edgecam

: wire edm

Advanced 2 and 4 axis Wire EDM solutions

Edgecam Wire EDM is the the industry leading Wire EDM CAD/CAM system developed specifically for precision engineering industries. It offers an intuitive environment for the comprehensive programming of all Wire FDM machine tools.

Edgecam's Wire EDM solution provides you with the flexibility and confidence to manufacture 2 and 4 axis parts accurately and efficiently. Advanced functionality enables manufacture of complex shapes with irregular tapers with ease.

Extensive range of CAD interfaces

Edgecam 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, IGES and VDA. Optional AutoCAD Inventor, VISI, Solid Works, Solid Edge, CATIA V5, Unigraphics, Creo, IGES BREP Solid and STEP loaders are available. Edgecam 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.

Comprehensive machine and postprocessor database

Edgecam 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.

intuitive graphical user interface

extensive range of CAD interfaces for both import and export

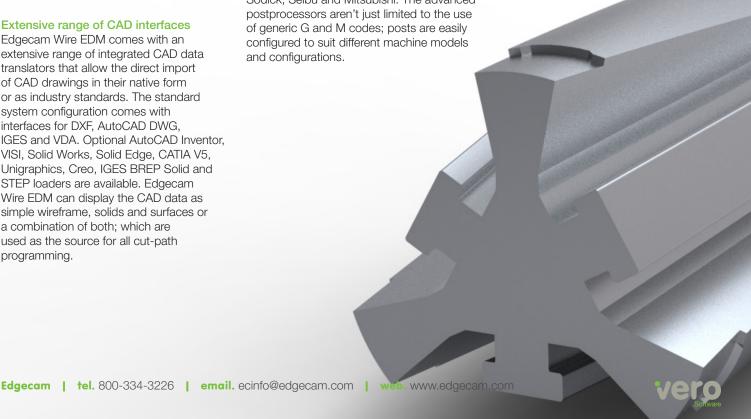
comprehensive machine and postprocessor database

> roughing and finishing cuts easily applied to multiple punches or dies

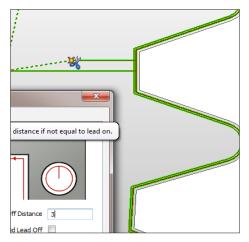
> multiple tagging options with auto tag removal

reverse cutting on roughing, finishing and tag removal passes

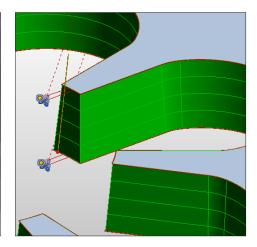
no-core pocket destruction of round, irregular and tapered apertures



By using Edgecam Wire EDM, your programming time will be minimised and your toolpaths will become more efficient, saving further time on the machine.







Applying cutting technologies

Geometry drawn in or imported into Edgecam Wire EDM is used to create 'Wire Features' ready for the application of cut technologies. Wire Features 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 Wire Features can be generated by directly interrogating wireframe or solid geometry and Edgecam 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 Edgecam 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, Edgecam 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.

Multiple tagging and auto removal

In Edgecam 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.

Automatic Cutting Strategies

Edgecam Wire offers predefined cutting strategies for automatic ordering of rough, finish and tag removal passes to accommodate common shop floor needs such as 'attended day cutting' and 'unattended night cutting'. Other features include:

- 4 Axis 'null span' support including reliable offsetting where small spans are eliminated.
- Square, conic and constant radius corner modes for variable taper.
- Separate clearance for main cuts and tag removal available.
- Additional M-Codes including 'Stop/ Optional stop', 'Power on/off' and 'Wire cut/Thread'.
- Automatic start hole file creation.
- Incremental lead on points to help eliminate 'witness marks' on finished component.
- Automatic approach and retract technology to allow power to be 'ramped' up and down gradually.



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