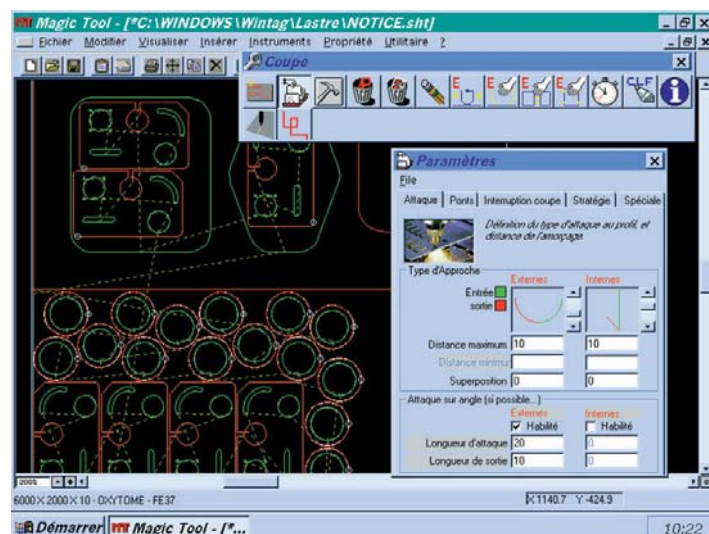
MAGICNEST JUNIOR

Principally designed for small sized cutting machines, MAGICNEST JUNIOR is an intuitive and easy-to-use CAD software that integrates 2D designing tools. Its cutting technology, simulation modules complement the product for the fuss-free control of the machine. It can also read and modify all types of drawing - DXF, DWG, DSTV etc. The serial transmission module WINRS completes the functionalities of the product.



MAGICNEST 01 (manual nesting)

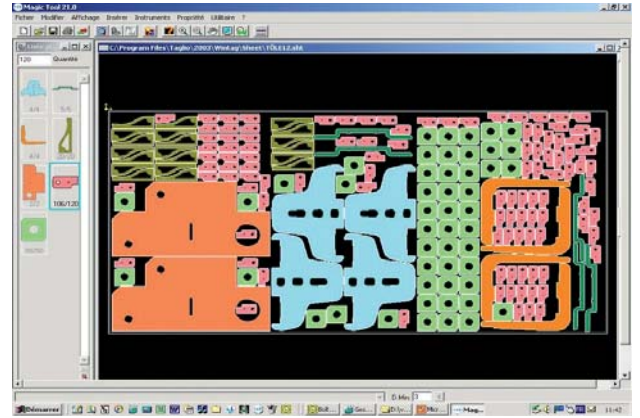
MAGICNEST 01 includes MAGICNEST JUNIOR and a nesting module that allows to manage quotes, orders, sheet stock and piece nesting. Its database makes it possible to obtain accurate quotes in a very short time, offer the manual cutting strategy, save know-how and generate machine programs. Its many tools - multiple-torch cutting, junctions, bridges, will enable you to fully control production and retain simplicity and intuitiveness of use.



MAGICNEST 10 (automatic nesting)

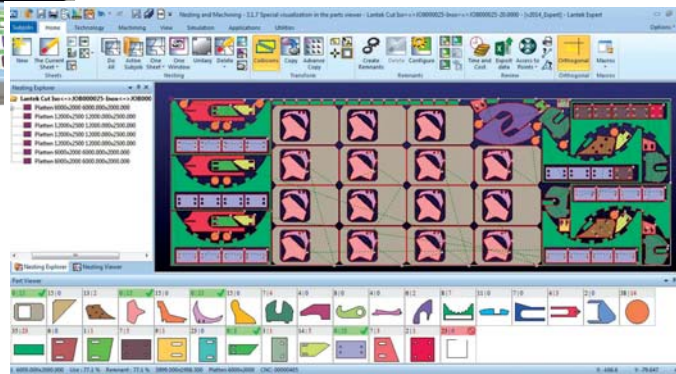
This is the top end version of MAGICNEST 01 for thermal cutting machine. MAGICNEST 10 ensure automatically the following operations:

- Nesting pieces using the best strategy for maximising material savings,
- IT application of the cutting technology, multiple-torch cutting, - cutting entry/exit, bridges, micro-junctions, common cutting, scrap recovery,
- Tool path and machine program.



