# WORKING AREA UP TO 7000x2000 mm

POWER UP TO







The LME laser system family combines the ability to operate at the highest levels of quality with high productivity and low operating costs. The systems are designed to meet the growing demand by small-medium structural metalwork companies for **space-saving machines** but with excellent cutting quality and precision.

LME fulfils this request while maintaining the **linear motor** layout with the "all in one" feature of the bigger Plus models, the same cutting head with autofocus and process sensors and the possibility of designing and programming on board the machine in order to make it as versatile as possible.

The fluid dynamics of the cutting head, **designed and produced in-house** by Cutlite Penta, results in high pressure cuts with a lower nitrogen consumption compared to the competition.

This results in a considerable saving in manufacturing costs. All this makes the LME laser system one of the most efficient and reliable on the market.

#### Mechanical design

The base is an electro-welded steel frame which is then machined to accommodate the absolute high-precision guides and linear motors.

#### Gantry

The gantry frame is made up of a light, sturdy steel beam that is stiff enough to compensate for thermal expansion with no deformation. This type of configuration provides remarkable dynamic performance.

#### Offcut recovery

The work surface area is divided into modular sections each approximately

500 mm long, which direct the offcuts to the corresponding collection systems located beneath the frame. Each section is equipped with two suction inlets (these are switched automatically depending on the cutting path).

#### Work surface

The work surface consists of a replaceable support grille. The same laser machine can also be used to produce the grille using a pre-installed program in the numerical control. The work grille is adaptable and can be spaced as required for improved processing material handling.

#### Laser source

Fiber laser sources of up to 15000 W provide a great deal of versatility and make it possible to cut a multiplicity of metal types. Developed as a single system, it can be paired with a wide variety of optical fiber diameters. High efficiency, excellent beam quality and low power consumption are all hallmarks of the source.

The source is housed in a NEMA 12 cabinet which is conditioned and sealed so that it can operate even in the harshest of environments. The high degree of reliability of these sources also ensures particularly low maintenance costs.

# TECHNICAL SPECIFICATIONS

LME MODEL	WORKING AREA
1010	1000x1000mm
1020	1000x2000mm
1515	1500x1500mm
3015	3000x1500mm
4015	4000x1500mm
4020	4000x2000mm
6020	6000x2000mm
6025	6000x2500mm
7020	7000x2000mm

LASER POWER	
2.000 W	
3.000 W	
4.000 W	
6.000 W	
8.000 W	
12.000 W	
15.000 W	

# Z-AXIS

#### LINEAR MOTORS

One of CUTLITE PENTA'S strengths is that it can, in certain circumstances, meet customer requirements by **increasing the dimensions** of the system as required.



### **STRENGTHS**

- Small and compact its footprint on the floor is little larger than its working area.
- Concentrated technology: linear motors, process sensors and autofocus head.
- All in one electrical panels, laser source, control
  panel all integrated, which guarantees high
  speed and excellent accuracy in the cutting
  process.
- Quick and easy installation, in two days the machine is ready to start manufacturing for the customer.
- CAD/CAM machine integration software

The new LME fiber laser cutting system joins the Cutlite Penta family - it was created to meet the needs of the fashion accessory sector, which has long been calling for small machines with excellent speed and accuracy. This is why the 3015 version makes it an entry-level machine for customers who are currently looking for used machines with outdated technology.



### **HARDWARE SOLUTIONS**



#### **AUTOMATIC NOZZLE REPLACEMENT**

Automatic nozzle replacement is an option whereby the machine automatically changes the cutting head nozzle with no need for operator involvement.



#### CAMERA

A position camera that enables remote monitoring and viewing of machine operation.



#### TWO-LEVEL WORKTABLE CHANGEOVER

Two-level worktable changeover allows the table to be changed in approximately 15 seconds, almost completely masking loading and unloading times – the fiber plus system is the fastest on the market today.



#### MANUAL EXTRACTION TABLE

Manual extraction bench for loading/ unloading materials to be processed.



TRATOR CLASSES

## **SOLUTION**

# 2D SOFTWARE SYSTEMS was the object of the control o

- **SMART MANAGER 6**
- SMART COMPOSER