



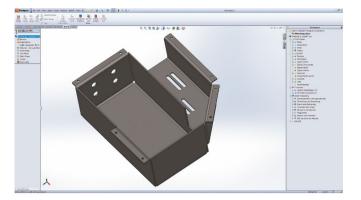
# BySoft 7

Construct and calculate parts, create cutting plans and bending programs, plan and monitor manufacturing processes: Modern sheet metal manufacturing is no longer imaginable without powerful software like BySoft 7. BySoft 7 offers a comprehensive range of functions and is still easy to operate. BySoft 7 – Make it easy.

### **Construct Parts**

Construct your parts quickly and easily with powerful 3D-CAD. BySoft 7 provides exactly tools you need for a specific situation, communicates a clear idea of the immediate status of the model, and is easy and intuitive to use. With BySoft 7 you can create very quickly 3D models of the parts to be manufactured.

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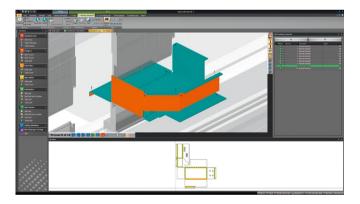


### **Create Cutting Plans**

BySoft 7 automatically ensures that sheet metal, tubes, and profiles are used to the maximum extent and nests as many parts as technically possible. In order to achieve this, BySoft 7 has countless functions, to optimize and improve nesting processes. In addition to that, BySoft 7 optimizes your cutting processes by automatically selects optimal cutting technology.

### **Create Bending Programs**

With BySoft 7, you can create perfect bending programs. Bending sequence, backgauge position, and tool plan are detected automatically so that the bending process can start quickly. BySoft 7 simulates the bending sequence and displays possible collisions which can be corrected. This ensures safety and shortens job throughput times.



### **Plan and Monitor Manufacturing Processes**

BySoft 7 module keeps an overview of your manufacturing processes and help you informed decisions. Furthermore, BySoft 7 automatically plans, initiates, and monitors part production and offers immediate access to all production and machine data. This is how BySoft 7 guarantees maximum transparency.



### **Requirements and solutions**

### BySoft 7 consists of four individual modules

- Sheet Cutting
- Bending
- Tube Cutting
- Plant Manager

The modules can be purchased either individually or as a complete package.



#### **Increase efficiency**

- The process-oriented design and clear construction of parts
- Simple and intuitive operator guidance from parts to programmed plans
- Efficient import and file cleaning



### **Reduce costs**

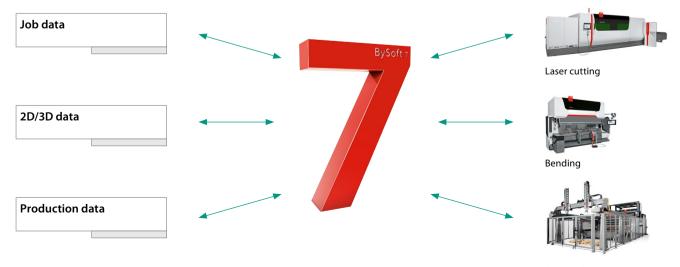
- Save time and materials by selecting the ideal steps
- Fast throughput times thanks to automatic programming
- Early identification of manufacturing conflicts



### **Simplify processes**

- Professional 2D/3D CAD system
- Flexible cutting plan and bending program programming
- Optimal production processes due to transparent planning

