Libellula

Libellula[CUT]
Programming software for laser cutting machines, plasma, oxy-cut, water jet
Libellula[CUT] is a system of nesting and programming for every kind of cutting machines. It is equipped with algorithms for optimize all kind of cutting technology.

**LASER CUTTING MACHINES**

Libellula[CUT] offers the automatic management of programming for every kind of laser machine, together with the perfect nesting efficiency. All the necessary algorithms for working with assisted or not assisted machines are included, as well as machines equipped with automatic load/unload systems, pallets changing, cells and also machines connected to FMS systems: for each of these situations Libellula[CUT] offers the best performance on programming.

**PLASMA and OXY CUTTING MACHINES**

The efficiency of nesting is also very important for plasma and oxy cutting machines. In particular the software includes all the algorithms for multi-torch machines with manual and also automatic packaging.

Libellula[CUT] is able to manage every kind of bevel cut (single, double and triple) full automatically and it allows to optimize the cutting paths in order to minimize the cost of consumable components that, in these kind of technologies, have an important factor.

**WATER-JET CUTTING MACHINES**

Libellula[CUT] provides with necessary algorithms for profiles cutting with water-jet machines, regarding the tool trajectory, cutting speed and piercing mode.

The managing of pumps parameters is totally automatized through experience tables.

Libellula[CUT] can be interfaced with all kind of machines. Nowadays the different cutting machines already interfaced are more than 600.

600+
Maximum efficiency.
Libellula[CUT] takes into consideration specific technologies during each step of programming process, from the project of the particular to the creation of NC code, going through the nesting definition and cutting paths.

Minimum scrap.
The Libellula[CUT] nesting algorithm optimizes the material use, minimizing the scrap.

Time reduction.
Libellula[CUT] allows a relevant time-saving thanks to his totally automatic system.
With OneClick [concept] it is easy to produce the best result in the desired cutting technology, in a completely automatic way.

Maximum simplicity.
The use of the Libellula nesting is very easy; it is not requested any parameters selected by the user in order to obtain the best result.

Thanks to the Libellula[ISA] (Intelligent Shape Analyser) the optimal parameters for nesting positioning of parts are automatically calculated.
Learning time reduction.
Libellula[CUT] owns an icon interface structured as a real language: the ideograms representing the activities have a symbolism studied to explain the meaning, also concerning the more complex and less used process.

Import of external file.
With only one click it is possible to import more file, in format DXF™ and DWG™ and make them immediately usable for nesting.

Machine performance time reduction.
Libellula[CUT] optimizes the tool paths for all different cutting technologies (multi-torch for oxy-cut, common cut, low/high head for laser, etc.). Moreover, the software assures the cutting quality using the specific tables and parameters for every technology: lead-in, speed, laser power, amperage for plasma, etc.

Programming time reduction.
With OneClick[concept] it is easy to produce the best technological cutting result in a completely automatic way.
Optimization

An optimized organization.
The same system can manage all the machines in the workshop and it is easy to program a different machine, beginning from an existent program. Moreover, with the others programs of Libellula Univers, it is possible to apply the same philosophy also to a different machines, as punching, folding press and robot.

Safe handling machine.
Libellula[CUT] provides with all the necessary algorithms to guarantee no collision between machine and cutted sheet or protected zone due to the presence of grabs or others mechanic elements. A realistic simulation of the machine processing allows an additional check by the user.

Minimize the cost of consumable components.
Libellula[CUT] provides for the unification of piercings where possible, together with the chaining by means of bridge cutting or chain cutting of parts, as well as cutting of common sides.

Managing of load/unload systems.
Libellula[CUT] automates:
- the managing of cells and automatic warehouses
- the handling of grip tools of any shape and dimension for parts or scraps unload
- the control of suction caps
- the control of magnets and forks for pallets unload.

Easy life on workshop!
Libellula[CUT] allows to optimize the nesting, reducing the management of reusable remnants. It also allows the automatic memorization of the remnants, the labelling and the correct management of his location. Libellula[CUT] consents to destroy automatically the scrap in order to get smaller dimensions of the remnants.
Saving material.
The nesting algorithm of Libellula[CUT] allows to save a lot of scrap.

