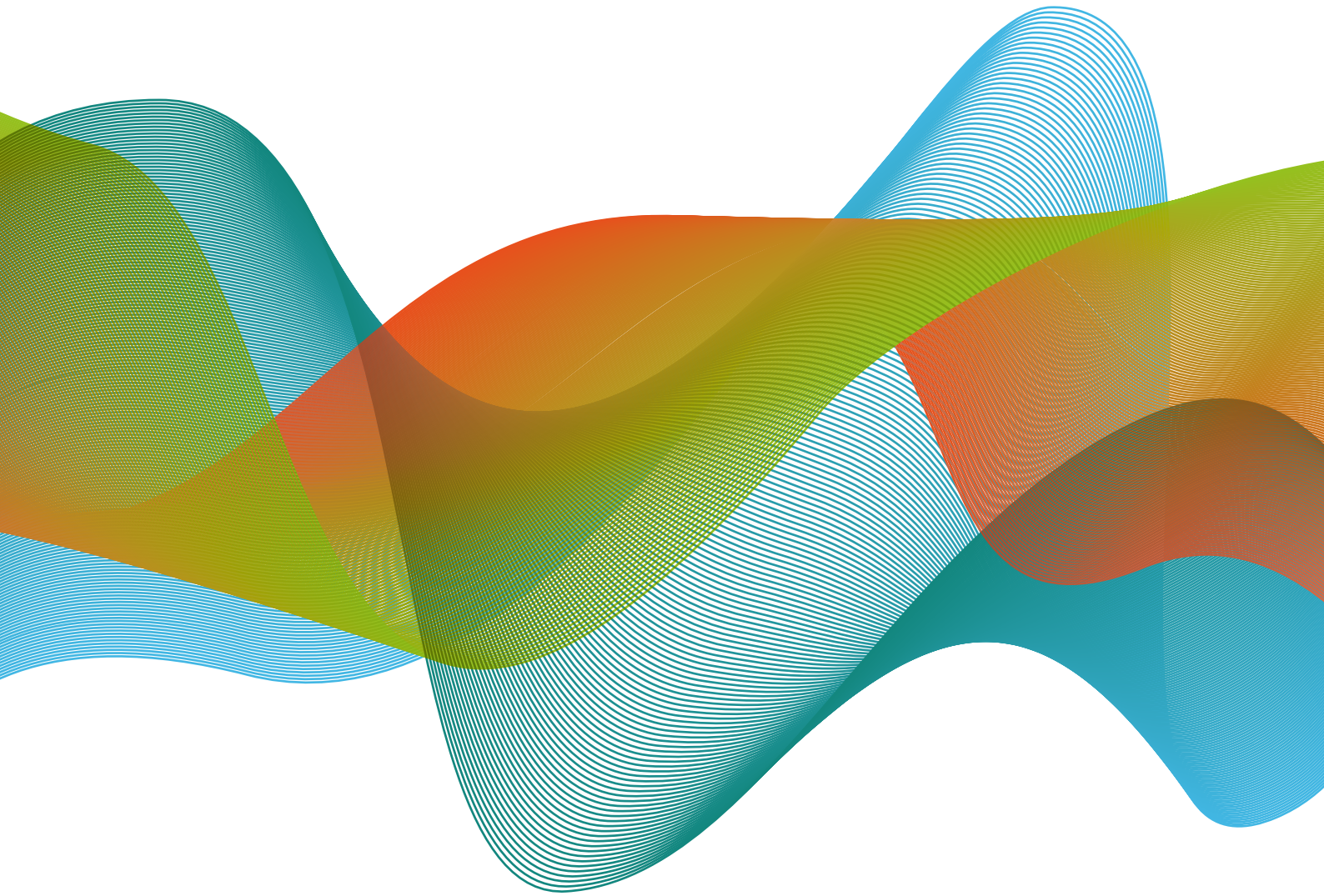


# FABLE

Fully Automated Cut & Bend Bundle

Unfold in 3D, cut and bend the sheet metal.  
Everything with one click in 3 steps. 100% automated.



