

The Unexpected Perfection



Automatic Programming for the cutting of very high quality holes



Made in collaboration with **THERMAL DYNAMICS**



Software line





The cutting quality of the holes of a laser with the speed and convenience of the plasma: this is perfection, this is Perfect Hole

One of the most complex problems that the plasma cutting technology has to face is related to the hole quality: despite the obvious advantages in terms of cutting speed and economy of management costs, the plasma has never been able to meet the needs of an absolutely regular drilling, in particular needed for mechanical clutches.

Some technologies have been developed to solve this deficit but they ask for significant investments in special equipment in plasma, NC and dedicated software.

From now, all this is past, thanks to Perfect Hole.

From the collaboration between the best, only a great software could have born

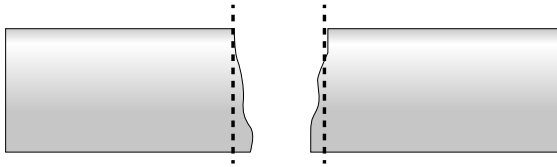
Perfect Hole is the exclusive result of the partnership between Libellula and Thermal Dynamics, a leading manufacturer of plasma cutting systems.

Only the encounter between know-how and technological capabilities of two companies, at the highest level in their respective areas of competence, could enable the development of software by stunning features as Perfect Hole: a cutting plasma technology, innovative but simple to use, which allows to obtain perfect round holes saving time and money, his utilization needs just a Thermal Dynamics plasma generator associated with any numerical control.

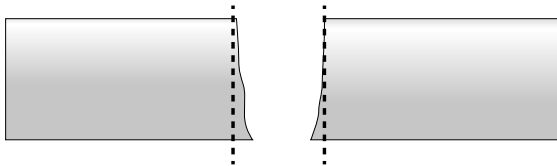


- ✔ It allows to cut of very **high quality holes**, ready for bolting, with the plasma system
- ✔ **It saves time and money**
- ✔ It ensures **ease of use and intelligent software architecture** for an **automatic** and **optimized** cut of holes
- ✔ It cuts out **secondary processes** and **increases productivity**
- ✔ Each piece is **immediately usable** for finishing or assembly right after the cutting process
- ✔ It is the ideal process to cut holes in steel with a diameter and thickness ratio of 1: 1 on the material thickness from 3 to 25 mm

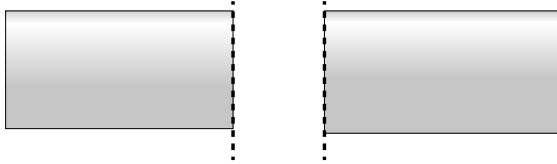
Traditional plasma



HD without Perfect Hole



HD with Perfect Hole



IT ENSURES THE PROMPT PERFECT CUT OF HOLES, ELIMINATING SECONDARY PROCESSES AND INCREASING PRODUCTIVITY



IT IS EASY TO USE AND PROGRAMMING THANKS TO THE EXCLUSIVE TECHNOLOGY "ONE-CLICK" OF LIBELLULA



Technical features

Perfect Hole automatically adjusts the following parameters depending on the material type and thickness and on the hole size:

- ✔ Process gas type
- ✔ Power
- ✔ Drilling methodology
- ✔ Tool range compensation
- ✔ Lead-in and lead-out technique
- ✔ Cutting speed
- ✔ Pre-stop cutting
- ✔ Torch height

Features which must meet the cutting machine in order to obtain quality holes with Perfect Hole.

The height control operated by NC must perform in a dynamic way the instructions sent from the program relating to the heights for the execution of the hole: piercing height, elevation, position to a cutting height that is different from the normal cutting length for the given thickness.

The control must be able to perform different cutting speed along the programmed path to manage the program information: speed/acceleration on the lead-in, cutting speed, speed/deceleration on the lead-out.

You may be required to vary some of these parameters as a function of the machine dynamics in order to optimize the result.



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