

CutExpert

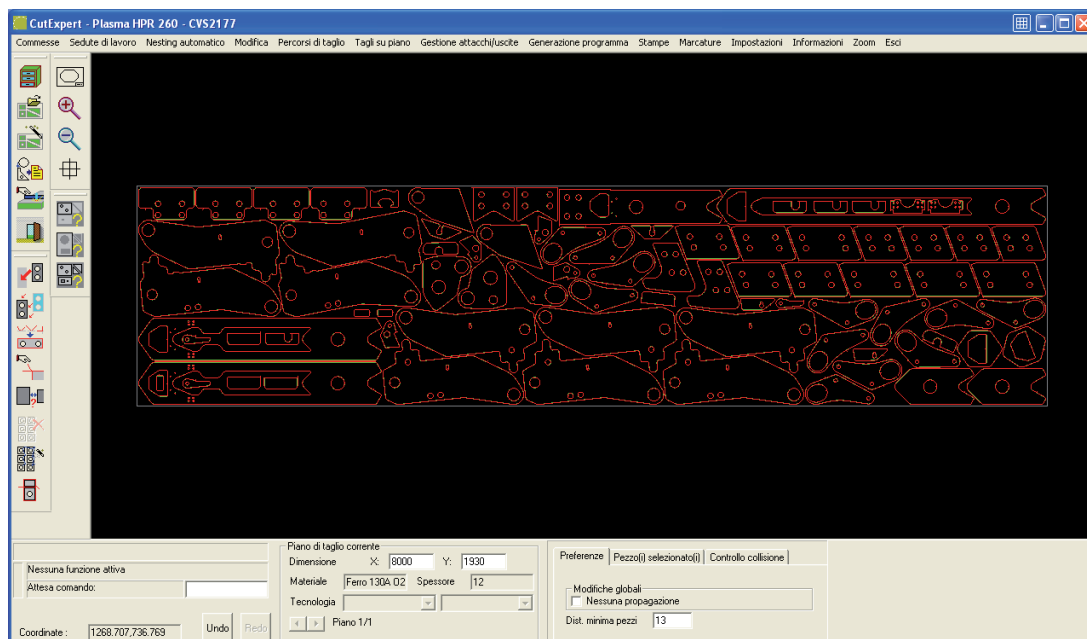
EUROSOFT



Automatic nesting module

The nesting module that grants for some excellent results and a certain saving of raw material.

Automatic nesting environment, perfectly integrated with the order management



An ideal nesting

The saving of raw material is a need that all the companies must take into consideration.

The material costs strongly affect the finished product and also strongly influence the profitability of your company.

The most spread opinion in the world of cutting is that to save sheet it is necessary to use a lot of skill and that the automatic systems are not as performing as a skilled CAM operator.

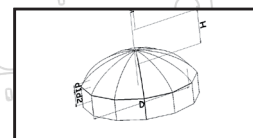
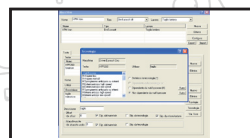
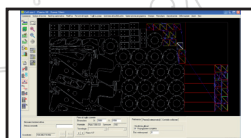
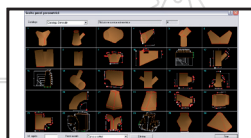
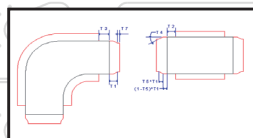
A part of this statement is certainly true, yet some recent developments of the computers are making possible some algorithmic approaches of the type brute force that make a massive number of attempts and chose the objectively best; the computer power average doubles every 3 years and the situation is then evolving favorably towards the automatic programs of nesting.

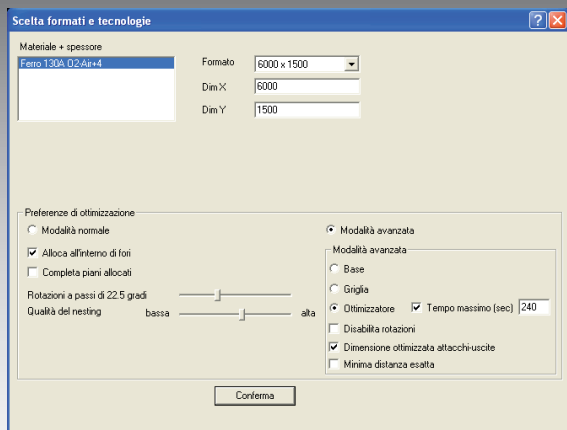
From another point of view, special production needs can impose to make some manual modifications to a nesting, or wrongly delete some pieces entered in an order; the opportunity to manually

intervene on a nesting must be preserved.

