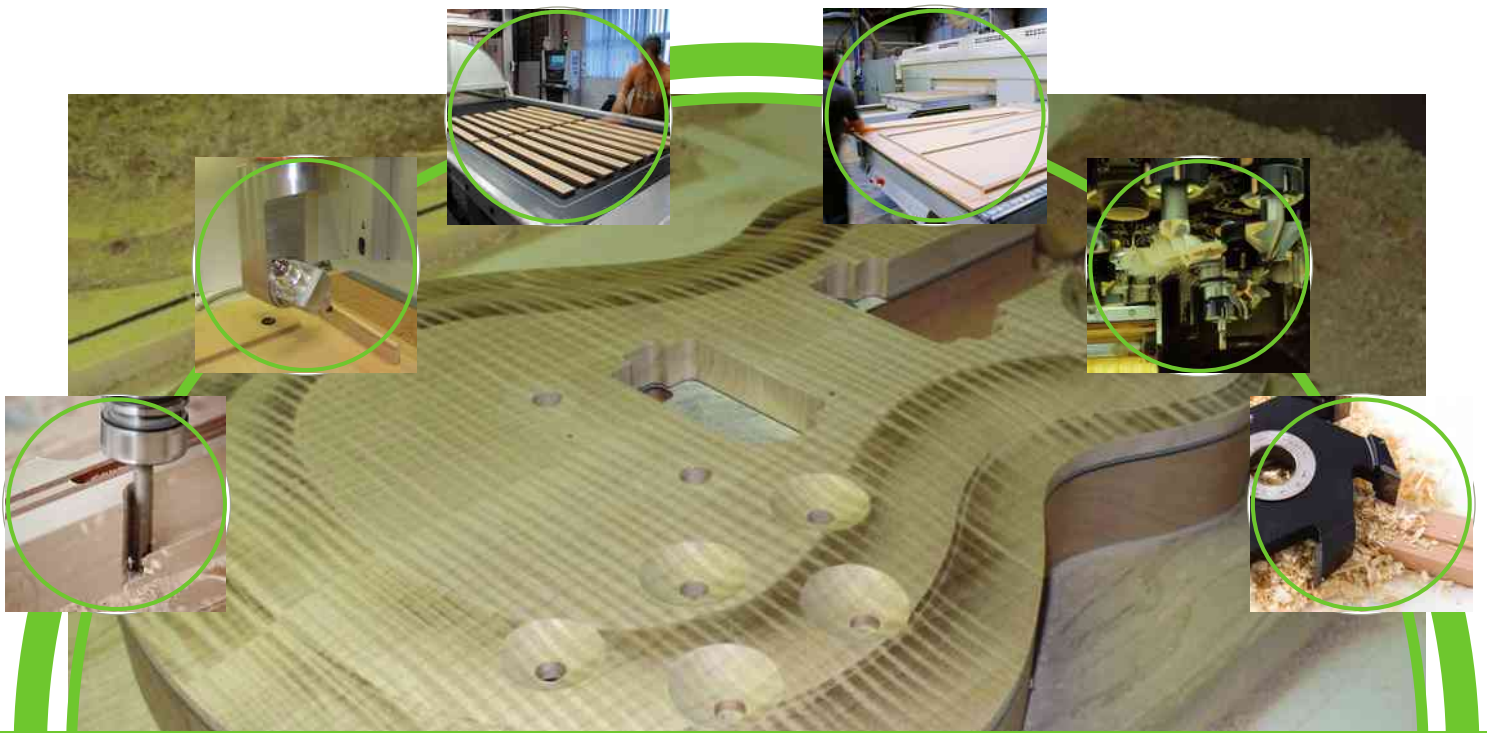


# Alphacam

## Router

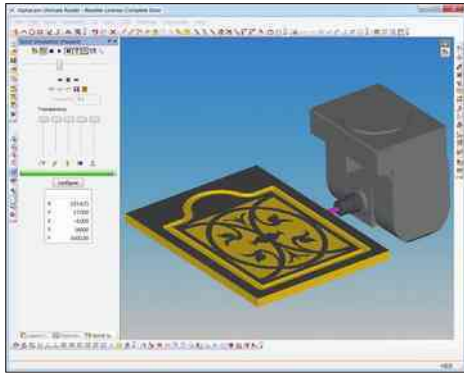
Alphacam Router is a full-featured, easy-to-use CAM solution for manufacturers wanting fast, efficient toolpaths and the generation of reliable, machine ready CNC code