MAGICNEST EXPERT PLUS

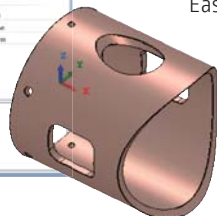
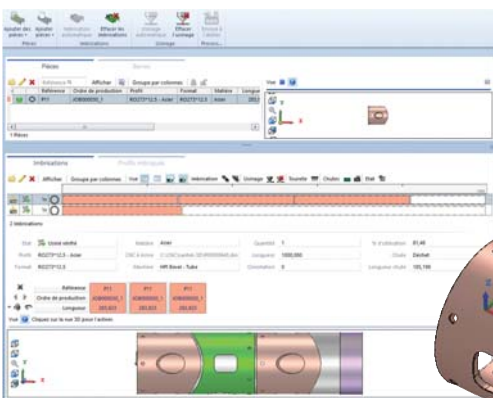
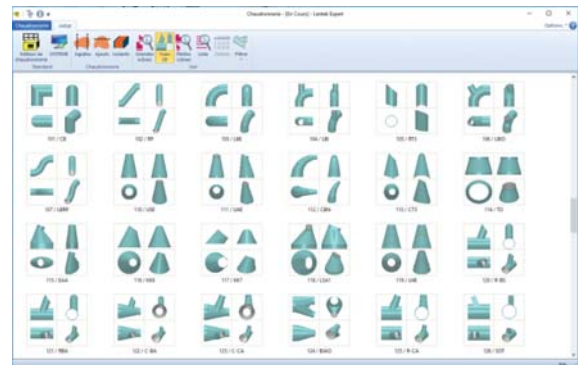
This is the best and complete version for machine with option bevel, indexing or piercing. Drawing and nesting functions are similar to MAGICNEST 10. With bevel option, MAGICNEST EXPERT PLUS control open-ended bevelling units that use plasma technology. It may be used for all types of bevel - V, X and K - in multiple pass processes. Possibility to include duct module and special marking (SIC marking or inkjet) in option.



DUCT

Duct is a powerful module of MAGICNEST Expert Plus for calculating DUCT figures. Duct is designed in such a way that the user only has to follow the simple steps prompted by the system.

User simply has to select the figure to be developed, enter the required dimensions, and the figure will automatically be developed.



FLEX 3D

Flex3d Tubes is a member of the MAGICNEST Expert Plus family of products for the design and cutting of tubes.

Easy, flexible design Flex3D Tubes gives a real vision of the result on the screen.

It displays the exact tube and simulates in 3D.

Flex3D Tubes allows 3D design in an intuitive and simple way:

It gives the result that the user will obtain when cutting the profile on the machine.

EXTRACTION TABLES

Extraction tables for dry cutting

The extraction tables with air extraction offers unrivalled efficiency in terms of fume extraction thanks to its unique system of transverse extraction ducts.

Robustly designed in one-piece or modular form, the table is divided over its length into multiple sections, extraction taking place across the full width of the table on the module in operation only.

Mechanical or pneumatic flaps actuated by the displacement of the machine provide suction under the sheet at the place of cutting only.

This principle of operation guarantees optimum extraction, irrespective of the size of the sheet being cut, while maintaining a modest extraction air-flow rate.

Technical characteristics:

- Transverse duct extraction system,
- Division into 0.75 meter sections over the length of the table,
- Removable slag boxes,
- Removable workpiece supporting frame with flat irons (section 100 x 6 mm) and wire mesh grid (50 x 50 x 5 mm),
- Maximum capacity: sheet up to 300 mm thick.