### How is BySoft 7 integrated into the existing IT environment?



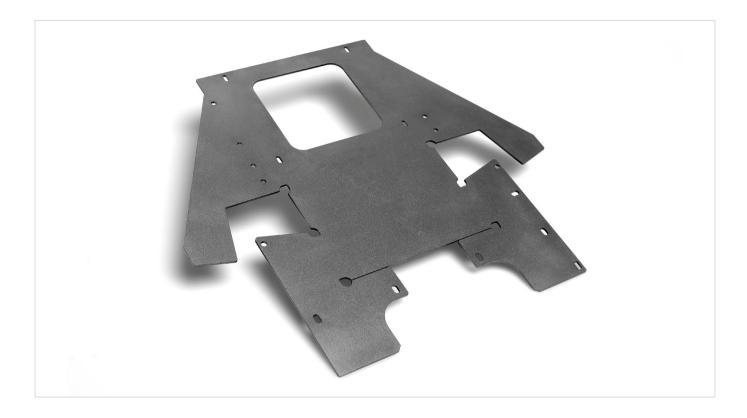
Automation

### Which options do the individual modules offer?

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	Sheet Cutting	Bending	Tube Cutting	Plant Manager		
Function				Planning	Production	Statistics
2D/3D-CAD Standard	•	•	•			
Automatic unfolding from 3D to 2D	•	•	•			
Parts Import	•	•	•			
Bending Technology		•				
Cutting Technology	•		•			
Parts Nesting	•		•			
TiltPrevention	•					
Calculation of Cutting and Bending Time	•	•	•			
Simulation of Cutting and Bending	•	•	•			
Cutting/Bending Programs Export	•	•	•			
Sorting and stacking*	•					
Automatic Job Import				•		
Job Management				•		
Parts Management				•		
Management of Operation Steps (Cutting/Bending)				•		•
Cutting Plans Management				•		
Automated nesting of cutting plans				•		
Production Data Export				•		
Machine Utilization				•		
Notification Service				•	•	•
Optimization of Production Sequence for Bent Parts		•				
Production Monitoring					•	
Parts removal					•	
Calculate part costs	•	•	•	•		
PartID (part identification)*	•			•		
Working Papers	•	•	•	•		
Quick Support	•	•	•	•	•	•
Planning				•		
Production					•	
Statistics						•

\* = Option

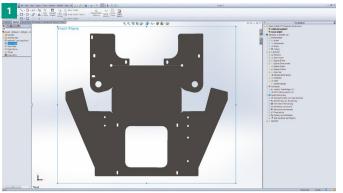


# **Sheet Cutting**

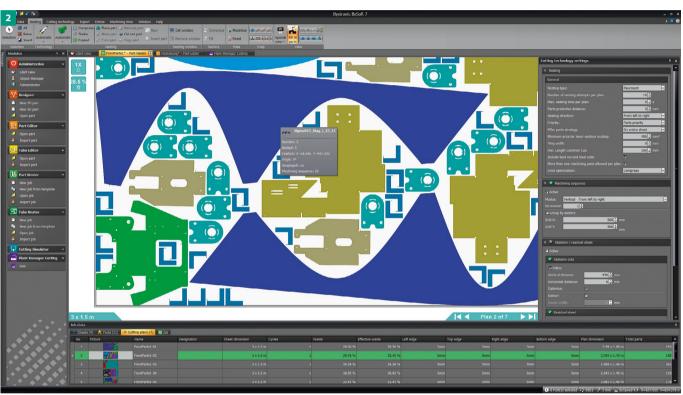
With this module, you can construct parts and import and edit existing CAD data. You can create perfect cutting plans for processing sheet metal and other 2D materials.

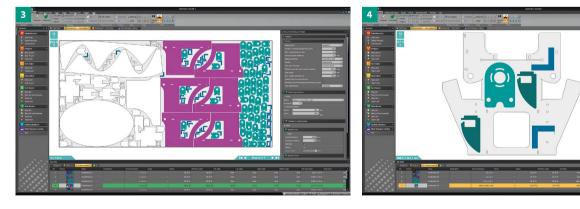
- Construct parts with powerful 2D and 3D CAD
- You can create cutting programs quickly and effortlessly because BySoft 7 is intuitive and easy to use
- You will reduce part costs because raw material is used optimally. To achieve that BySoft 7 has comprehensive options, for example, various nesting processes
- With the touch of a button, BySoft 7 always selects the correct cutting technology and implements it with ease
- BySoft 7 is optimized for reliability. Your machine usage rate will increase, and so will your profit. You profit thanks to perfectly cut parts and a high machine usage rate
- Optional with BySort: Create sorting plans automatically for an optimized stacking of your parts

### Software Sheet Cutting



- 1 Parts Construction
- 2 Parts Nesting
- 3 Residual sheet and other miscellaneous shapes can ...
- 4 ... be used as raw material (as shown on this example)



