

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 III**, the design environment to create individual parts, assemblies and derived drawings based on sketches.

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

- Multiaxis module I (erosive grinding)
- Multiaxis module II (erosive grinding & multiplane machining indexed)
- Multiaxis module III (erosive grinding, multiplane machining indexed & multiaxis machining simultaneous)
- Multiaxis module IV (erosive grinding, multiplane machining indexed & multiaxis machining simultaneous) and freeform Wire EDM with Guiding Curve

Minimum system requirements:

- 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)
 - 12 GB hard disk space
 - graphic card:
- <https://www.solidworks.com/support/system-requirements>
- USB interface or broadband Internet connection (DVD on request)

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.

FUNCTIONAL SCOPE Solo EXPERT

The DCAMCUT EXPERT SOLO package offers the following services:

EDMCAD III

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

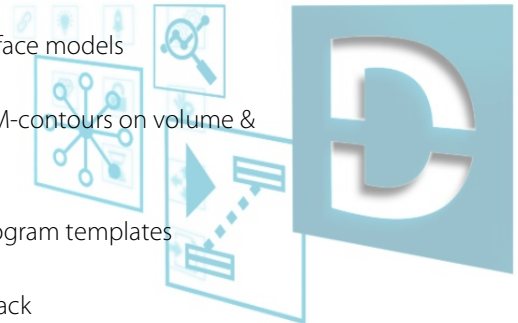
4-Axis destruction, 4-Axis destruction with predefined islands & 4-Axis partial destruction

Space Curve

Space curve processing for 3D curves

Approximation

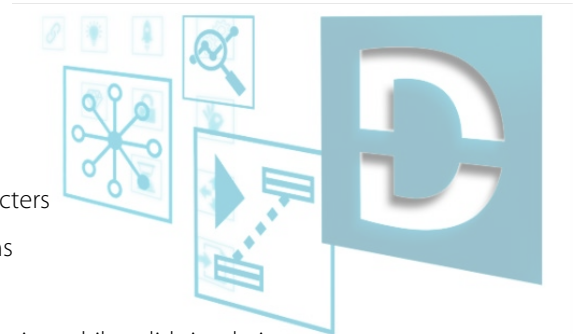
Reduction of linked line elements within a user specified tolerance into arcs, circles & lines (optional CAD output)



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 EDMCAD III Solo EXPERT

EDMCAD III consists parametric CAD design for the construction of individual parts, assemblies & derived drawings based on sketches incl. dimensioning and element dependencies. It also contains extensive design options on surface and volume models, including construction history.

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 (*.wrl)
- STL (*.stl)
- Adobe Photoshop Files (*.psd)
- Adobe Illustrator Files (*.ai)
- CADKEY (*.prt; *.ckd)
- IDF (*.emn; *.brd; *.bdf; *.idb)
- CATIA Graphics (*.cgr)

