Best choice.
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 comprehensive functionality, while remaining easy to use. This way, you maintain an overview, while completing jobs quickly, affordably, and reliably. BySoft 7 – Make it easy.

Construct Parts
BySoft 7 supports your parts construction with powerful 3D-CAD, widely distributed across the world. BySoft 7 provides exactly those tools you need for a specific situation, communicates a clear idea of the immediate status of the model, and is intuitive to use. Thus, you quickly and confidently achieve correct 3D models of the parts to be manufactured.
Create Cutting Plans
BySoft 7 automatically ensures that sheet metal, tubes, and profiles are used completely and nests as many parts as technically possible. To do this, BySoft 7 has countless functions, for example, various nesting processes. What’s more, BySoft 7 optimizes your cutting processes and automatically selects each 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 more quickly. Furthermore, BySoft 7 simulates the bending sequence and displays possible collisions automatically. This ensures safety, saves even more time and material, and shortens job throughput times.

Plan and Monitor Manufacturing Processes
Thanks to BySoft 7, cutting and bending jobs are completed quickly and with little effort. Because: You maintain an overview of your manufacturing processes and make informed decisions. Thus, you deliver on time and with favorable conditions. Furthermore, BySoft 7 automatically plans, initiates, and monitors part production and offers immediate access to all relevant production and machine data. This is how BySoft 7 guarantees maximum transparency.
Requirements and solutions

BySoft 7 consists of four individual modules

- 2D Processing
- Bending
- Tube Processing
- Plant Manager

Depending on need, the modules can be purchased either individually, in personal combinations, or as a complete package.

Increase efficiency
- The process-oriented design and clear construction of BySoft 7
- 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?

Job data

2D/3D data

Production data

Laser cutting

Bending

Waterjet cutting
Which options do the individual modules offer?

<table>
<thead>
<tr>
<th>Function</th>
<th>2D Processing</th>
<th>Bending</th>
<th>Tube Processing</th>
<th>Plant Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>2D/3D-CAD Standard</td>
<td>●</td>
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<tr>
<td>Bending Sequence Simulation</td>
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<tr>
<td>Bending Technology</td>
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<td>ByVision Visualization</td>
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<tr>
<td>CAD Bending Functions</td>
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<tr>
<td>CAD Tube Functions</td>
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<tr>
<td>Calculate part costs</td>
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<td>●</td>
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<tr>
<td>Cutting Simulation</td>
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<td>Cutting Technology</td>
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<td>Cutting Time Calculation</td>
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<td>Bending Programs Export</td>
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<tr>
<td>Cutting Programs Export</td>
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<tr>
<td>Production Data Export</td>
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<tr>
<td>Cutting Plans Management</td>
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<td>Automatic Cutting Plan Packaging</td>
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<td>Notification Service</td>
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<tr>
<td>Automatic Job Import</td>
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<tr>
<td>Job Management</td>
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<td>Parts Import</td>
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<tr>
<td>Parts Management</td>
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<tr>
<td>PartID (part identification)*</td>
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<td>Parts Nesting</td>
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<td>Bevel Manager (beveled cutting edges)*</td>
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<td>Production Monitoring</td>
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<td>Planning</td>
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<td>Production</td>
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<tr>
<td>Statistics</td>
<td>●</td>
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</tbody>
</table>

How can the individual modules be combined?

<table>
<thead>
<tr>
<th>Module</th>
<th>Combinations</th>
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<tbody>
<tr>
<td>2D Processing</td>
<td>● 01 02 03 04 05 06</td>
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<tr>
<td>Bending</td>
<td>● 02 03 04 05 06</td>
</tr>
<tr>
<td>Tube Processing</td>
<td>● 03 04 05 06 07</td>
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<tr>
<td>Plant Manager Planning</td>
<td>● 07 08 09 10 11 12 13</td>
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<td>Plant Manager Production</td>
<td>● 08 09 10 11 12 13</td>
</tr>
<tr>
<td>Plant Manager Statistics</td>
<td>● 10 11 12 13</td>
</tr>
</tbody>
</table>

* = Option

The 2D processing module is included in the Plant Manager Planning module.
2D Processing

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.