alphacam

# Alphacam Router

(efficient toolpaths & reliable CNC code)



## Core Foundation

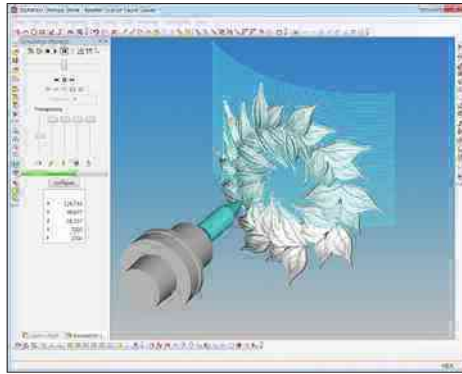
All Alphacam modules are built using one core foundation which includes geometry creation commands such as line, arc, circle, rectangle, polygon, ellipse, spline and polyline together with surface creation options.

Import options for DXF, DWG, IGES and a variety of solid model formats ensure compatibility with other CAD systems. There are also various geometry editing functions including undo, redo, move, copy, rotate, mirror, scale, break, trim, explode, join, extend, fillet, chamfer and offset.

All modules have user-defined tool and material libraries controlling many of the important machining parameters such as tool direction, automatic lead in and lead out, corner cut options (straight, roll round or loop), G41/42 tool compensation and automatic calculation of speeds and feeds.

## Aggregate Support

Horizontal aggregates, available on nearly all CNC routers, for machining hinge reliefs and lock mortises for example, are easy to control using Alphacam. Standard operations can be created and saved within the system and inserted on to work planes when required, saving programming time.



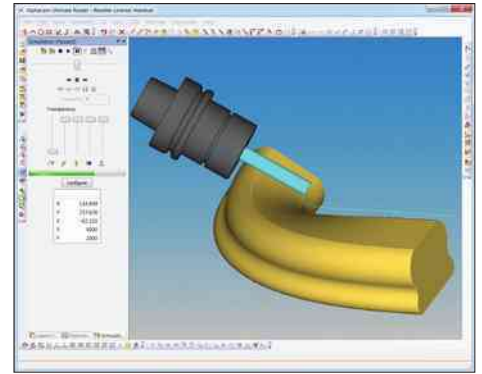
## Alphacam Art

The easiest way to go from a 2D drawing or sketch to high quality 3D low relief and CNC toolpaths.

Alphacam Art, powered by Vectric's Aspire technology is 3D relief modelling and machining software for CNC routing and engraving projects such as carving decorative ornate panels and doors, swept flourishes, custom millwork, architectural mouldings, dimensional signage, bespoke company logos, jewellery pieces, custom gifts and awards.

Alphacam Art's unique 3D component construction tools make it easy to work with existing 3D models and to design your own 3D shapes.

With Alphacam Art, users can quickly and easily convert 2D sketches, photographs, drawings and graphic designs into unique high quality 3D carvings and designs. Alphacam Art has been developed to give users complete flexibility and control when designing 3D CNC projects. Using a flexible component management logic, users can easily and interactively change the size, position, orientation and material properties of regions or individual components in a project at any time.



## Routing

Ease-of-use is just one of the reasons that Alphacam is the industry standard and system of choice for programming CNC routers. Tooling and machining techniques unique to this industry are accommodated by Alphacam's dedicated Router modules.

