

ArtCAM Insignia: for decorative designs

USING features available in ArtCAM Insignia, Delcam's introductory 3D modelling and machining package or ArtCAM Pro, the advanced artistic CAD/CAM software, Delcam created a 10 m² decorative panel (right) using a router with a 1 m² working area ... and demonstrated how the tool settings can be saved for future use, should a similar project come at a later date. The technique was presented in one of a series of webinars to show different capabilities and applications of products within the ArtCAM range and the video is available on the YouTube channel www.youtube.com/delcamartcam

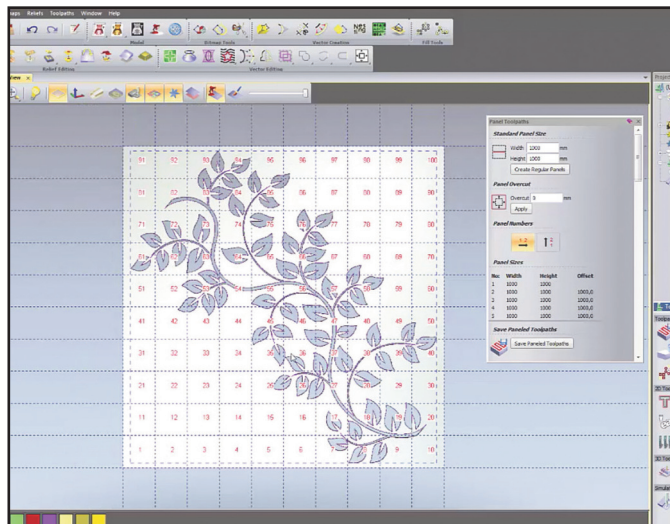
The process of creating an initial model, importing an image, creating vectors from it and then rotating and resizing it proceeded very much as it would in ArtCAM Express, Delcam's entry-level 2D design & 2D/3D machining software: see the article on p 6 for more details of this process.

As can be seen in our image (bottom left), the design now flowed off the edge of the model area. The choice could have been made to delete those vectors which had disappeared "off the edge", but in the demonstration they were not, saving time. A toolpath was created for a 12 mm end mill profiling tool. The toolpath was simulated, waste material removed and the result simulated, as seen in our bottom right image.

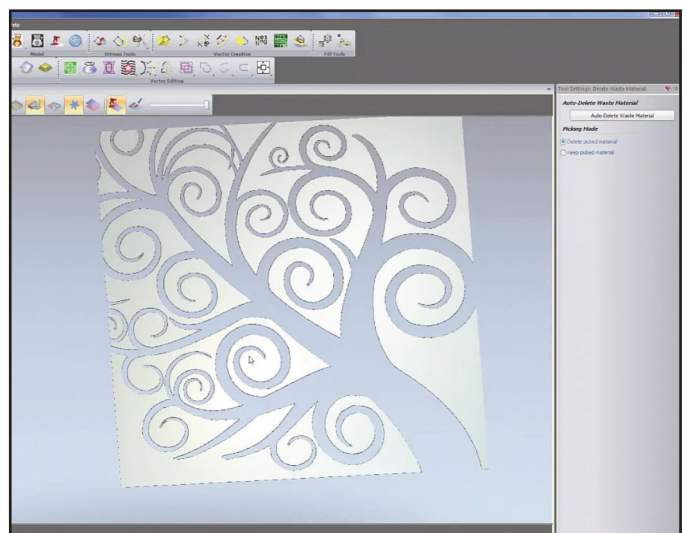
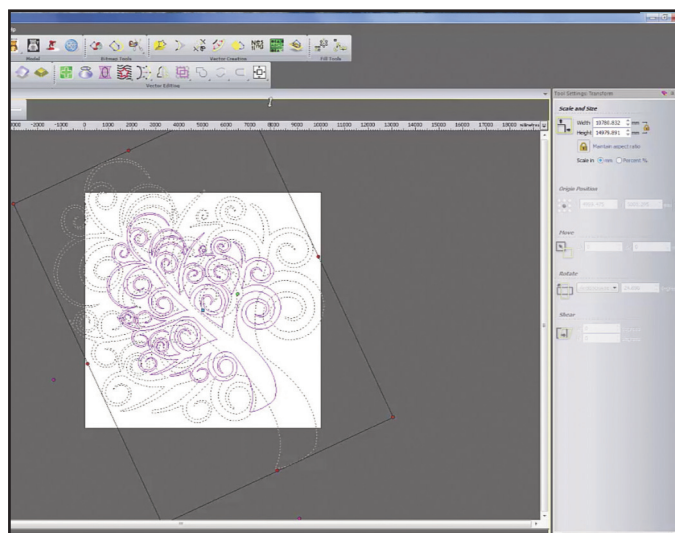
As described above, the size of the finished workpiece was greater than the size of the working area of the machine that would create it. This is not a problem for ArtCAM Insignia and above; a simple command will divide the model area into as many regular panels as are required to complete the design, and this is why having the design overflow the model area did not prove a problem when creating the toolpaths. Panels can be numbered in columns or in rows, as best suits the workshop, and the machine code for each panel is placed in a separate file by the post-processor, with a summary sheet that can be printed out and provided in paper form, as well as digital, for the shop floor so the separately machined panels can be assembled correctly!

Another advantage of ArtCAM Insignia and above is that the basic toolpath settings, such as tool used and if the profile is inside, outside or along, can be saved as a template for future reference. As an example, the demonstrator asked the audience to imagine that a month or two later a similar job came along, same size panel but with a different image, this time a leaf pattern.

After the image had been imported, the vector created and the design positioned, the existing toolpath template was called up



Top of the page, the completed decorative panel. Below left, the design in the process of being rotated and enlarged; below right, simulated with the picked material removed; above, a similar leaf design, showing the allocation of the panels across the design.



and applied to the new project. The only change was that, when waste material was removed, it was the picked material that remained rather than being deleted, since this design remains fully within the borders of the model.

Illustrated left is the design after it had been divided into 100 separate panels for machining purposes. Needless to say, separate machining information would not have been saved for panels such as 1-6 for which no machining is required!

From the demonstration, using these options in ArtCAM Insignia is straightforward, with the menus and toolbars providing clear guidance as to how to proceed.

To find out more, visit the Delcam stand at W14: 8B220.

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