**Libellula**  
Cutting The Edge Of Software Everyday



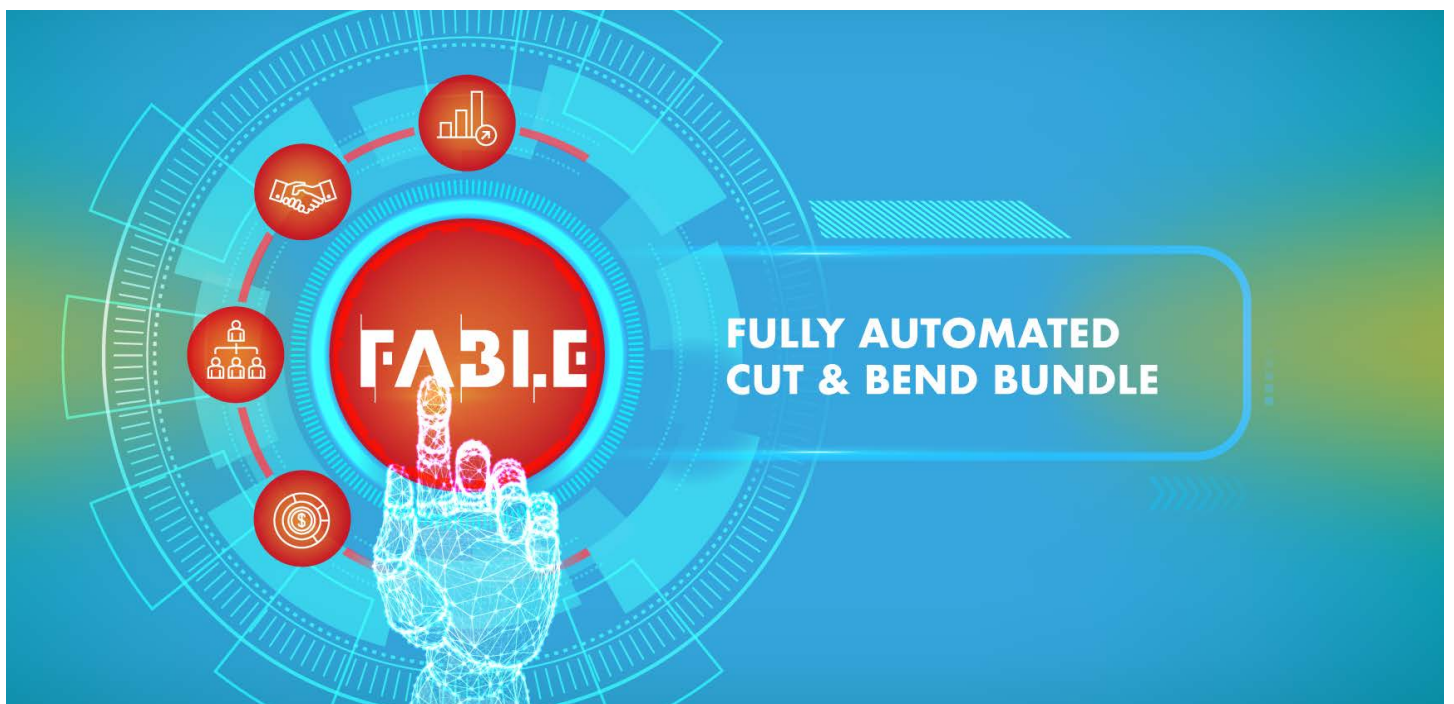
## Automation of processes: the path that leads to efficiency and profitability.

