

# **Powerful CAD CAM, Made Easy.**



## **OneCNC** XR8 Wire











2 Axis

4 Axis

No-Core

Cut Direction

Multi-Cut



#### Versatility

Fast, easy, and productive is just the way it should be using OneCNC to program CNC Wire EDM machines. OneCNC 2-axis and 4-axis wire cut paths let you choose the best method for the results you need over the wire motion, angle, entries and exits, and much more. OneCNC users get that control in a clear, easy to understand way. OneCNC Wire complements the functionality of other products such as OneCNC Mill and Lathe.



## Advanced Features

Quickly and easily program your precision part shapes with constant tapers or variable tapers using 2 and 4 axis wire cut paths. Open, closed, inside or outside cutting arc defined by wizard driven settings. This powerful software allows users customized skim passes, independent lead-ins and lead-outs, glue stops, cutting conditions and 4 axis synchronization. OneCNC is a complete wire EDM programming solution that works with Fanuc, Sodick, Brother, Mitsubishi and other CNC Wire EDM machines.



## Model Cut

OneCNC Wire EDM is model aware featured for wire cut path programming. A part model to be cut either external or internal can be automatically processed just by selecting the model. OneCNC will read the model top and bottom profiles and model seam lines automatically to synchronise the part in accordance with the model shape and angle. This means that OneCNC can make wire cut path directly from the model without the need to construct geometry and restriction synchronisation lines.



## Image Tracing

OneCNC Wire EDM makes it possible to work with files including PNG, JPG, and raster-based images and create an automatic trace outline used for wire cut path operations. After tracing the wireframe tools can be used to prepare the trace outline for processing in preparation for wire cut path programming. The image could be a corporate logo to be cut or other artistic shapes to be cut profiling around the traced image.





## 2 Axis Cutting

OneCNC provides universal EDM 2 axis profiling cycle to machine any profile shape for die, core or cavity, shape parts. This versatile machining cycle supports any number of straight or tapered rough and skim cuts while optimizing wire-cutting paths. Strategies for all types of EDM machining such as punch or die and combination of multi-cavity parts for unattended machining are included. OneCNC automatically handles the necessary wire-cut and wire-thread instructions and various part-handling functions including flushing, tank fill, and tank drain operations.

## 4 Axis Cutting

Quickly program parts with complex tapers or completely independent freeform shapes, top and bottom, with OneCNC XY lower and UV upper 4-axis contouring cycle functionality. Select the upper and the lower profiles and the 4-axis cutting process is automatically synchronized and if they are odd numbered in entities you can add an unlimited number of additional synchronization or restriction lines. OneCNC adds glue gaps automatically and creates skim cuts for unattended machining.

## No-Core Cutting

Handling core slugs efficiently during EDM machining becomes more difficult with smaller part size. OneCNC provides a special EDM no-core hole or pocket shape machining functions to wire erode away all the material inside a given cavity without creating a slug. With no-core cutting, a start hole is drilled into the part and OneCNC recognizes and automatically machines the slug, preventing wire breakage and minimizing machining time.



## Cut Direction

OneCNC Wire cut paths include functionality to control the wire cut path directions for both hole and punch style cutting. The wire cut path cutting direction can be controlled for single direction or reverse direction for the rough cut, skim cuts, and tab cut-off to provide the most efficient cutting methods to suit the application. You can reverse the cutting direction for any tab cut or skim cut or cut-off operation to control single or multiple passes.



## Multi-Cut

OneCNC provides functionally to copy and array multiple same or separate parts. Multiple parts can be positioned and programmed in 2 Axis or 4 Axis for automated un-attended operation using machine cycles to cut the wire move to the next part rethread and join the wire then continue to cut the next part. The only limit to the number and size of part is the size of the machine cut area.











#### **OneCNC** Verification

Accurate and reliable dynamic verification and eliminates the need for expensive dry runs on the machine. Easily ensure the cut path delivers exactly what you intended with OneCNC verification tools. These tools include dynamic viewing and backplot of the cut paths. Minimize downtime, maximize manufacturing efficiency, and cut machining costs while gaining complete confidence in your machining processes.

#### **OneCNC** Design

This gives your shop the best possible foundation for shop-tested CAD tools. From wireframe and surfacing with associated dimensioning to solid modelling, OneCNC ensures that you're ready for any job. The streamlined CAD engine makes design work easy because each piece of geometry you create can be incrementally or absolutely created. Combined with all traditional CAD geometry functions consolidated into a few simple clicks, simplifies the creation of even the most complex parts.

## Wizard Driven CAM

Ease of use is a very important factor in creating NC wire cut paths. To enable this all functions of the Wire CAM are "Wizard Driven" to lead users through the process with the minimum number of clicks. This ability allows the user to quickly produce wire cut paths with synchronisation without missing important settings. Work settings can be saved to further simplify use for commonly used functions.

## **OneCNC Industry 4.0**

OneCNC addresses the emerging shift in manufacturing towards Industry 4.0. This ensures users can merge into these goals and have the full benefits of digitalisation. Complete connectivity is provided by way of translators or direct file importation that handles the latest STEP IGES Parasolid SLDPRT SAT 3DM and VADFS to suit Solidworks, Inventor, Rhino3D, Ironcad, Spaceclaim and others. All of these digital processes are necessary to ensure connectivity that comes with Industry 4.0.

#### **OneCNC Global Locations**

Australia - USA - USA California - UK - Germany Benelux - Italy - France - Denmark - Spain - Sweden Ireland - Poland - Turkey - South Africa - Mexico Japan - China - Taiwan - Korea - Indonesia - India

More Information: OneCNC.net



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