

## PROGRAMMING SYSTEM Solo EXPERT

**DCAMCUT Solo EXPERT** is a powerful CAD/CAM system for Wire EDM programming, beginning with 2-Axis up to 4-Axis that works directly on 2D and 3D CAD models.

Besides the integrated technology databases for all common machines, the efficient solution offers you extensive possibilities for import and export of CAD data. All the interfaces for direct data transfer from external systems are already included as standard.

**DCAMCUT Solo EXPERT** contains the CAD package **EDMCAD I**, the design environment to create individual parts.

### The scope of services can optional be extended by the following packages:

- **EDMCAD II** consists parametric CAD design for the construction of individual parts, assemblies & derived drawings based on sketches
- **EDMCAD III** consists parametric CAD design for the construction of individual parts, assemblies & derived drawings based on sketches incl. dimensioning and element dependencies.
- **Multiaxis module I\*** (erosive grinding)
- **Multiaxis module II\*** (erosive grinding & multiplane machining indexed)
- **Multiaxis module III\*** (erosive grinding, multiplane machining indexed & multiaxis machining simultaneous)
- **Automation module** Automate processing sequences using color coding and names. I.e. select contours, assign contour properties, automatically assign job and cutting sequence definitions and cutting schemes.
- **MDSC module** For Mitsubishi, Sodick and Fanuc: Create multiple clamping with corresponding machining programs in a main program. Manage events and machining groups on the machine (batch machining). Create NC program output to different machine types with just one programming run.



\*Supported machines for the multi-axis modules on request.

## FUNCTIONAL SCOPE Solo EXPERT

**The DCAMCUT EXPERT SOLO package offers the following services:**

### **EDMCAD I**

CAD design environment for creating of individual parts, assemblies & derived drawings

### **2D Contour Generation**

2D contour definition based on CAD-sketches

### **2-level Contour Generation**

Controlled surface machining via existing upper and lower contour and synchronization lines (sketches)

### **2-Axis pocketing**

Standard 2-axis pocketing

### **Standard Simulation**

Standard simulation incl. offset surface calculation & visualization for all interfaces

### **Solid Simulation**

Solid simulation for 3D visualization incl. separation check & removability-analysis

### **Parametrics**

Associativity of existing EDM-jobs into model changing (automatic recalculation on volume models, surface models and sketches)

### **4-Axis Contour Definition**

4-axis contour generation on volume & surface models

### **Feature Recognition**

Automatic recognition & generation of EDM-contours on volume & surface models incl. filter functions

### **Template Technology**

Generation and listing of contour, job & program templates

### **NC Browser**

NC Browser technology incl. graphic feedback

### **Partial Destruction**

2-Axis partial destruction

### **Destruction with predefined islands with target offset**

2-Axis destruction with predefined islands with target offset

### **4-Axis Destruction**

4-Axis destruction, 4-Axis destruction with predefined islands & 4-Axis partial destruction

### **Space Curve**

Space curve processing for 3D curves

### **Approximation**

Reduction of linked line elements within a user specified tolerance into arcs, circles & lines (optional CAD output)



## SERIAL FUNCTIONS Solo EXPERT

- Global corner rounding
- Automatic gap closing in CAD-data
- Controlled synchronization on 2-level models
- Contour duplication with attached EDM technology
- Implementation of different approach/retraction strategies
- Simple programming of contour multiple connections
- Integrated finish-cut module with freely definable skim-cut strategies
- Free positioning between contours (via action-points) with and without wire
- Punctual manipulation of single contour elements (offset change, conic change, machine-specific commands)
- Automatic classification of the start points through the contour via drawn boreholes
- Multiple definition of boreholes
- Forced perpendicular approach/retraction
- Multiple definition of action points
- Cut off function after skim-cuts
- Overcut with full technology
- Shortened approach for skim-cuts
- Skim-cuts offset
- NC Data output with unicode-characters
- Adaption of local coordinate systems
- Filter for contour selection
- Contour & NC program code information while solid simulation



## **CAD-EXPANSION BUNDLE Solo EXPERT**

### **Included CAD Interfaces:**

- DWG (\*.dwg)
- DXF (\*.dxf)
- IGES (\*.igs; \*.iges)
- STEP AP203/214 (\*.step; \*.stp)
- Parasolid (\*.x-t; \*.x\_b; \*.xmt\_txt; \*.xmt\_bin)
- ProE (\*.prt; \*.xpr; \*.asm; \*.xas)
- Unigraphics (\*.prt)
- Inventor (\*.ipt; \*.iam)
- SolidWorks (\*.sldprt; \*.sldasm)
- Solid Edge (\*.par; \*.psm; \*.asm)
- Rhino (\*.3dm)
- ACIS (\*.sat)
- VDAFS (\*.vda)
- VRML (\*.vrl)
- STL (\*.stl)
- Adobe Photoshop Files (\*.psd)
- Adobe Illustrator Files (\*.ai)
- CADKEY (\*.prt; \*.ckd)
- IDF (\*.emn; \*.brd; \*.bdf; \*.idb)
- CATIA Graphics (\*.cgr)



## **MINIMUM SYSTEM REQUIREMENTS**

### **Solo EXPERT**

- Current Intel or AMD processor with SSE2 support
- 64-bit operating system recommended
- Microsoft Windows 10 Professional / 64 Bit
  - With CAD SolidWorks 2022 Microsoft Windows 10, 11/ 64 Bit
- 16 GB system memory (RAM)
- 30 GB hard disk space
- graphic card: <https://www.solidworks.com/support/system-requirements>
- USB interface and/or broadband Internet connection

We would like to remind you that a valid maintenance contract gives an opportunity to get the latest updates, new product versions and our hotline support services.



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