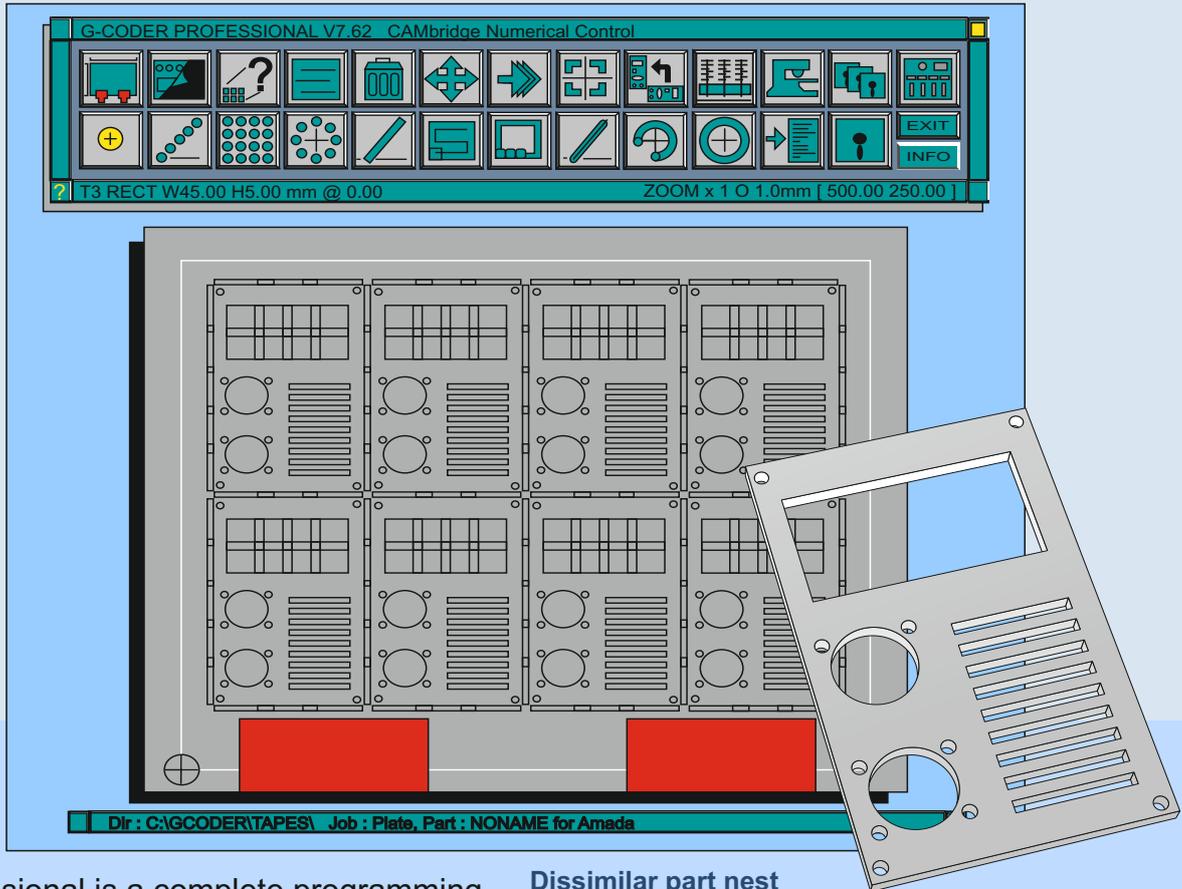


Quickly and easily from drawing to finished part



G-CODER Professional is a complete programming system developed specifically for CNC punching and nibbling machines. It has been designed to be simple to use yet powerful enough to program the most complex of component shapes.

#### Direct Punch Mode

Direct Punch Mode is unique to G-CODER Professional and allows you to start producing programs immediately without having to draw the component. You simply select the punch you want to use, then select the appropriate punch action ie single punch, row, grid etc and then enter the co-ordinates for the start point of the punch action. If you have not used a drawing system before, this method greatly reduces your learning curve, you can then learn to use CAD at a later stage at your leisure. If a job is produced using the direct punch method it can then be transferred to your CAD system for dimensioning or may be used as a template to create a working drawing.

#### Snap to Geometry Mode

If a drawing is transferred into G-CODER Professional via DXF the punches can be automatically snapped to the component profile, this saves you having to calculate the start point of a punch action.

#### Autoprogram

Drawings from AutoCAD or any CAD system that supports DXF can be imported into G-CODER Professional for automatic punching. G-CODER Professional will scan the drawing and then select appropriate tools from just the current turret or from the turret and library to punch the component. Tools automatically selected from the library will be placed into the correct size turret station.

#### Dissimilar part nest

Dissimilar components can be stored as parts and then manually or automatically nested on a sheet. Nests the true outline of the components rather than the smallest rectangle around them. Checks the part to ensure that it can be mirrored or rotated on the designated punch press. Nesting of parts within parts. User defined efficiency to do a 'quick' nest or 'best possible' nest. More than one filler part may be specified. User can specify part gaps, angles of rotation and if it can be mirrored etc..