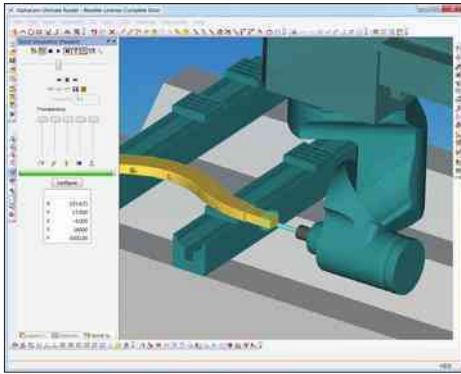
## 3D Routing

Multiple 3D rough and finish machining strategies of surfaces, STL models and other native CAD models are available within Alphacam. These strategies can be applied to any work plane, allowing for 3 plus 2 machining to be programmed using Alphacam on machines with 4 and 5-Axis rotary heads.

Alphacam's Ultimate module is capable of 4 and 5-Axis simultaneous machining of surfaces and 3D trim curves, often used for finishing chair backs.



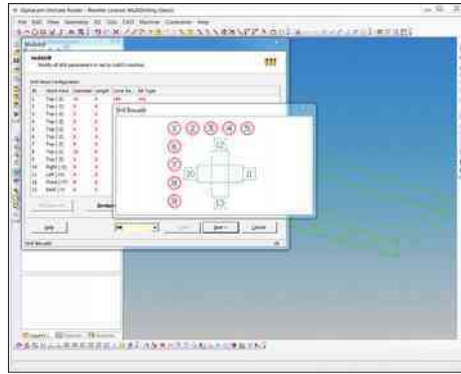
# cient toolpaths & reliable CNC code)



### Multi-Axis Machining

Head mounted rotary axes on CNC routers can be programmed at any orientation. Aggregates with a programmable rotary axis and manual tilt are fully supported, as well as routers with fully interpolating 5-Axis heads. Safe rapid moves between planes are automatically controlled and verified using advanced solid simulation.

Alphacam's powerful post-processing ability means that the advanced functionality of all CNC controllers is utilised, including plane rotation.

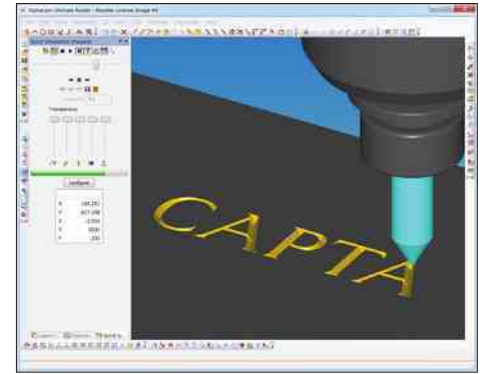


### Dedicated Drilling Unit

Drilling paths can be optimised for any drill unit using Alphacam's Multi-Drilling command. Holes are matched to the drill diameters and automatically machined, multiple drills are selected simultaneously when a standard 32mm pitch is matched.

### Nesting

Nested based manufacturing is made easy using Alphacam's automatic nesting functionality. Parts can be selected directly from the screen or as a kit; their orientation fixed, if grain direction needs to be maintained or rotated to any angle. Nesting supports tool lead in/out, support tags for small parts, avoiding loss of table vacuum and multiple depth cuts, if an onion skin is required.



### 3D Engraving

Artwork and text can be easily created and machined using Alphacam's powerful 3D engraving. This command contours geometries with a form tool, and on meeting a sharp corner automatically retracts the tool to produce a sharp corner, often referred to as embossing.

### Post Processors

With manufacturers facing ever increasing global competition, it is essential to maintain maximum machinery efficiency to ensure optimal production throughput. Having an optimised link between Alphacam and your CNC machines, through the use of post processors, is a key component in attaining this efficiency.

Having developed post processors for virtually every machine control in use today, Alphacam has the knowledge and experience to fine tune your CNC output ensuring maximum yield and quality in the shortest possible time.

