MAYKA EXPERT

Version 7

## When your looking for that competitive edge in 3/4/5 axis and more !
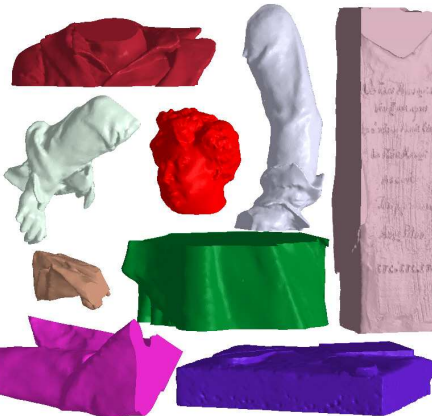
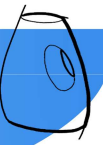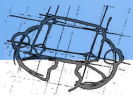## Indispensable tools for model preparation prior to machining

- Splitting / dividing of models when :
    - Model size exceed the CNC machines capacity.
    - Zones of the model are inaccessable.
- Automatically or manually create an optimised array of nested parts.
- Re-orientate a model according to any reference face with the mouse.
- Powerful interactive object placement tool.
- Extract any curve on the model with automatic control of the silhouette, the edges of the horizontal planes, the partion lines...
- Select, mask and fill holes.
- Projection and mapping of textures and designs to create detailed reliefs.
- Punch and die feature with constant offset for forming tools.
- Adjust the mesh with intelligent decimation.
- Display grids in greyscale and colour mapping
- Merge seperate model parts
- Contour editing

Model

Split into sections

Arranged in an array
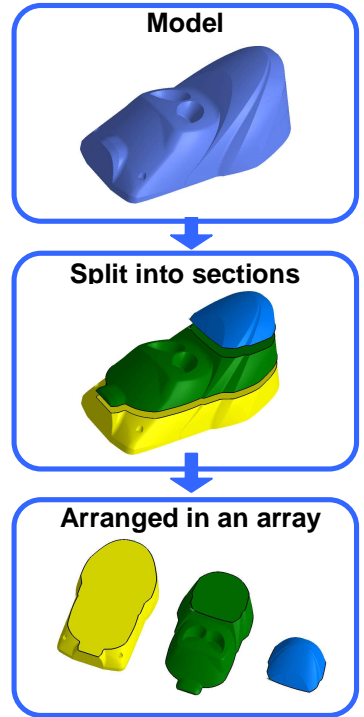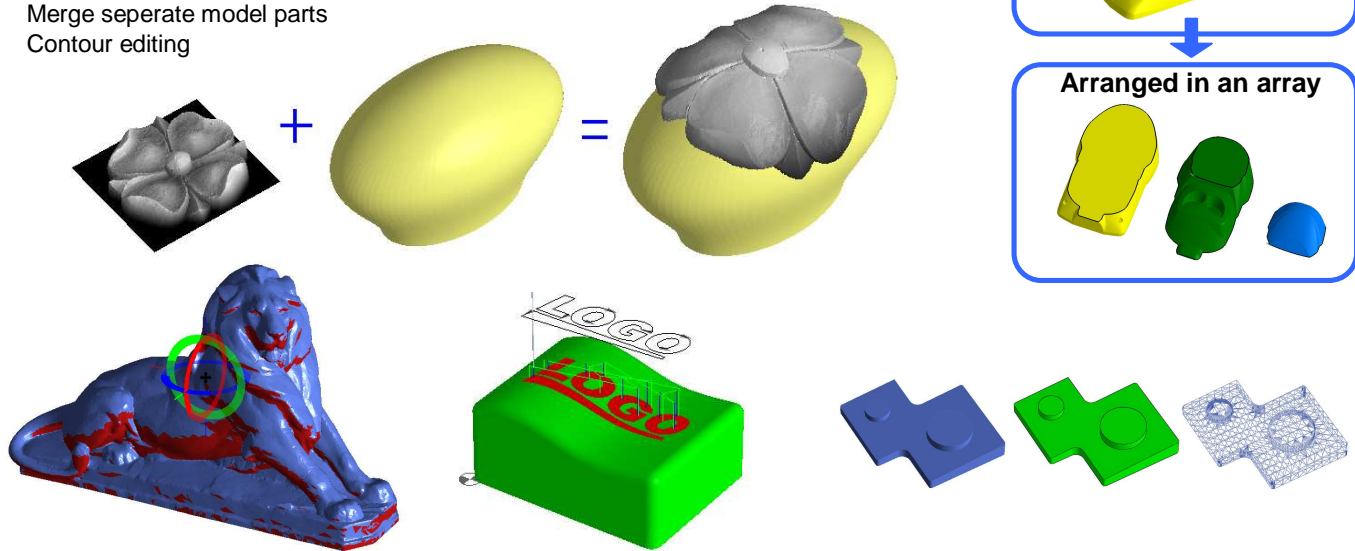
Meet the real world with Mayka …