The use of Libellula nesting is very easy and doesn’t need many settings to get the best result, thanks to Libellula[ISA] (Intelligent Shape Analyser) that automatically calculates the correct parameters for any parts that must be nested.

The Libellula nesting can work with standard sheets stocked in the warehouse and/or with scraps obtained from previous processing.

Without Libellula[ISA]
Scrap percentage: 31.751%

With Libellula[ISA]
Scrap percentage: 22.286%
Accurate and complete report

*Always sharable, in whatever format*

Libellula[CUT] is provided with a modern and powerful engine for report editing, that is able, in every situation, to produce all the necessary informations, equipped, if needed, with bar code, to the production department.

Moreover, an output is available on PDF or Excel format, to create a document sharing through computer network.

An open system

*A geometrically and operationally open system*

**Geometrically.**
Libellula[CUT] imports geometric parts from any CAD systems and optimizes automatically the profiles for the sheet processing environment.

Libellula[CUT] exports geometric parts to these formats.

**Operationally.**
Libellula[CUT] is equipped with an interface module for systems of production management and ERP systems, through RP Bridge software.

RPBridge is a service provider for information transfer, studied and dedicated specially to the connection of CAM software toward ERP or MRP systems (or any other operational software).

Using the versatility of the architectural structure of RP Bridge services, the software is able to establish a connection between two systems through the exchange of information with files in XML language.
Additional modules
All the extension of Libellula[CUT], for every needs

Libellula[STORE]
Management of sheet warehouse, scraps, possibility to manage automatically the operations through the bar code system.

Libellula[BUDGET]
Module for automatic creation of budget. From DXF to the budget in one click.

Libellula[SHOP]
Order management

Libellula[UNFOLDER]
From 3D Cad to flat development for sheet cutting.

Libellula[RPBRIDGE]
Interface module “from and through” ERP systems and production management.
Hardware & Software Requirements

Technical requirements

Minimal Hardware Configuration

- CPU Intel® Core™ i5 or similar
- Hard disk: 2GB free space
- 4 Gb RAM
- Video Card with 256 Mb Ram memory
- DVD ROM 16x
- Monitor 17" (1024X768)
- Mouse 3 buttons with wheel
- USB port for USB License Key
- COM Port RS232 (9 pin) *if the pc need the transmission with cable to the machine

Suggested Hardware Configuration

- CPU Intel® Core™ i7 or similar (32bit or 64bit)
- Hard disk SATA III (2GB Free space)
- RAM 8 Gb or Higher
- Video Card with 1GB Ram memory
- Monitor 22" (1920X1080) or Higher

Software Requirements (Server side)

- Microsoft .NET Framework 4.0

Server Operating System:

- Microsoft® Windows Server 2003 SP1 (32bit o 64 bit)
- Microsoft® Windows Vista SP2 Business - Ultimate (32bit o 64 bit)
- Microsoft® Windows Server 2008 SP1 (32bit o 64 bit)
- Microsoft® Windows Server 2008 R2 SP1 (32bit o 64 bit)
- Microsoft® Windows 7 SP 1 Professional e Ultimate (32bit o 64 bit)
- Microsoft® Windows 8 Pro - Enterprise (32bit o 64 bit)

Software Requirements (Client side)

Client (web access)
Browser supported:
- Firefox 3.0
- Google Chrome
- Internet Explorer 9
- Opera 11
- Safari 5

Client Operating System:

- Microsoft® Windows XP® Professional SP3 (32bit o 64 bit)
- Microsoft® Windows Vista® Business e Ultimate (32bit o 64 bit)
- Microsoft® Windows 7® SP1 Professional - Ultimate (32bit o 64 bit)
- Microsoft® Windows 8 Pro - Enterprise (32bit o 64 bit)
Availability, precision on answering, ability to recognize the problems quickly and to propose the right solutions: these are the guidelines of our technical support.

Libellula assistance: an immediate, operative and efficient answer.

The Libellula technical support proposes 3 types of contracts, following the customer requirements. Every customer selects the technical support service in function of his structure and his organization: Libellula always assures the problem solving.

