



LiSEC

SUCCESS STORY

3D Costing Instead of Spreadsheets:
LiSEC Gains Greater Cost Transparency

costing24, the cloud-based costing solution from simus systems, enables LiSEC to gain early cost transparency and move from spreadsheet-based calculations to fast, secure, and precise 3D cost analyses.

 **simus** systems

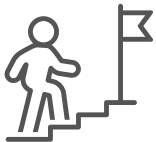
Overview

Company



- LiSEC, based in Seitenstetten (Lower Austria), with 1,300 employees worldwide and revenue of €296 million (2024)
- For over 60 years, a specialist in machinery, software, and automation solutions for flat glass processing and finishing

Challenge



- High manual effort and low transparency in calculations using spreadsheets
- Early and reliable production cost estimates are crucial for cost-effective product development
- Cost analyses must cover numerous manufacturing processes and different production strategies
- Guaranteed data security and easy IT integration without installation effort are key requirements

Solution



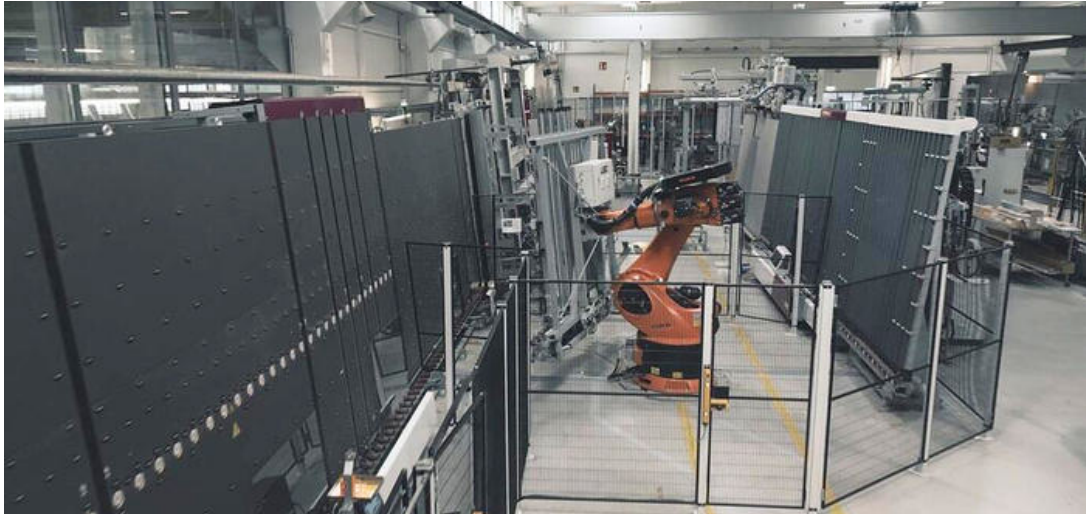
- Introduction of costing24 for automated component costing based on 3D CAD models
- Transparent cost analyses through detailed breakdowns of processing times, technologies, and batch sizes
- Cloud-based solution requiring no installation or maintenance while ensuring high data security

Results



- Significantly greater cost transparency and faster calculations compared to the previous spreadsheet system
- Daily use of costing24, covering over 90% of the relevant manufacturing processes in custom machine building
- Reliable cost analyses enable well-informed decisions

The globally active LiSEC Group uses costing24 to calculate the manufacturing costs of components for its flat glass processing machines and systems. The switch to the cloud solution from simus systems makes future costs visible earlier and with greater accuracy - without the need for installation, licenses, or maintenance.



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“In mechanical and plant engineering, price is a decisive factor. Approximately 70 to 80 percent of manufacturing costs are determined as early as the development phase,”

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says Georg Kropf, who has been with the LiSEC Group since 2019. For 60 years, LiSEC has been offering machines and automation solutions for the processing and finishing of flat glass. In Seitenstetten, in the Amstetten district of Lower Austria, approximately 950 of the company's 1,300 global employees develop and manufacture individual machines and production lines for insulating and laminated glass, glass edge processing machines, glass cutting systems, logistics systems, and software for the flat glass industry. Product development focuses on innovation - as evidenced by 330 patents - as well as the robustness and durability, quality, and efficiency of the systems. Georg Kropf oversees cost-related matters from prototyping through to series production handover. “Even during product maintenance or in collaboration with purchasing, I analyze cost structures, discuss component machining steps, or determine assembly costs to ensure transparency,” he says.

