It's all talk - laser features explained

LS100-30W C02 Laser

GT100 Yag Laser

Fact: lasers are the easiest engraving and marking systems to use. There is no mechanical skill required to understand cutter geometry and material resistance. Gravograph have been selling lasers for over 12 years, here they provide us with an overview of all the main laser functions:

Automatic focus (auto-focus)
The table raises itself automatically until a sensor detects the part to be lasered without any manual intervention. This function is driven from the software and can be deactivated.

Motorised Z-axis table (up / down movement)
This function enables the auto-focus function and is also extremely useful when cutting through thick material in several passes (the table will be automatically raised between each pass to optimise cut quality).

Red dot pointer
LED light that can be used to visually simulate the lasering or to locate the area to laser.

Automated moveable home position
For items that are not easily positioned in the machine, the red dot pointer can be used to define the position of the area to laser. This is achieved using the machine joystick, making it fast, easy and precise. The XY coordinates are displayed on the machine LCD screen and can be entered in the software.

Air assist
Programmable through the software, air assist will blow air directly onto the item at the point of lasering. It will improve finished quality by reducing heat at the point of lasering as well as blowing away fumes and particles.

Internal compressor for air assist
Compressors required for air assist are fitted into Gravograph lasers as opposed to being external devices. An integral part of the machine, they are extremely quiet, save space and are driven from the software.

Head mounted fume extraction
Fumes are extracted at source by the head mounted fume extractor. Residual fumes are extracted at the back of the cabinet. Optimal fume extraction is essential as fumes tend to negatively affect lasering quality and reduce optics lifespan.

Beam Expander
Although concealed inside the machine, the beam expander is a key component of Gravograph's laser systems. This clever optical device will channel the laser beam into a parallel light thus ensuring constant power over the whole table area.

Honeycomb table
Will make cutting out easier and neater by allowing the laser beam to go through the honeycomb grid.

Electronic cylindrical attachment
Used to mark cylindrical items held between two cones for optimal precision. Can be tilted and fitted with concentric chuck.

Stand alone fume extraction system

Those units come with small activated carbon filters (typically around 10L), basic filters and average extraction capacity. Suitable for low fume applications such as anodised aluminium marking. For lasering materials generating high volumes of fumes such as wood, acrylic, rubber, etc, a more powerful system is required.

Stand integrated power fume extraction system

Designed to be used as machine stands, those units are fitted with large activated carbon filters (40L and above) and also various high capacity filters. Extremely effective for all applications, they are also economical to run.

Gravostyle 5 software

Software purposely designed for laser engraving, with a host of unique features making lasering both intuitive and productive. Can also be used to run Gravograph's engraving machines.

Laser drivers for external software

Third party graphic software such as CorelDRAW, Photoshop or AutoCAD can be run using Gravograph's unique laser interface supplied as standard with all lasers.

Contact Gravograph for further information or an on-site demonstration of laser systems.