Customer benefits

- Thanks to BySoft 7, you can construct parts with powerful and worldwide distributed 2D and 3D CAD
- You can create cutting programs in next to no time because BySoft 7 is clearly structured and turns less practiced users into programming professionals
- You will reduce part costs because raw material is used completely. To do so, 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
- Thanks to countless functions, BySoft 7 provides reliable processes. You profit thanks to perfectly cut parts and a high machine usage rate
1 Parts Construction
2 Parts Nesting
3 Residual sheet and other miscellaneous shapes can (4) be used as raw material.
Bending

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

Customer benefits

- Thanks to BySoft 7, you can construct parts with powerful and worldwide distributed 2D and 3D CAD
- You can use your pressbrake capacity in its entirety because parts are no longer programmed on the machine, but rather by BySoft 7
- 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 empirically by experts
- Thanks to full simulation of bending sequences, you can prevent collisions and costly errors
- You can prepare jobs more quickly because BySoft 7 determines and suggests bending sequences, backgauge positions, and tool plans
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 Processing

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.

Customer benefits

- Thanks to BySoft 7, you can 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. Because: BySoft 7 is clearly structured and turns less practiced users into programming professionals.
- By turning sections and parts, these can be nested with even more 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.
- Thanks to countless functions, BySoft 7 provides reliable processes. You profit thanks to perfectly cut parts and a high machine usage rate.
1 Easy Parts Construction
2 Unfolding 3D Data
3 Nesting with Shared Cut Lines
Plant Manager

The Plant Manager plans and monitors manufacturing processes. It provides maximum transparency for sheet processing.

What is the Plant Manager?
The Plant Manager is a unique tool with which you can plan and monitor all laser and waterjet cutting processes in both an automatic and informed way.

Which tasks does the Plant Manager assume?
Each ERP system is subdivided into individual work cycles in the production chain. One of these cycles is the general planning of cutting processes. Here, the Plant Manager assesses and refines the planning automatically. In this way, individual steps and time are saved, costs are reduced, and error sources are eliminated. Furthermore, the Plant Manager initiates and monitors parts production and provides you with comprehensive statistical data.
Planning

- The Plant Manager draws job data from the ERP system or other job sources and links them with the CAD data
- It creates optimal cutting plans and applies the suitable cutting technology
- The Plant Manager groups parts according to type of material, material thickness, and schedule, as well as according to cutting head and cutting nozzle

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
- It delivers a complete production overview

Statistics

- The Plant Manager assesses all relevant machine and job data for you and provides you with the corresponding statistics
- If a defined event takes place, the Plant Manager will send you a corresponding email

Customer benefits

- You can manufacture parts more quickly, at a lower cost, and with less effort
- Your processes will run more reliably because manual entries are no longer necessary and machines are regularly maintained
- You retain a complete overview of your production and the condition of your machine systems
- You receive data with which you can further increase your production efficiency
NEW

ByOptimizer

Cut parts as precisely and cost-effectively as possible: The ByOptimizer is an exclusive online service that offers singularly optimized cutting plans.

Customer benefits
- Higher profit margins because optimization potential is maximized during laser cutting
- Considerable material savings and reduced cutting time due to clustering and optimized cutting paths
- More cut parts per sheet with optimal material use that would not be possible with conventional cutting plans
- Process reliability and high manufacturing precision due to an extensive process database and integrated user know-how
- Immediate access and pay-per-use without needing to invest in additional software or hardware

Bystronic: Best choice.
Dynamic clustering with ByOptimizer
With dynamic clustering, ByOptimizer reduces both cutting time and material excess on the sheet skeleton.
Residual sheet waste: 21.5 percent of all parts on one sheet → 15.4 percent total advantage.
Processing time: 13 min 14 sec → 19 percent faster.

Traditional cutting plan
Residual sheet waste: 28.6 percent on sheet 1 necessitating a second sheet to cut the remaining parts.
Processing time: 16 min 21 sec.
Observer

The Observer is a web-based remote monitoring system that sends notifications regarding the operational status of your systems and the progress of job processing.

Customer benefits

- Increased machine availability, thanks to early idle state recognition
- Location-independent queries of machine status results in higher functional reliability
- Optimized production costs due to decreased deviation from planned production time
**OPC interface**

The OPC interface is an interface that is installed on the machine and through which you can access all manufacturing process information.

Customer benefits

- Increased machine availability due to reduction of unplanned stoppages
- Reliable manufacturing job calculation
- Increased degree of cutting process automation
Bystronic Collections

Not all products listed in this brochure are available in all countries.

This brochure may show parts that are not standard equipment, but are available as options. For the better visibility of machine details, some safety covers may have been opened or removed for these pictures. The right to make changes to dimensions, construction and equipment is reserved.

ISO-9001-certified
Best choice.