Replacing Spreadsheets with costing24

After spending his first year familiarizing himself with the existing machinery, manufacturing processes, equipment, and tools in his costing projects, Georg Kropf began to question the high level of manual effort involved in working with spreadsheets and started looking for alternatives: “While searching online, I came across costing24 from simus systems,” he recalls. The cloud solution can be easily tested without any installation effort or time commitment: “I immediately liked the logical structure and ease of use.” To perform a cost estimate, you upload the 3D file of a component. Based on the component geometry and the defined details, the necessary machining technologies and work sequences are automatically determined, and a preliminary cost estimate is generated. Machine data, cycle times, markups, and much more can be customized. Georg Kropf explains:

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“I particularly like the clear breakdown of costs, categorized by setup and processing times for different batch sizes. I can export the results and aggregate them into system costs in our PLM portal.”

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Georg Kropf - Technical Calculation

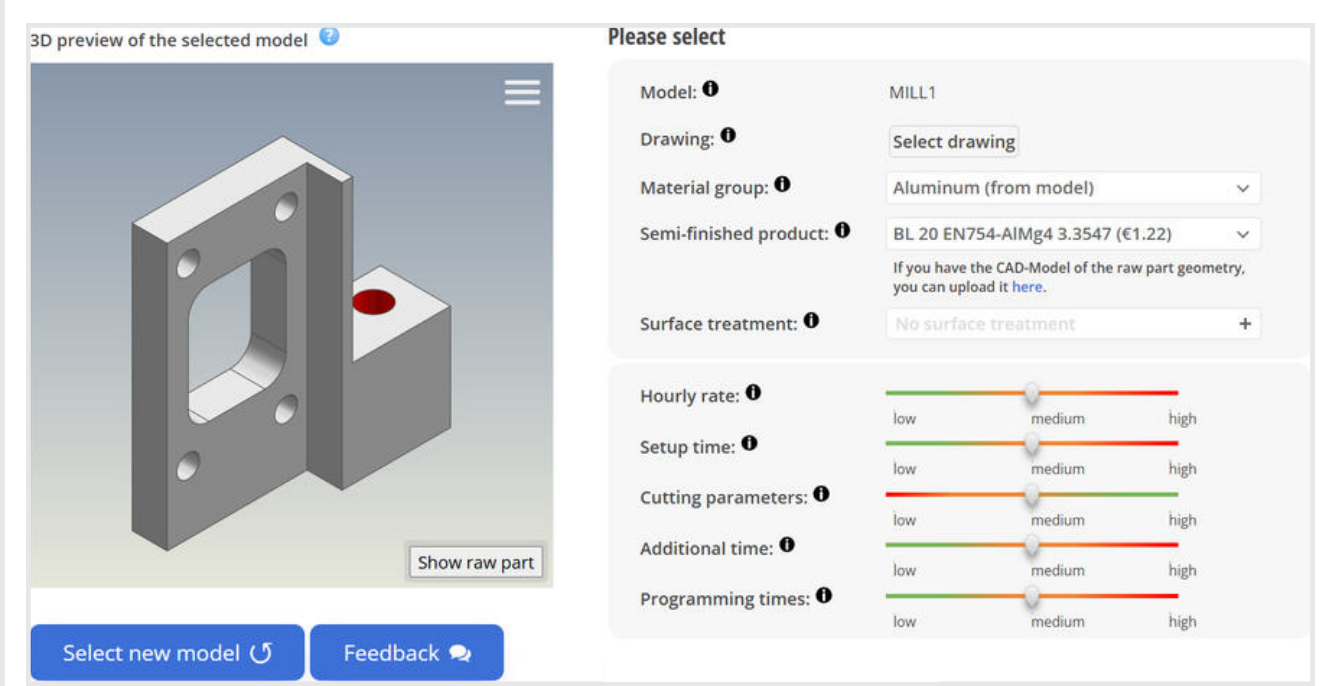
Cloud-Based Costing with High Data Security

Data security is a top priority at LiSEC. That is why it was important that costing24 be developed in Karlsruhe and hosted on a server in Germany. After analysis, the native 3D models are saved exclusively in the simus proprietary S3D format. The original data is not retained and cannot fall into the wrong hands. Georg Kropf explains:

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“The high level of security was the deciding factor. Since there’s no installation or maintenance involved, I didn’t need any IT support either. You pay a monthly fee for the service and aren’t locked into a long-term contract. That’s what made the decision easier.”

