

# : peps wire edm

Advanced 2 and 4 axis Wire EDM solutions

PEPS Wire EDM is the industry leading Wire EDM CAD/CAM system developed specifically for the precision engineering, tool-making, mould & die, press and extrusion tool industries. It offers an intuitive environment for the comprehensive programming of all Wire EDM machines tools.

#### Extensive range of CAD interfaces

PEPS WIRE EDM comes with an extensive range of integrated CAD data translators that allow the direct import of CAD drawings in their native form or as industry standards. The standard system configuration comes with interfaces for DXF, AutoCAD DWG, AutoCAD-Inventor, VISI, SolidWorks, Solid Edge, IronCad and Solid IGES. Optional CATIA V4, CATIA V5, Unigraphics, Pro Engineer, VDA and STEP translators are available. PEPS WIRE EDM can display the CAD data as simple wireframe, solids and surfaces or a combination of both; which are used as the source for all cut-path programming and process simulation.

#### Comprehensive machine and postprocessor database

PEPS WIRE EDM contains a comprehensive database of Wire EDM machines from the leading Machine Tool manufacturers; including JOB and Script for Agie, CMD and CT Expert for Charmilles, Brother, Fanuc, Hitachi, Makino, Ona, Sodick, Seibu and Mitsubishi. The advanced postprocessors aren't just limited to the use of generic G and M codes; posts are easily configured to suit different machine models and configurations.

#### Multiple tagging and auto removal

PEPS Wire EDM allows you to give the part multiple start holes and it will automatically establish tags near to the start of each new hole location. In PEPS Wire EDM it is possible to select from several different methods of unattended machining. If your machine is equipped with automatic wire threading, then you will most likely want to run unattended as long and as often as possible. Unattended machining is performed by leaving the slugs attached while all of the preliminary cuts are taken. Numerous strategies are available to cut the part; for instance, taking all of the rough cuts before finishing, in which case all rough cuts are taken while leaving the tags attached, then the tags are removed, and finally the finish cuts are taken. Alternatively, take the rough and finish cuts while leaving the component or waste material in place and then remove the tag and finish this area.

intuitive graphical user interface

extensive range of CAD interfaces for both import and export

comprehensive machine and postprocessor database

feature recognition from solid models with cutting projection

roughing and finishing cuts easily applied to multiple punches or dies

variable land heights for extrusion dies and clipping tools

solid and wireframe projection wizards

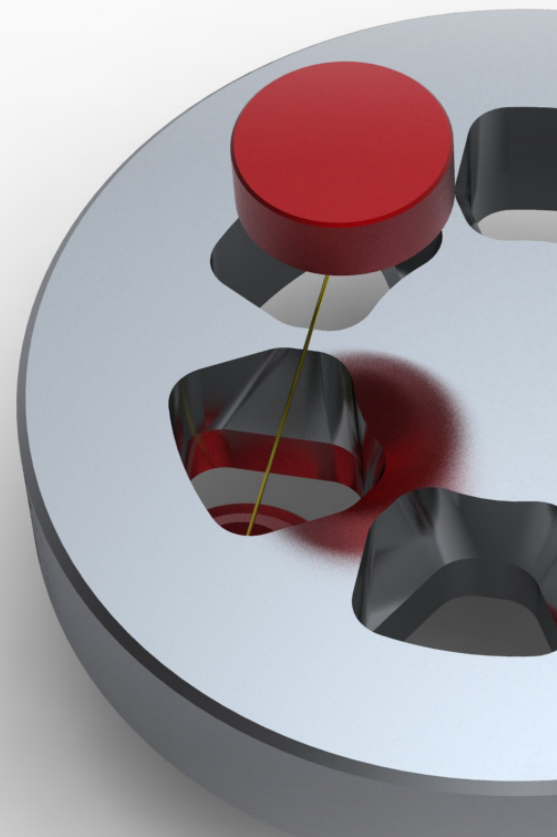
multiple tagging options with auto tag removal