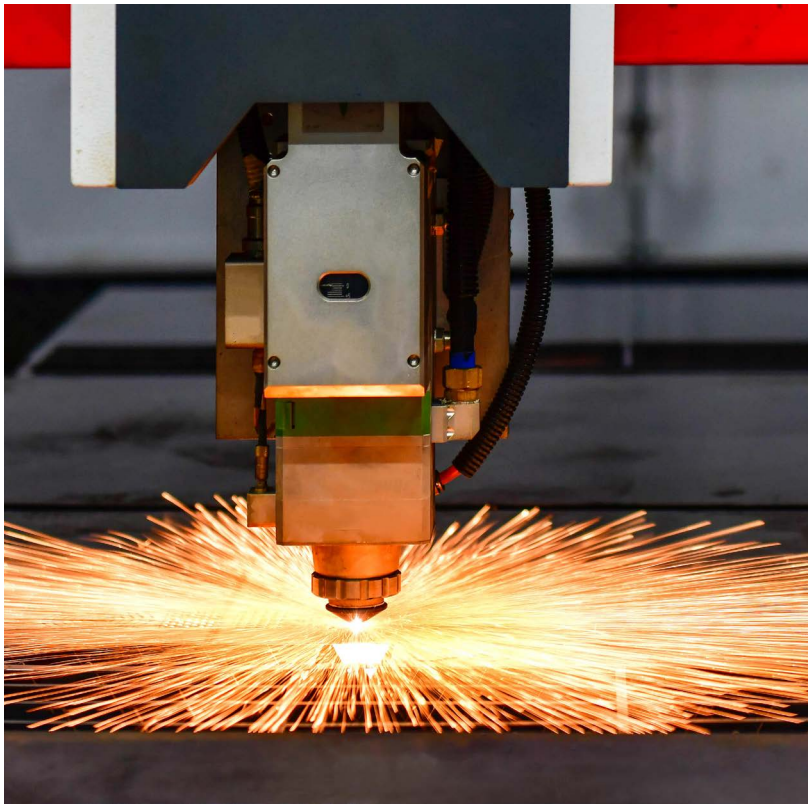
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In the current economic setting, the automation is an essential strategic lever to let a company, engaged in sheet metal processing, to raise the level of internal efficiency to compete in markets increasingly overcrowded and globalized.

### The advantages of automation are evident:

- ✔ **Improving productivity and product quality:**  
standardizing of the production flows lets a company speed up the processing times, improves production planning by reducing the defectiveness, related to the human factor
- ✔ **More satisfied customers:** automation makes it possible to accelerate and streamline processes, ensuring respect of the delivery time and full and constant compliance of products with the quality standards, required by customers
- ✔ **Improved HR management:** automation allows an optimal allocation of available human resources, because:
  - ✔ it simplifies the work of an operator, allowing him to follow several processes simultaneously
  - ✔ being the machine to ensure the correct execution of the most complex operations, resolves the possible problem of lack of qualified technical skills
- ✔ **Increased profitability:** more efficiency means less processing time and waste of material, increase of the productive ability and decrease of the cost of the job with a sensitive increment of the marginality and the profitability.





## **Request of companies:** a single application to manage the sheet metal working process.

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Informatics has already entered in the normal management of sheet metal working: all companies have CD software for unfolding, cutting/nesting and folding.

Software from different manufacturers can, however, create integration, compatibility and operation problems, the standards of design and use can follow different philosophies, lengthening the time of learning and programming in workshop.

A growing and pressing requirement of sheet metal workers is, therefore, to have the only software provider to entrust the entire processing cycle until bending.

## **The response of Libellula:**

**FABLE, a new suite of software to manage cutting and bending, starting from an assembly 3D.**

For over 30 years, Libellula has been designing advanced cutting and nesting software, such as Libellula.CUT, valued by many customers as the best in class in the industry sector.

With FABLE, Libellula offers now a single computing environment able to manage and integrate with maximum easiness and speed even the bending phase, ensuring the effectiveness, reliability and quality standards that have made it famous.

## **FABLE is unfold, cut and bend with the only click. Fabulous, right?**

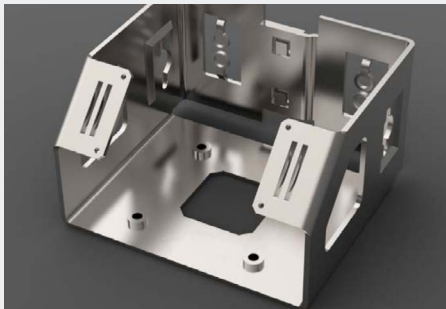
FABLE is an acronym of Fully Automated Cut & Bend BundLE but in english it means as well "fairy tale": an ideal combination to outline its really fabulous features: absolute integration and automation, high speed and unbelievable simplicity and high speed of use.