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The screenshot displays the costing24 calculation platform interface. On the left, there is a 3D preview of a selected model, a metal bracket with a central cutout and four holes. Below the preview are buttons for "Select new model" and "Feedback". On the right, a "Please select" panel allows for model configuration. The configuration options include:

- Model: MILL1
- Drawing: Select drawing
- Material group: Aluminum (from model)
- Semi-finished product: BL 20 EN754-ALMg4 3.3547 (€1.22)
- Surface treatment: No surface treatment


Below these options are five sliders for customizing cost parameters, each with a range from low to high:


- Hourly rate: low, medium, high
- Setup time: low, medium, high
- Cutting parameters: low, medium, high
- Additional time: low, medium, high
- Programming times: low, medium, high

Customization of cost parameters on the costing24 calculation platform

In the cloud application, you can customize many cost parameters – such as markups, hourly rates, or feed rates – and even factor in location-specific cost rates. “However, we’ve hardly made use of this feature because we’re more interested in a representative market comparison than in actual purchase prices,” says Georg Kropf. “We’ve only uploaded our extensive material database, which we update ourselves.”

Customizable Machine Data for Accurate Costing



Machines 

#	✎	Active Var 1	Active Var 2	Abbreviation	Name	Hourly rate	Working span
Generic machines							
1	✎	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SFC	Surface		
Cutting							
Laser cutting							
2	✎	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	LRS	Laser [small]	€75.00 /h	3000 x 1500 x 3 mm
3	✎	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	LRB	Laser [big]	€80.00 /h	6000 x 3000 x 12 mm
4	✎	<input type="checkbox"/>	<input type="checkbox"/>	LST	Laser/stamping machine	€90.00 /h	6000 x 3000 x 10 mm
5	✎	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3D_LRS	3D laser [small lot sizes]	€125.00 /h	
6	✎	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3D_LRS_HQ	3D laser [big lot sizes]	€125.00 /h	
Punching machine							
Flame cutter							
8	✎	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	FC	Flamecutter	€100.00 /h	4000 x 2000 x 30 mm
Plasma cutter							
Waterjet cutter							
Saw							
12	✎	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SAW	Saw	€30.00 /h	
Machining							
Turning machine							
13	✎	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TSN	Numeric turning machine [small]	€70.00 /h	555 x 200 x 200 mm
14	✎	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TBN	Numeric turning machine [big]	€80.00 /h	1000 x 1000 x 1000 mm
15	✎	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TSC	CNC turning machine [small]	€80.00 /h	500 x 200 x 200 mm
16	✎	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TSC_HQ	CNC turning machine HQ [small, dual spindle]	€100.00 /h	500 x 200 x 200 mm
17	✎	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TBC	CNC Turning Machine [big]	€90.00 /h	1000 x 950 x 950 mm
18	✎	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TBC_HQ	CNC Turning Machine HQ [big, dual spindle]	€110.00 /h	1000 x 950 x 950 mm
19	✎	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TM	Mill-turning machine	€100.00 /h	500 x 500 x 500 mm
20	✎	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TM_HQ	Mill-turning machine HQ [small, dual spindle]	€120.00 /h	500 x 500 x 500 mm
21	✎	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TMB	Mill-turning machine [big]	€110.00 /h	2000 x 2000 x 2000 mm
22	✎	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TMB_HQ	Mill-turning machine HQ [big, dual spindle]	€130.00 /h	2000 x 2000 x 2000 mm
Milling machine							
23	✎	<input checked="" type="checkbox"/>	<input type="checkbox"/>	M3S	3-axis milling machine [small]	€85.00 /h	700 x 380 x 350 mm
24	✎	<input checked="" type="checkbox"/>	<input type="checkbox"/>	M3M	3-axis milling machine [medium]	€90.00 /h	1000 x 1000 x 500 mm
25	✎	<input checked="" type="checkbox"/>	<input type="checkbox"/>	M3B	3-axis milling machine [big]	€90.00 /h	2000 x 1400 x 1000 mm
26	✎	<input checked="" type="checkbox"/>	<input type="checkbox"/>	M5S	5-axis milling machine [small]	€95.00 /h	500 x 400 x 200 mm
27	✎	<input type="checkbox"/>	<input checked="" type="checkbox"/>	M5S_HQ	5-axis milling machine HQ [small]	€110.00 /h	500 x 400 x 200 mm
28	✎	<input checked="" type="checkbox"/>	<input type="checkbox"/>	M5M	5-axis milling machine [medium]	€95.00 /h	1000 x 1000 x 500 mm
29	✎	<input checked="" type="checkbox"/>	<input type="checkbox"/>	M5B	5-axis milling machine [big]	€95.00 /h	2000 x 2000 x 2000 mm
30	✎	<input type="checkbox"/>	<input checked="" type="checkbox"/>	M5B_HQ	5-axis milling machine HQ [big]	€115.00 /h	2000 x 2000 x 2000 mm
31	✎	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TM	Mill-turning machine	€100.00 /h	500 x 500 x 500 mm
32	✎	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TM_HQ	Mill-turning machine HQ [small, dual spindle]	€120.00 /h	500 x 500 x 500 mm
33	✎	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TMB	Mill-turning machine [big]	€110.00 /h	2000 x 2000 x 2000 mm
34	✎	<input type="checkbox"/>	<input checked="" type="checkbox"/>	TMB_HQ	Mill-turning machine HQ [big, dual spindle]	€130.00 /h	2000 x 2000 x 2000 mm