In a mirroring way it is important that the nesting system permits to go on in an automatic way a placing that was manually started, so making it possible to use then the "manual" strategies where they are really required.

In order to get the outmost advantages from the automatic placing, the system must permit to mix in the same lot of nesting pieces of different orders and supply all the necessary tools to manage this matter (in which nesting was programmed the piece xx of the customer yy ?); by mixing more than one order the system must in fact operate with a bigger variety of pieces and this permit to obtain the best advantages in terms of scarps.





The powerful options for "nestings" presented in a very intuitive way

Eurosoft solution to the nesting problem

The proposal by Eurosoft for the nesting includes an automatic/manual environment for the placing with the following features:

Automatic/manual placing graphical environment integrated with the cutting technology order management : it is not necessary to enter/exit from different environments and it is possible to intervene on the position of the pieces also when the sheets have been totally defined in terms of technology.

Undo redo-multi-level: along with the opportunity to use the automatic and manual environment in an absolutely free way and without any pre-built schemas it permits to the operator to operate in a fast way and go back on his own steps in case he wants to change of strategy.

Integrated check of the quantities of pieces to be made: the system always keeps the consistency between the pieces required and the sheets made so really preventing that some errors relevant to the quantities during the placing are made.

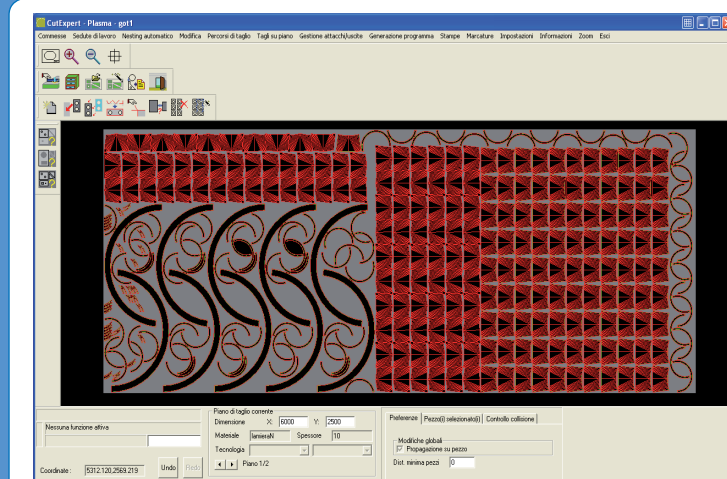
Incrementing nesting and scrap management: the automatic placing can be launched on nesting already made (independently on the matter they were made in an automatic or manual way) this makes it possible to manage in a rational way also the scraps that can be re-used.

On a market where it is necessary to combine rapidity and quality, CutExpert is the faithful ally to win any kind of challenge.

Function of archiving of nesting/scraps for the following uses.

Technical features of the system for the automatic placing

- Exact nesting: the system keeps in an exact way the minimal distance between the pieces, very useful in case of common cutting
- Option to carry out very regular nesting in case of pieces of (almost) rectangular last
- Exceptional performances in terms of time of elaboration: in standard modality the system can arrange the pieces in 100 sheets taking some time equal to more or less one minute
- Optimizer: the system makes an extremely big number of attempts to exploit the sheet in the best possible way; this is made possible by the extreme rapidity with which each attempt is made by the system
- Possibility to declare a maximum nesting elaboration time
- Possibility to launch in the batch modality the nesting (the operator can go on working while the nesting is running)
- Rotations admitted to be defined by the user
- Possibility to block the piece rotation (laminated materials)
- Possibility to fill up sheets with non rectangular sizes (or with areas in which pieces cannot be entered)
- Possibility to execute nesting on sheets with very large dimensions
- Possibility to declare some filling standard pieces: the system will use these pieces when the nesting is over to decrease the scrap percentage
- Possibility to arrange some pieces inside others in a completely automatic way
- Management of the sheet trim dimension with a different value from the minimum distance between the pieces.
- Possibility to respect in an exact way the minimal distance between the pieces also regards connections and exits (that in this case are entered before the nesting) or to automatically enter connections and exits of sizes equal to the half of the minimal distance between the pieces (so getting to more regular results).



An example of nesting calculated in a totally automatic way

Decrease the material waste with the new nesting of CutExpert !!!

Authorized dealer

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