The operator has to set only the initial parameters: FABLE software and algorithms will handle the entire process in a fully automated way, including unfolding.



## In the heart of FABLE are perfectly integrated the best software of Libellula.

Some of the most powerful and performing programs of the suite Libellula Universe:



**Libellula.CLAIM** 

### Easy and precise 3D unfolding

Designed for the advanced 3D unfolding, it enables to create and edit easily the imported geometry without complexity, associated with traditional CAD systems.

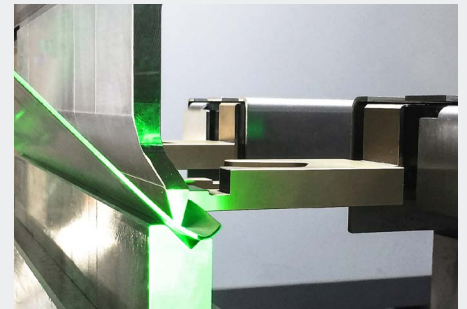
Libellula.CLAIM is designed to reduce the simulation preparation time and to extract quickly the sheet metal objects to start nesting.



**Libellula.CUT** 

### The state of the art technology for cutting and nesting

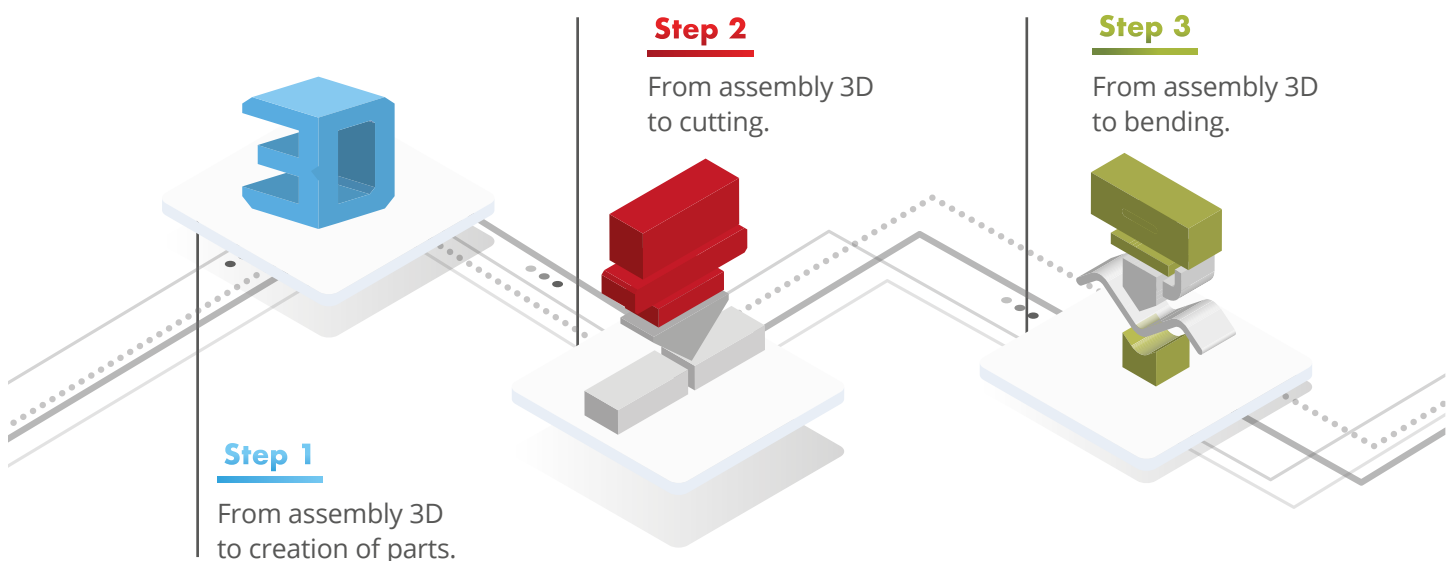
Top of the suite Libellula.UNIVERSE is the top software for nesting with all the technologies of cutting: laser, plasma, oxy-cutting, waterjet. Powerful and reliable, create or import geometric details in a moment from any other design platform, automatically optimizing their profiles and optimally preparing them for subsequent processing.