#### Multipart

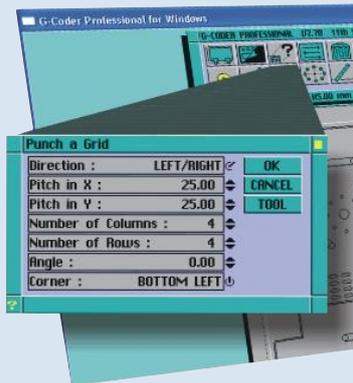
Once a single part is created it can be quickly copied across a sheet to form a multipart program. Multipart programs can be created with common slitting or alternatively a gap between components can be specified. The micro joint amount is automatically deducted from the components width and height. The slitting cuts directions are automatically optimised by changing their directions during the fit to sheet process. Program size can be optimised so they can be loaded into machines that have limited memory.

## Fast - Easy - Powerful

### Easy to Use

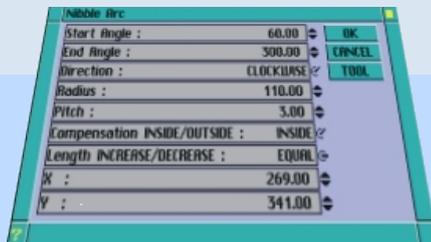
Clear easy to use and understand dialogue boxes guide you through the process of defining punch actions.

The terms used have been specifically chosen so anybody with a little sheetmetal experience will be able to use the system immediately



### The Query Button

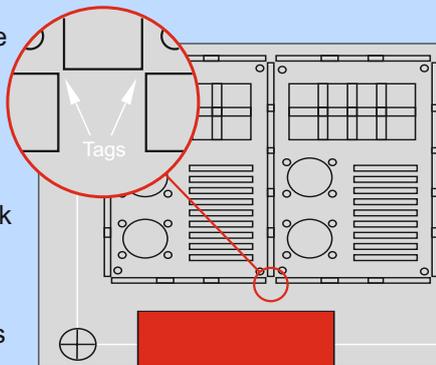
The Query button allows the user to find out the properties of any punch action on the sheet. As in this example of Nibble Arc we can clearly see all the details of the arc plus its X and Y position. Not only can we find out this information for any punch action but we can also click in the boxes and change any of the values. If you make a mistake you don't have to delete the punch action just use Query to change it to what it should have been.



### Automatic Tags

When slitting components they can be automatically tagged at any position so they are held within the sheet ready for shaking out.

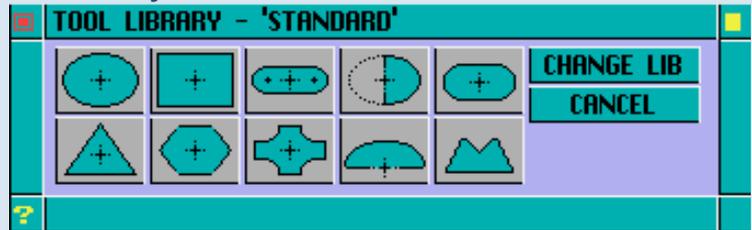
Tags can be placed at the components corners or anywhere along its edges. If the default value is used for the tag sizes and the components start to break out of the sheet during punching all you have to do is increase the default value and all the punches are recalculated



### G-Coder Professional includes the following

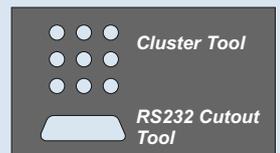
- Automatic dissimilar parts nesting.
- Auto-prog of DXF files.
- Complete optimization of tool path.
- Post processors available for all punch presses.
- Import & export of CAD files via DXF - the standard used by all AutoCad users.
- Dynamic move and rotation of parts.
- Query of any punch action properties.
- Automatic repositioning.
- Automatic detection of bad punching practice.
- Unique direct punch mode to get you programming immediately.

### Tool Library



Most common shaped tools such as round, rectangular, obround, single 'D', double 'D', triangular, hexagonal, crucifix and louvre are incorporated as standard shapes.

Any other shape can be defined as a special and no matter how complex its profile it will always be displayed on the sheet.

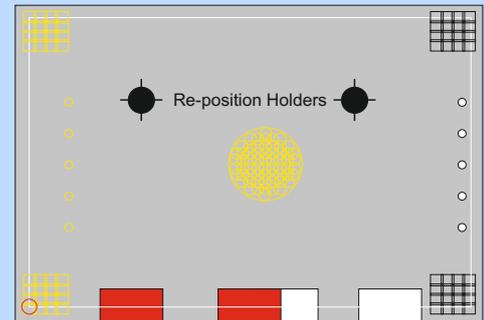


Any number of tool libraries can be created, for instance you may create a tool library for a particular type of material or certain type of component.

### Automatic Re-positioning

A re-position will be required if punches are in the clamp zones or outside of the travel limits in the X axis. During the repositioning operation clamps, travel limits and sheet holders will be shown in black when in an invalid position.

The mouse is used to move a vertical white line to indicate the area to be punched. Normally you would move the white line to just to the left of the travel limit line.



The clamps are then moved so that the travel limits encompass the next area to be punched.

Next the re-position holders are placed on the sheet, taking care not to position them over a punched hole.

### Agent



Cambridge Numerical Control

Units 8 & 9 Royce Court Burrell Road St. Ives Cambs PE27 3NE Tel : +44 (0)1480-468639 Email sales@cnc.uk.com