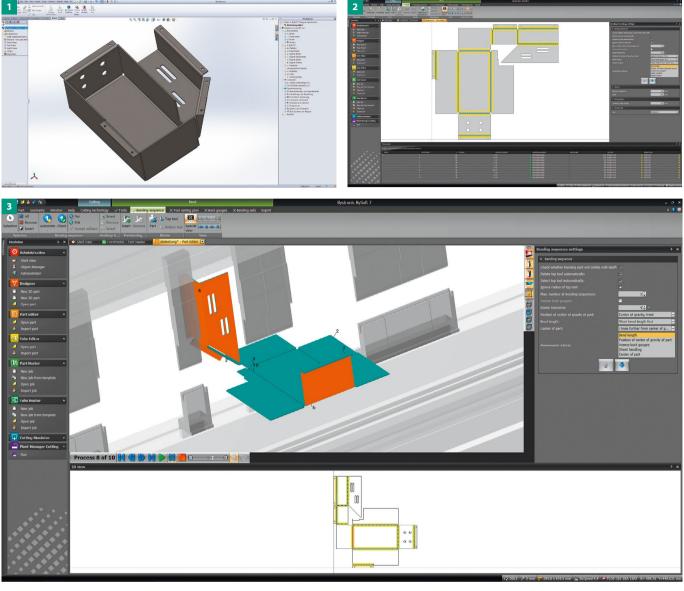


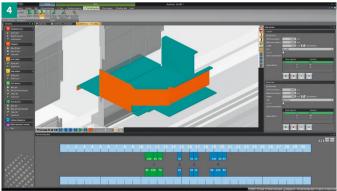


# Bending

With this module, you can model parts and import and edit existing CAD data. You can create perfect unfolding and bending programs.

- Construct parts with powerful 2D and 3D CAD
- All relevant machine and tool data for your pressbrake(s) are stored in BySoft 7. Thus, you achieve
  perfect unfolding. The bend allowance values were determined through years of expertise in
  developing bending software
- Thanks to full simulation of bending sequences, you can prevent collisions and costly errors
- You can prepare jobs quickly because BySoft 7 determines and suggests bending sequences, backgauge positions, and tool plans
- Optimize set-up times when manufacturing several bent parts. BySoft 7 creates and proposes an ideal processing sequence





- 1 3D Parts Construction
- 2 3D Data Executed Perfectly
- 3 Calculation and Simulation of Bending Sequence
- 4 Calculation of Tool and Set-Up Plan



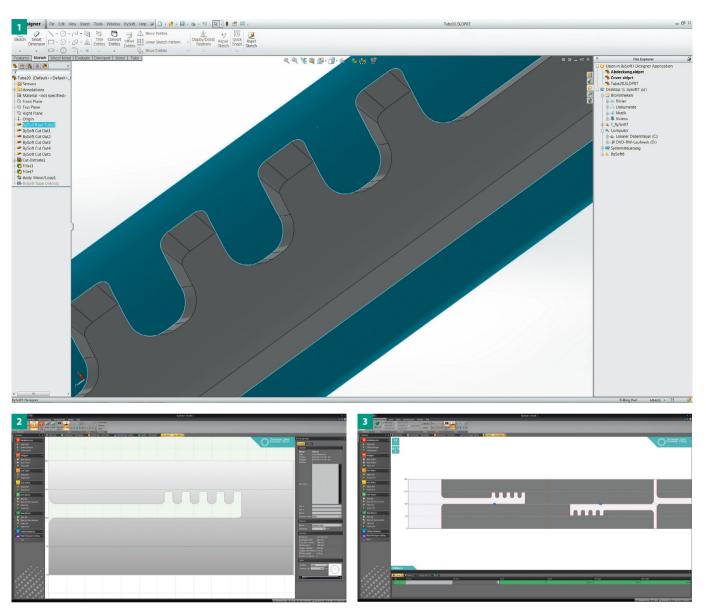


# **Tube Cutting**

With this module, you can construct parts and import and edit existing CAD data. You can create perfect cutting plans for processing tubes and profiles.