**Libellula.BEND** 

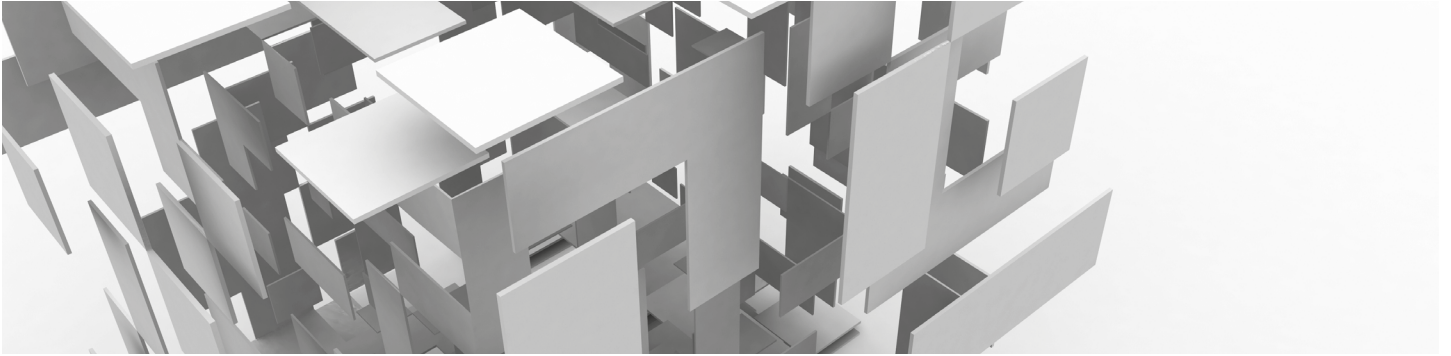
### Offline programming of bending

The new Libellula.BEND enables configuration and off-line programming of press brake machines, ensuring a significant reduction of their downtime. Clear and intuitive interface guarantees a fast and easy programming: the operator is continuously assisted at each stage (machine setup, calculation of the optimal bending sequence, positioning of backgauges, etc).



## FABLE in action: 1, 2 e 3. Unfolded, cut and bent.

The only three steps are enough for FABLE to manage automatically the entire cutting and bending process. Thanks to the modern and user-friendly HMI, the fruit of design philosophies Zero Training and One-Click of Libellula, operator experience is at the highest level: the process becomes very quick and excludes any risk of error.



### STEP 1: From assembly 3D to creation of the parts (BoM).

With the application Libellula.CLAIM is designed or imported the complex model 3D, whose BoM is created automatically.

FABLE will automatically separate the sheet metal components and prepare a complete set of parts to produce by cutting and bending machines, in addition to useful data in production such as the type of material, thickness and quantities required.

ParentPartName	T...	P...	P...	Ordemu...	Delivery...
<input checked="" type="checkbox"/> Sh_1	1.2	FE	1	ORDN_01	14_03_20
<input checked="" type="checkbox"/> Sh_2	1.2	FE	1	ORDN_01	14_03_20
<input checked="" type="checkbox"/> Sh_3	1.2	FE	1	ORDN_01	14_03_20
<input checked="" type="checkbox"/> Sh_4	1.2	FE	1	ORDN_01	14_03_20
<input checked="" type="checkbox"/> Sh_5	1.2	FE	1	ORDN_01	14_03_20
<input checked="" type="checkbox"/> Sh_6	1.2	FE	1	ORDN_01	14_03_20
<input checked="" type="checkbox"/> Sh_7	1.2	FE	3	ORDN_01	14_03_20