Variable water level tables

Variable water level tables are specifically intended for immersed plasma cutting.

This procedure limits pollution by solid or gaseous matter and gives protection against audible and visual stress.

It improves accuracy of cutting while limiting distortions caused by heating of the workpiece.

Technical characteristics:

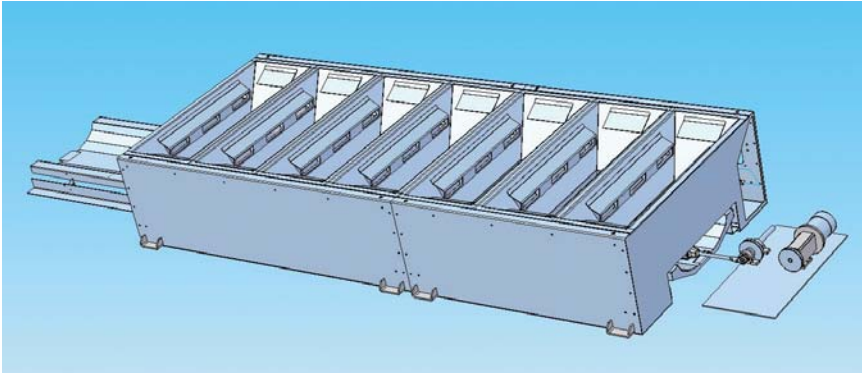
- Modular construction in lengths of 1.5, 1.75 and 2 m,
- Width: on request,
- Pivoting workpiece support frame.



Extraction tables for dry cutting

Table with slag automatic outfeed

The table has at its base a vibrating belt automatically recovering slag and possibly very small cut pieces. The automatic cleaning system significantly extends the maintenance table maximizing cutting time.



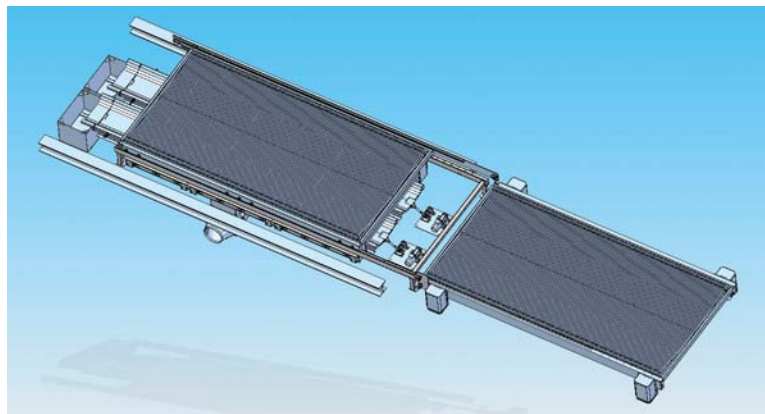
Technical characteristics:

- Transverse duct extraction system, monobloc or modular design,
- Division into 0,6 meter sections over the length of the table,
- Vibrating system recuperator of slag,
- Removable workpiece supporting frame with flat irons (section 150 x 6 mm),
- Maximum capacity: sheet up to 120 mm thick. (more on request),
- Length on request
- Standard width : 1.5 - 2 - 2.5 m.

Palletisable table

The palletisation system allows loading and unloading of sheets to cut out of the cutting area.

The preparation of sheets to cut is performed in masked time without risks for the operator.



Technical characteristics:

- Cut area design : monobloc or modular,
- Division into 0.6 meter sections,
- Standard length : 3 m (more on request),
- Standard width : 1.5 - 2 - 2.5 m,
- Maximum capacity : 1900 kg/m²,
- Mini height : 1 000 mm (installation without civil works),
- 2 carriages support sheet (electrical movement) with flat irons section 150 x 6 mm,
- 1 hydraulic elevator support for carriages palletisation,
- Option : slag automatic outfeed.