When **Alexander Dumas** (who wrote The Count of Monte-Cristo, Three Musketeers) needed to make an apperance after 200 years. His sculpture was scanned and imported into Mayka. **Creaform** used Mayka to scale and sliced it into manageble parts for machining. In a few days the 3 metre master was ready for casting in bronze.
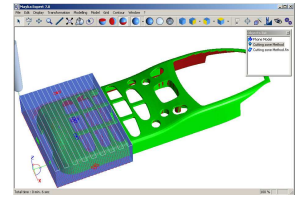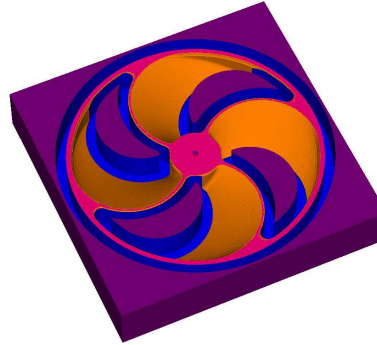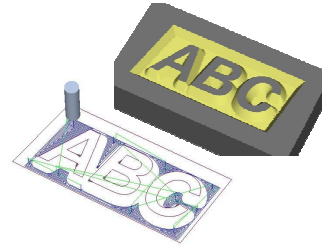

Picasoft S.A.S. - Beauzy - Route de Châtres - 41300 Theillay - France - Tel : (33) 254 833 216 - Fax : (33) 254 833 572

www.picasoft.com - e-mail : info@picasoft.com

The functionalities

2D machining

- Contouring with left and right tool compensation
- Spiral pocket roughing and finishing cycles
- Sweeping (Hatching) areas
- Contour centerline cutting
- Raised angle carving with conical tools

3D machining

- 3, 4, 5 axis machining (4/5axis positioning & continuous)
- Cutting in all directions with cartessien, polar, conical, spherical and cylindrical methods.
- Inside and outside cylindrical cutting for rings etc.
- Optimised roughing with plunge, peck and ramp entry
- Model profiling of all boundries
- Z constant waterline cutting
- Automatic parallel planes cutting pocketing cycle's
- Cutting of all curved and non flat areas automatically
- Cutting limited to the partion line of the model
- Drilling, surfacing, core roughing
- Tool geometry and spindle collet collision detection.
- Residual machining during roughing. Mayka automatically limits the tool to the residual material of the original block and calculates a new residual block for the next process.
- Rest machining for finishing. Mayka shows the non machined surfaces, for example when the tool is too large for the models features. Then the following operation with a smaller tool will only cut the non machine sections.
- Tools specific to the machining of stone:
  - Epanelage (Slitting)
  - Core drilling with auto waste ejection cycle
  - Management of disc cutting tools
- Engraving of 2D outlines onto 3D models
- Machining of textures and reliefs to create detailed designs and lithophanes.
- Toolpath simulation and animation with cycle timings
- Rhinoceros 3D Plugin to transfer curves and meshes directly into Mayka.

5 axis JOBS CNC machine with Mayka Expert
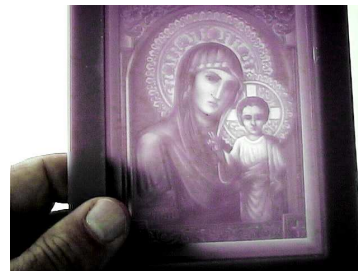
Compatibility

Mayka Expert is full compatible with:

- 3D models : 3D-DXF, STL, Rhinoceros(3DM), 3DStudioMax(3DS)
- Images (gif, jpg, bmp) to utilise 3D grey scale levels
- Low reliefs : Type3 (vna), Stenza (mvg), Picza (pix), Terrain IGN.
- Vectors in 2D-DXF, Illustrator (ai & eps)

The powerful parameterised post processing engine allows all 3, 4 and 5 axis machines to be utilised with Mayka's post processors. Specific development is also available for special milling and robotic machine configurations.