### Principal advantages

- ✦ Automatic list of sheet metal parts
- ✦ Automatic opening and quality control
- ✦ Automatic export
- ✦ Indication of film side and grain direction
- ✦ Identification of layers to export
- ✦ Indication of thickness, material or component name
- ✦ Addition of order number and date information
- ✦ Counting of parts to export the quantity to be produced





## STEP 2: From assembly 3D to cutting.

The 3D files thus separated are subjected to the 100% automated process of unfolding. It is not a mere theoretical calculation: the whole process is in fact managed by Libellula.CLAIM, that is able to export the most correct design thanks to the possibility to insert the tables of the customer's experience. The flat part, obtained in this way, will be sent to the central database of Libellula.CUT for creation of a new part in the library, necessary for the the automatic sheet metal nesting and cutting process.

Advanced use of FABLE let you carry out each step of production plan quicker than ever and in total control.

The management data transmitted will be matched within the mod.ORDER of Libellula (including order number, delivery date, quantity to be produced) and will be automatically associated to the parts to be created in order to keep a digital track of production progress and thus to refine the procedure towards the management of production with a view to Industry 4.0.

**Principal advantages**

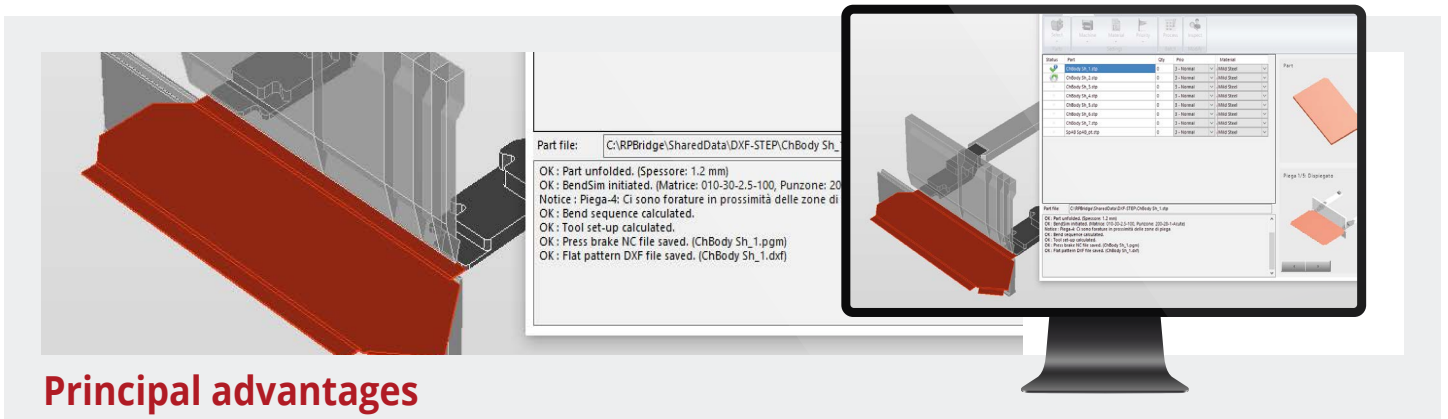
- ✦ Automatic insertion of the order from the assembly 3D
- ✦ Easy filters for finding nesting parts
- ✦ Timeline visualisation
- ✦ Automatic nesting and optimized technology
- ✦ Industry 4.0 compliant
- ✦ Post Processor of high quality for cutting machines
- ✦ Smart Factory Integration till automatic production feedback





### STEP 3: From assembly 3D to bending.

The bending engine of Libellula.BEND will manage the last step of the automation process, providing the best possible bending sequence. This process will execute in the background each automatically extracted sheet metal part from the original 3D set, producing machine post processor, including instructions for the best possible bend sequence together with PDF report of bending.



### Principal advantages

- ✦ Automatic search of the bending sequence
- ✦ High quality post processor for bending machines
- ✦ Reduction of machine downtime and machine setup
- ✦ Optimization of production queues
- ✦ The parts are unfolded by means of real calculation of bending allowance, using the real machine's properties and tools





**Microsoft Partner**  
Silver Application Development

**Libellula S.r.l. - Headquarters**

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