Breathing new life into tried-and-true “DOS” profile machining centres

Companies that continue to use their time-tested elumatec profile machining centres don’t have to give up on the choice of using state-of-the-art profile machining software. In fact, eluCad is designed to enable them to get their machining work done with only a few mouse clicks – even when working with machines with a DOS operating system. The result? Plenty of benefits when it comes to a company’s day-to-day operations.

The fact that elumatec profile machining centres continue to work with their original precision and reliability a long time after ten years have passed comes as no surprise to people familiar with them. “Many of our first-generation SBZ 130 3-axis centres, which in 1992 raised the bar for profile machining and of which we’ve installed a lot more than 1,000 units worldwide, are still going at it today”, reports elumatec Software Sales Manager Gunnar Lange. “What many users don’t know, however, is that the convenience and wide range of functions offered by our latest eluCad profile machining software can translate into tangible cost-effectiveness and profitability improvements even when it comes to profile machining centres running on a DOS operating system”.

Uninterrupted production flow
For one, this eliminates inconvenient machine stops, as using eluCad means that machining programs no longer have to be created directly on the profile machining centre being used. Instead, they can simply be programmed at any work preparation workstation and then be transferred to the relevant machine when necessary. The advantage behind this is quickly apparent, as it means that even DOS machines can now continue performing their work while programs are being written. Or as Gunnar Lange puts it: “The one scenario in which operators needing to program directly on the machine can prove to be disastrous is when there are a lot of incoming orders and every single ounce of capacity counts. By using eluCad, this issue is eliminated, ensuring a continuous production flow and improved machine utilisation. Among other things, this means that the investment made to acquire the software tends to pay for itself quite quickly”

Gunnar Lange, Software Sales Manager at elumatec AG: “Tried-and-true DOS machines can benefit from our state-of-the-art eluCad profile machining software too.”
Once a program is ready, it can be used time and time again
eluCad runs on normal PCs, preferably with a connection to the relevant company's network. This is of enormous advantage to any company, regardless of whether it is using a single elumatec machine or an entire plant full of elumatec profile machining centres. And since eluCad manages machining programs in a non-machine-specific manner, these programs can be used again at any time on any elumatec machine. All a user needs to do is select the right “target machine” that will be used to do the job.

Eliminating the need for hard-to-find qualifications
Another important advantage is the fact that eluCad is intuitive and easy to use, something that becomes obvious as soon as one looks at the alternative: DOS machines with long tables and countless ISO code lines. These machines require machine operators with extensive expertise and a unique ability to visualise things in their mind. In contrast, eluCad simply shows the actual profile and the machining operations that have been entered. The fact that the workpiece is displayed in a multi-dimensional visualisation interface, combined with clearly laid out input fields that users can easily fill out with the relevant production data, makes work much easier. In addition, this gives companies added flexibility when it comes to finding qualified personnel. “Nowadays it’s much easier to find personnel who can handle the Windows-like layout of eluCad than DOS specialists”, Gunnar Lange explains. Certainly not an unimportant aspect when one considers that the sudden absence of a DOS expert can result in production grinding down to a halt when conventional DOS programming is in use. That’s where eluCad shines: By allowing programs to be created by Work Preparation personnel instead, it enables companies to hire personnel with less stringent qualifications.

A treasure trove of know-how
eluCad’s wide range of functions also gives companies more flexibility by ensuring that they don’t depend on the knowledge of a single employee. In other words, by providing these companies with the cumulative know-how provided by elumatec subsidiary elusoft. This is achieved by means of functions such as path and tool optimisation, collision checks and tool assignment. “eluCad does these things automatically, saving time and significantly increasing the reliability of our customer’s profile machining operations”, Gunnar Lange explains.

Automated data imports
eluCad also saves time and effort when importing data from upstream window manufacturing software. While it’s true that DOS machines can also import this data directly, implementing required changes is extremely time-consuming, whereas eluCad makes it easy to modify and add to imported data. Moreover, the software has a variety of automated data import options. When importing 3D data, eluCad will use a 3D model to identify the various relevant profile dimensions and machining operations in a matter of seconds – even when sophisticated industrial components are involved – and automatically generate the appropriate machining program. Meanwhile, the CSV import function is an effective solution for extensive jobs, such as making 100,000 similar, but not identical, façade parts. When using this option, eluCad will use the job data in an Excel table to automatically program the necessary machining operations.
Versatile options

Customers can use modules such as the bar optimisation module, bar machining module or clamp management module to customise eluCad according to their specific needs. “For companies that want to keep working with their tried-and-true elumatec DOS machines, eluCad is an ideal way to reach a whole new level of efficiency”, Gunnar Lange says from experience after talking with various users. In fact, using the software not only represents a step towards greater profitability and productivity for these companies, but also a step towards the future. On top of all this, elumatec focuses on making sure that customers can easily take advantage of the benefits provided by eluCad. Gunnar Lange explains: “We’ve actually put together a very attractive package for eluCad that we can offer to our customers with special terms (purchase or financing). This package includes the latest version of eluCad, the corresponding training and data import functions for a variety of window manufacturing programs. In other words, it’s the perfect way for our customers to boost their productivity quickly and easily.”