- Construct parts with powerful and worldwide distributed 2D and 3D CAD
- Even complex tube and profile cutting programs can be created in the blink of an eye. BySoft 7 is intuitive and easy to learn
- By turning sections and parts, these can be nested efficiency. Raw material is used completely and part costs are further reduced
- With the touch of a button, BySoft 7 always selects the correct cutting technology and implements it with ease





1 Easy Parts Construction

2 Unfolding 3D Data

3 Nesting with Shared Cut Lines

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### **Plant Manager**

Create maximum transparency and efficiency in your sheet processing. The Plant Manager plans and monitors manufacturing processes.

### What is the Plant Manager?

The Plant Manager helps you to plan and monitor all laser cutting and bending processes in both an automatic and informed way.

### What does Plant Manager do?

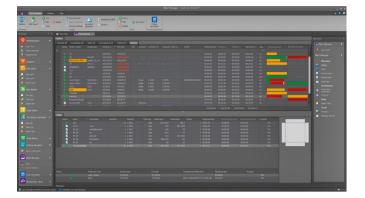
Each ERP system is subdivided into individual work cycles in the production chain. One of these cycles is the general planning of cutting and bending processes. Here, the Plant Manager assesses and refines the planning automatically. This way time is saved and erros are eliminated. Comprehensive statistical data is available in order to understand even more about the production and ways to improve.

### Planning

 The Plant Manager draws job data from the ERP system or other job sources and links them with the CAD data

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- The Plant Manager groups parts according to type of material, material thickness, and schedule, as well as according to cutting head, cutting nozzle and machine
- It creates optimal cutting and bending programs and applies the suitable cutting technology
- Plant Manager reduces set-up times thanks to optimal planning of the bending tools



### Production

- The Plant Manager manages and controls all machine jobs, including your express jobs
- It plans for maintenance windows and shifts
- The Plant Manager monitors and visualizes the processes on the individual machine systems and the condition of these systems
- Plant Manager provides you with a complete production overview



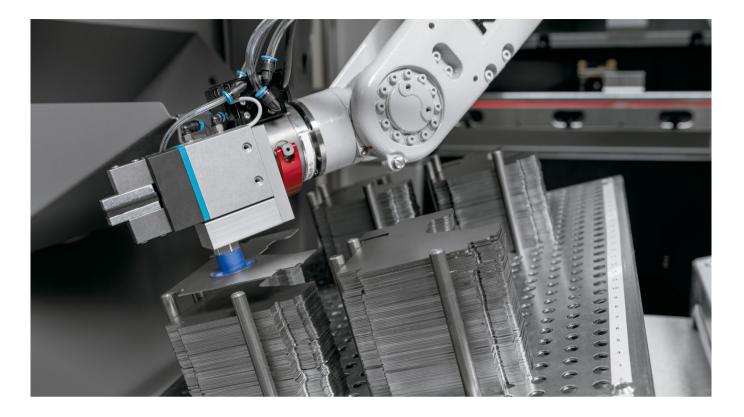
### Statistics

- The Plant Manager assesses all relevant machine and job data for you and provides you with the corresponding statistics
- Email notifications when pre-defined set of conditions are met



- You can manufacture parts more quickly, at a lower cost, and with less effort
- Your processes will run more reliably
- You retain a complete overview of your production and the condition of your machine systems
- Increase efficiency with statistical data





### **Robot Manager**

The comprehensive and high-performance programming software for automated bending. With the Robot Manager, you control and simulate the robotics that are integrated into Bystronic's bending automation solutions.

### What is the Robot Manager?

The Robot Manager is a software solution for the macro programming of bending robots, which form a part of Bystronic's bending automation. With the Robot Manager's 3D user interface, users create and simulate the required automation steps within an offline programming environment. This includes automated bending procedures as well as the loading of the parts that are to be bent and the unloading and stacking of the completed bent parts.

- Integrated programming of robots and the parts that are to be bent
- Easy and intuitive user interface
- Efficient generation of programs thanks to automated programming procedures and integrated test functions
- Direct interfacing of robot programming with the programming process in BySoft 7 for the parts that are to be bent