No postponing, no delay, only solutions.
Our technical assistance service is operational on working days, at total service of our customers through their preferred system: phone, e-mail, chat, fax, remote assistance, VoIP.

Every system assures a rapid and exhaustive answer, always provided with expert technicians working in our company.

With only one click, all the support that you need.

Phone assistance
With a phone call an immediate answer: an expert technician is at your service in real time, to solve your doubts and problems.

Email assistance
Our technicians are always available and they reply to the e-mails in a rapid and exhaustive way. A service managed with care, without lack of efficiency.

Chat with our technicians
A professional chat for a rapid answer. An excellent service, that doesn’t let the customer without reply.

Fax service
A fax service for your not urgent requirements. For every fax we will reply in a rapid and complete way.

OneClic[SUPPORT]
Technical support through a safe internet connection: our technician works directly on your computer, for an immediate solution of all your technical problems.

Customer Portal
The Libellula technical assistance can be also used through a direct connection to our new web site: www.libellula.eu. To solve any kind of technical problems, our portal allows a direct access to the service using your preferred system. A great innovation for our most exigent customers.
From cutting to production management.
All the requirements of sheet metal operators will find in our software an appropriate and quick solution.

Libellula: the first all-Italian software, totally on the site generated; everything is well tested and guaranteed.

Security, reliability and certainty of the result.
Our professionals, engineers and analyst programmers study the products in order to solve the problems of the market.

Our software systems are put on the market only after a positive safety tests, as well as efficiency and reliability trials and following the checking of customer requirements satisfaction.

Because for all of us, the full customer

An efficiency at the maximum of performances.
S.I. Engineering assures high operational performances and, above all, allows the maximal efficiency during the different steps of the process:

- very fast import time, also with "drag & drop" system. With only a click, the import is done.
- reduction of sheet remnants during the nesting, to optimize the costs.
- very fast programming time, to optimize your job and your operation management.
- control of your orders in real time; for a fast, punctual and correct "work in progress".

S.I. Engineering: an universe of interactivity, integration and automation
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<thead>
<tr>
<th>Cutting</th>
<th>Libellula[CUT]</th>
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<tbody>
<tr>
<td>Laser - Plasma/oxycut - Water Jet</td>
<td>LIBELLULA [CUT] is a new, efficacious and simple programming CAM system dedicated to laser machines, plasma, oxy-cut, water jet, etc.</td>
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<td>From CAD 3D to 2D</td>
<td>Libellula[UNFOLDER]</td>
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<td>LIBELLULA[UNFOLDER] is a system enables to quickly import 3D CAD files, to convert them and automatically calculate the flat development.</td>
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<td>CAD 3D</td>
<td>Libellula[CAD]</td>
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<td>DUCT</td>
<td>Libellula[HVAC]</td>
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<td>Libellula[HVAC] is a duct library of parametric shapes for air cooling and suction.</td>
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<td>Graphic Editor</td>
<td>Libellula[3DEditor]</td>
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<td>LIBELLULA [3DEditor] is a powerful and efficacious graphic editor for laser cutting machines with 5 or 6 axes.</td>
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<td>Quick Estimates</td>
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<td>Punch</td>
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<td>A programming system for punching and combined cutting machines.</td>
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World-leading on CAM, nesting and PCS solutions for sheet metal working, S.I. Engineering is the favourite partner for more than 11,000 customers in the world.

The leading industries on automotive, aerospace and naval sectors, as well as the most important machine tool manufactures meet in S.I. Engineering the solution concerning all requirements of optimization and innovation; nowadays this is essential to continue to be a Leader.

Our professionals, engineers and analyst programmers study the products in order to solve the problems of the market.

Our software systems are put on the market only after a positive safety tests, as well as efficiency and reliability trials and following the checking of customer requirements satisfaction.

_Because for all of us, the full customer satisfaction is the main objective_
S.I. Engineering: numbers
Real numbers

11,889
Satisfy customers all over the world

60
The countries we serve

16,125
Number of sold licenses

29,654
Number of installed machines

70
A team composed by professionals, engineering technicians and analyst programmers at customer service

100%
Satisfaction guaranteed

Our partners:
Rivoira
Prima Power
Microsoft
and many others.