

An advanced specialized solution for 2 or 4 axis wire erosion

WorkNC Wire EDM is a system that has been developed for wire erosion operations. It is the ideal software for molds, dies and tools as well as smaller precision parts common in sectors such as medical and watch-making.

WorkNC Wire EDM has an intuitive and easy to use graphic interface enabling fast programming of all wire erosion machine tools available on the market.

WorkNC Wire EDM enhances and complements the experience of the user enabling him to efficiently manage strategies created and optimized over the years. These productivity gains will enable companies to guarantee shorter lead times and lower costs by reducing cutting times and extending machine life.



WorkNC Wire EDM, a few clicks and you're cutting:

- Direct retrieval of any 2D or 3D geometries
- Integrated 2D or 3D solid or surface geometries
- Direct programming of 2D drawings or 3D parts
- Wizard for automatic analysis and extraction of simple or complex sections
- Vertical or angled 2 axis and 4 axis trimming with automatic synchronization
- Advanced machinery and specialized technology mgmt
- Machining simulation
- Comprehensive post processor support



Sescoi introduces WorkNC Wire EDM

A CLEAR, EFFICIENT ENVIRONMENT:

- Simple and easy to use graphic interface,
- Construction tree for direct management of machining operations,
- Context menu for simulating, copying and editing parameters or controlling toolpath status (visible, etc),
- Toolpath scheduling directly from the tree

DATA RETRIEVAL & HYBRID MODELING:

- Retrieval or creation of all types of 2D or 3D geometries thanks to its hybrid 2D/3D modeling environment (wire, solid and surface).
- Toolpaths prepared directly on 3D parts or 2D entities selection,
- Broad range of 2D or 3D CAD data import and export modules: IGES, STEP, DXF, DWG, Catia® V4/V5, SolidWorks®, SolidEdge®, Parasolid®, UG®, ProE®, CADDS®.

INTELLIGENT ANALYSIS & AUTOMATIC RETRIEVAL OF SECTIONS:

- Intelligent wizard for 3D model analysis (undercuts, heights, sections, etc),
- Automatic section extraction of 3D parts,
- Visualization by dynamic sectioning on the model
- Multi-section or mono-section of profiles to be cut,
- Multi-section extraction with threading points,
- Direct modification of extracted sections using 2D functions.

2 / 4 AXIS WIRE CUTTING PATHS:

- Vertical or angled 2D profiles cutting
- 2D spiral pocketing.
- 4 axis cutting (direct machining on surfaces)
- Automatic surface tangency extension,
- Automatic profile synchronization,
- Interactive synchronization with added coupling points,
- 3D manipulation of coupling points,
- Direct collision display,
- 4 axis cutting on 3D curves with variable drafting.

SPECIALIZED PROGRAMMING:

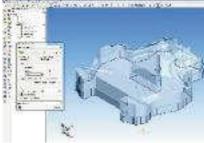
- Direct intervention on sections of geometry to create a specific behavior at this point (offset ...),
- Corner mode: point, square, rounded or rectangular,
- Edge loop protection to ensure sharp corners,
- Partial offsetting with transitional options: linear, round or smooth,
- Multi-tabs: definition of several threading points and automatic definition of adapted lead-ins near the start point for each new threading point,
- Tab (attachment): easy tab management with length and extension parameters,
- Lead-ins, lead-outs: lead-in and lead-out value management,
- Lead-in and lead-out radial movements: addition of lead-in radius and/or lead-out radius.
- Automatic management of open and closed contours: 2 and/or 4 axis toolpath creation
- Multi-contours: Easy creation of 2 and/or 4 axis toolpaths on multiple contours,
- Various options available: center wire, corrector, multi-passes, zig-zag, tab cutting on first pass on 'n passes or on all passes...

USER-DEFINED STRATEGIES MANAGEMENT:

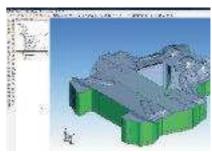
- Direct use of user's cutting strategies,
- Strategies including machine technologies,
- Filtering options according to material, material thickness or wire diameter,
- Direct use of strategies on the selected geometry.

MULTI-MACHINES:

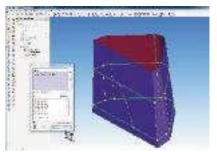
- Machinery and specialized technologies management,
- Machining simulation,
- Post-processors accredited for wire cutting machines (Agie/Charmilles, Fanuc, Hitachi, Makino, Mitsubishi, ONA, Sodick. ...).



Automatic profile recognition and extraction



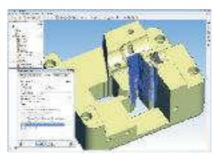
Upper and lower profile extraction



Automatic synchronization Add coupling points



Complex 4 axis cutting



4 axis cutting with partial interactive offset