A Central Resource for Costing Insights

Since then, the specialist has costed several hundred components. Requests come from current product development, from design engineers working on product maintenance, and also from the purchasing department.

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“I act as a human interface to ensure cost transparency for everyone involved. Compared to the previous method of using spreadsheets, transparency has increased significantly,”

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explains Georg Kropf. Depending on the order situation, LiSEC adjusts the balance between in-house production and outsourcing to preferred suppliers. “If in-house production isn’t cost-effective and the quality is right, we outsource parts.” The cost reports from costing24 serve as a basis for discussion with both the company’s own development and production teams as well as with suppliers. Based on STEP models and component costs, bottom-up calculations for entire assemblies are generated by transferring the data to the internal PLM portal.



The screenshot shows the costing24 web interface. At the top, there are navigation links for Help, FAQ, and Support, along with a phone number and a German flag. The main header includes the costing24 logo, a 'Calculate' button, and a 'Configuration' dropdown menu. Below the header, there is a 3D model of a metal part. To the right of the model is a table with technical specifications:

Model	MILL1
Description (CAD)	Mitnehmer Schlitzen
Latest geometric classification on	06/02/2026 03:46:42 PM CEST
Material (CAD)	Flach 80x 20 AlMgSi0.5F22relouiert102077
Reference lot size	5
PLAN quota	1.00
Manufacturing cost	21.71 €
Purchase price	30.21 €
Purchase price incl. progr.	45.00 €
Dimensions	76x71x20 mm

Below the technical specifications is a 'Messages' section, followed by a cost breakdown table:

> Rawmaterial costs	1.13 €
> Set up	10.04 €
> Rough shaping	9.22 €
> Post treatment	0.44 €
> Programming	12.35 €
> Additions	0.89 €
> Surcharges	8.50 €
> Lot size scaling	
> Times	7.21 min
> Cost information	

At the bottom of the screenshot, a text box states: **The cost report breaks down the costs in detail by processing method.**



LiSEC offers not only individual machines and software, but also complete production lines, including automation technology, that can be seamlessly integrated.

Daily Costing for a Wide Range of Manufacturing Processes

costing24 is more than capable of handling the special-purpose machine builder's wide range of manufacturing capabilities: in addition to turning, milling, and drilling, as well as sheet metal and bending operations, it also covers 3D printing, welding, and a wide range of finishing processes. The solution is constantly being improved:

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“I can now also calculate tube laser cutting. The program thus covers over 90 percent of our machining processes,”

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says Georg Kropf pleased. This is important to LiSEC, as technological progress continues unabated. For example, shaped tubes have recently begun to be folded so that they can be welded using tube lasers without the need for scoring. “It would be great if this advancement were soon incorporated into costing24 as well,” says Kropf.

Excellent Value for Money

So far, the costing specialist has been very satisfied with both the speed of development and the service provided by simus systems. "Whenever we encountered issues with the application, I received prompt responses from very friendly and helpful staff - just as we strive to serve our own customers."

The scope of services also meets our requirements. Georg Kropf sums it up:

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"This tool is a huge help to us in our transparent cost monitoring."

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"For individual machining operations, costing24 doesn't go into as much detail as the quoting software used by specialized contract manufacturers." But Georg Kropf doesn't compare his results to those anyway: "For our critical parts, we rely on long-term partnerships within a clearly structured supplier network that we can count on."

Georg Kropf is currently so satisfied with costing24 that other costing tools are out of the question:

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"The value for money and the minimal effort required are hard to beat."

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We develop software that supports mechanical engineering companies with digitalization.



Optimize data structure

Our core competence is to optimally structure and classify data and thus make it usable for further, value-adding processes.



Keep costs and emissions under control

Our software calculates manufacturing costs and emission values by analyzing the 3D CAD model in a matter of seconds at a very early stage of development.



Automate processes

A clean database enables many automated processes and thus reduces the workload in many departments.



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