

THE PLASMA PROJECT

OUR HISTORY

Our history starts in 1994 with some small italian customers like

- **OPCM** cutting table
- **CRM** punching and cutting combined
- **WHITNEY** punching and cutting combined

and is going on with these

- **PROMOTEC** (I) plasma, oxy, laser cutting table
- **CRM** (I) plasma cutting table
- **Flli. Farina** (I) plasma cutting table
- **IMAL** (I) plasma cutting table
- **BAYKAL** (T) plasma cutting table

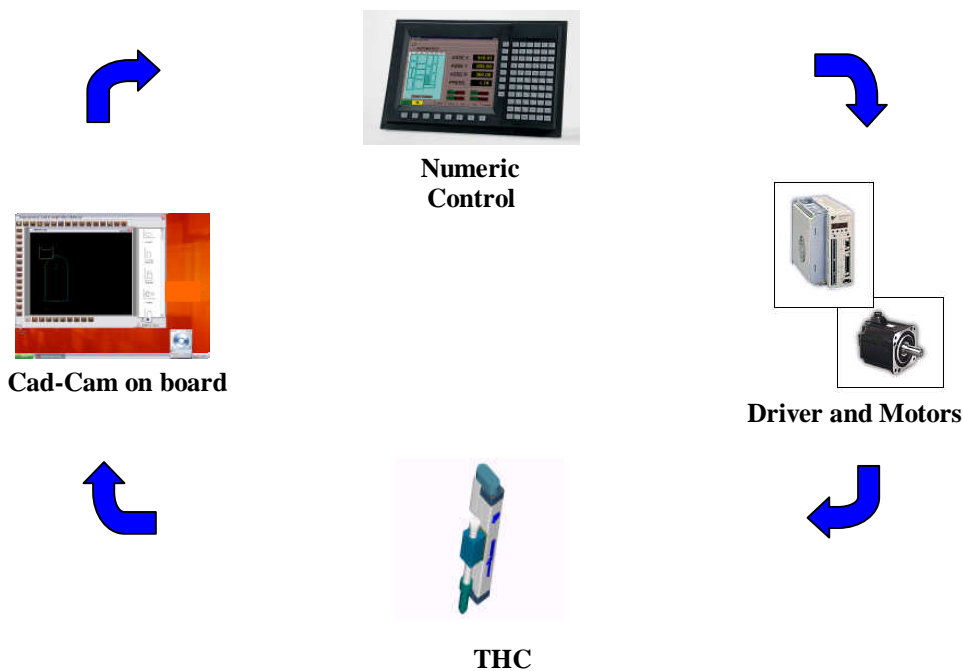
We sell 200 CN for year in this field.



OUR EXPERIENCE

Our experience lets us to help our customers to find solution for his problems. We have reached a good knowledge of the problems of a good cut and often we work together also in problem regarding motors and drive, user interface, THC (Torch Height Control) integrated or not in the CN.

As shown in this schema, we can give you a lot of solution not only the CN.



A SIMPLE OVERVIEW OF OUR PRODUCTS

Our philosophy consists in dividing the CN in two units:

- **The User Interface Unit called *processor A***

It is normally a personal computer for industrial environment like PC12 or CN16, or a remote unit that must be connected to a office PC.



- **PC12:** it's a real PC with WIN XP, serial ports, USB, Ethernet, Har Disk,

- **CN16:** a compact and cheap solution with a small PC silicon disk, MS-dos, Floppy disk, serial port, Ethernet port



- **TN18** Remote unit for simple machine.



- **Numerical Control with integrated PLC called *processore B***

There are three solutions that are equal for software and performances.

- **Syncro Rack:** It's a modular system from 2 to 12 axis, and up to 96 inp and 96 out. We can insert every solution for every needs. The Mechatrolink bus is available only in this solution.



- **UR10:** medium Unit from 2 to 6 axis and up to 72 I/O Additional I/O can be added via Can-Open bus. It has an additional Ethernet port built in.



- **UR050:** The small unit. With 2 or 3 axis, up to 32 integrated I/O, 72 local I/O, an additional Can-Bus.



These three units can be exchanged and connected to every one of the A units.

DRIVES AND MOTORS

We work with all trade-marks for driver and motors, because our units loads drive with reference speed signal and reads the position by encoder inputs.

We have also developed a digital connection with Yaskawa drives via Mechatrolink standard.