reverse cutting with offsets and cutting technology changes

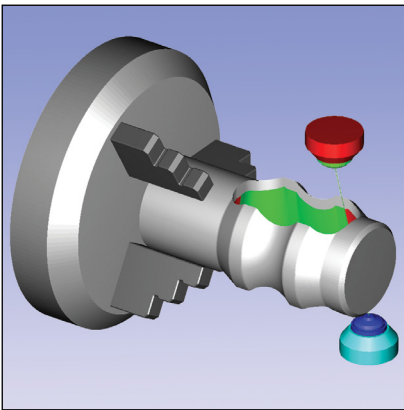
multiple strategies for corner types

no-core pocket destruction of round and irregular shapes

full solid 3D simulation, part sectioning and part comparison

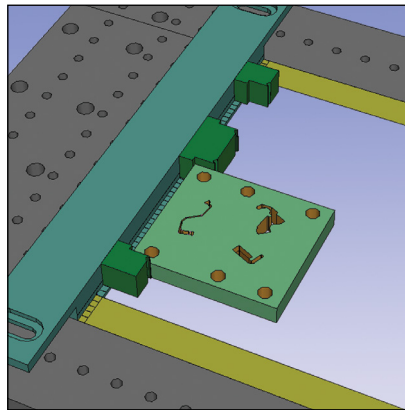


By using PEPS WIRE EDM, not only will programming time be minimised, but also the eventual cut-path will be far more efficient, saving further time on the machine. Add in the comprehensive simulation and proofing tools and you have a system that not only streamlines day-to-day production, it also reduces costly errors and eradicates the need for dry-runs, giving you're company a competitive advantage.



#### Applying cutting technologies

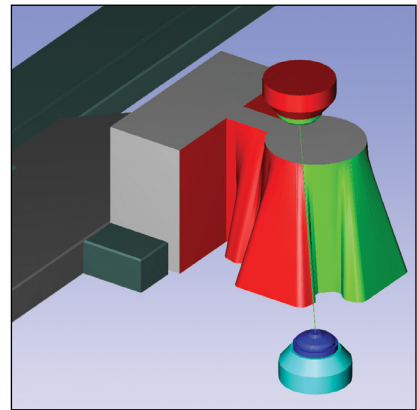
Geometry drawn in or imported into PEPS Wire EDM is used to create 'Profile Figures' ready for the application of cut technologies. Profile Figures are used whether a single component profile or no-core section is being programmed or as upper and lower sections for 4 axis machining. Individual Profile Figures can be generated by directly interrogating wireframe or solid geometry and PEPS Wire EDM can be used to quickly find linked items. Multiple Punch or Die profiles can be generated by the user selecting a set of lines and arcs representing the profiles, as typically appears on a press tool plate and where PEPS Wire EDM will automatically and rapidly create discrete profiles from the largest amounts of data. 4-Axis Upper and Lower profiles can be automatically synchronised, however, PEPS Wire



EDM also benefits from full manual override and the use of 3D constraint lines, which define how the upper shape will be matched to the Lower shape.

#### Toolpath verification and simulation

The completed wire path can be simulated using rendered solid model graphics, including fixtures and target parts. Any collisions that are detected are highlighted both on the model and via on-screen messages. As slugs become detached by cuts, the simulation advises the programmer that this is the case and graphically removes the part, emulating the cutting process on the machine tool exactly. Toolpath verification also tests whether the completed part is removable from the component. It is also possible to do a detailed part comparison between target model and cut part, which highlights any rest material or gouges.



#### Optional functionality

PEPS Wire EDM also includes specific functionality for turning tool design manufacturers. Component Profile geometry can be automatically modified to Tool Profiles by entering combinations of Top, Side and Front tool rake angles. CAM and GEAR profile generation is delivered to DIN/ISO and AGMA standards. Extrusion Toolmakers benefit from the Variable Land feature. Changes in land heights are easily applied at any number of points around the die face.

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