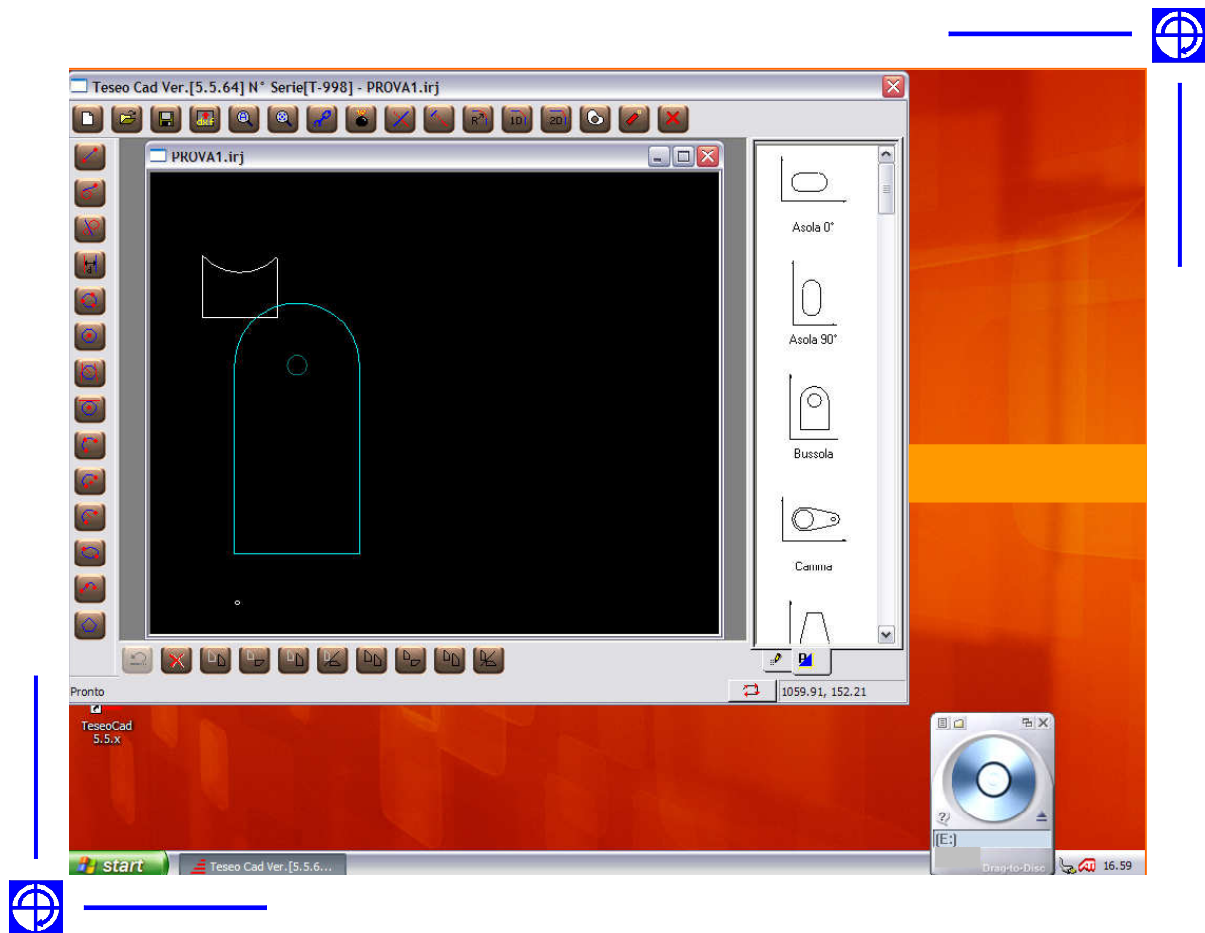
This solution is available only for the Syncro Rack Unit.

CAD-CAM

The same philosophy is used for CAD-CAM. The most important Cad-Cam software house have a post-processor for our units.

With PC12 our customers can install on-board every programs the user needs.

But we have also developed small Cad-Cam solution for simple and cheap solutions.



THC

One of the most important question about the good quality of cut, is the Torch Height Controll (THC). Normally it means that the CN has a strong connection with the plasma generator and with the torch axis.

We have developed different solutions for our customers.

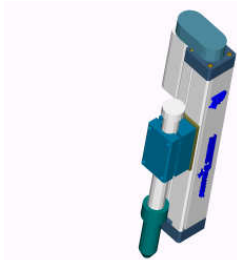
- THC and torch group made directly by our customers.

Normally in this case the CN can control only the current of cut with digital signal and can regulates the position of cut only in the corner.

- Torch group made by customer and THC integrated in the CN.

In this case our CN reads directly from the generator the arc tensions and move the torch axis as a normal third axis.

- Torch group integrated with clever electronic boards.



This is the last development in progress for a big company that produce plasma generator.

The goal of this project is to have a unit that can work with any type of controls



- Gas Consolle integrated in our software. See the relative document.

- A lot of different type of touching the sheet, with proximty, with ohmic contact, with mechanic contact.

- Integrated logic for the safety of the torch.



We can stop the cut without exiting from the line of cut, restart from the point of break.

But also we have a retrace function that can help to redo backward the last cut until the start of cut.

