

TURNING WIRE EDM
MILLING TURNING
NG LASER & WATER
EDM JET CUTTING
WIRE EDM
TURNING
WATER
CUTTING
EDM
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TURNING WIRE EDM



PEPS

Wire EDM
Milling
Turning
Laser & Water
Jet Cutting

The infographic features a large blue box on the left containing a list of manufacturing processes. To its right is a red box with the number '4' and the word 'Modules'. Below these are two boxes: a green one with '40 Years' and an orange one with '40T Installations'. At the bottom are three light grey boxes labeled 'Innovative', 'Flexible', and 'Independent'. A list of features is at the very bottom. The background has a large, faint grey gear-like shape on the left.

4
Modules

40
Years

40T
Installations

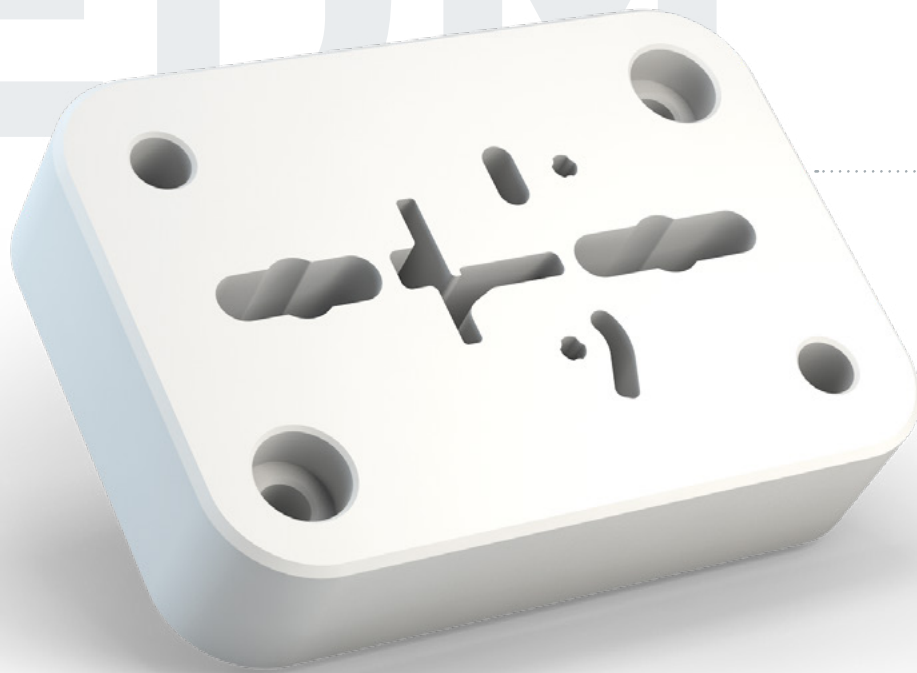
Innovative

Flexible

Independent

- Short programming times
- Fully automatic creation of the NC program by means of integrated feature recognition
- Extensive machining functionality
- Intelligent operation strategies to increase unattended machine run times
- Intelligent postprocessors including cycles and subprogram output
- Practice-oriented user interface

WIRE EDM



Continuous development on the pulse of time and extensive functionality mark the PEPS Wire EDM module.

Only a few of the reasons why the market leader is recommended by many manufacturers.

WIRE-Expert

Programming highly complex parts within seconds!

2,95 s

Import

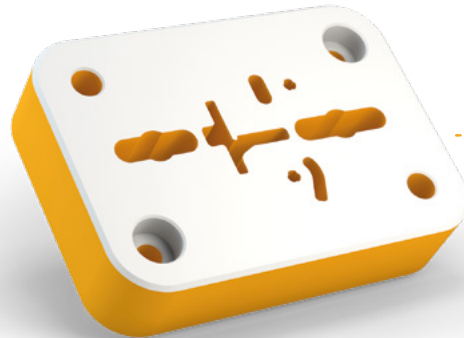
Automation with full control



1,89 s

Feature Recognition

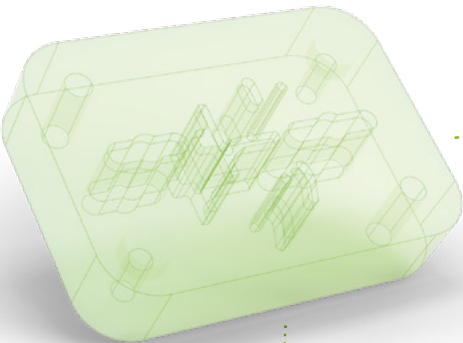
Recognising the geometry



3,41 s

Output

NC program creation.



2,04 s

Tool path calculation

Creation of the machining feature.



Technic Transfer One code. All machines.

Flip the switch! Reloading of technology and machining information when changing to another wire EDM machine from the integrated cutting schemes database is quick and error-free. Machine, manufacturer, control and technology data independent.



Technology database All products and types.

PEPS offers original technology databases for all common manufacturers. The user can either access the machine databases directly via interfaces, import the machine databases himself or is provided with a database which has already been converted.

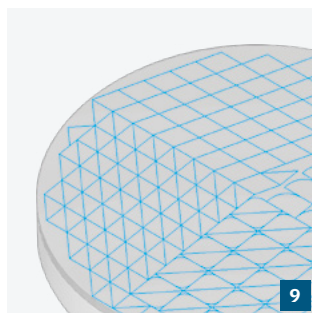
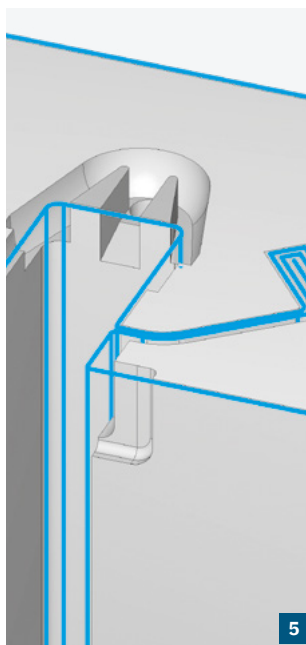
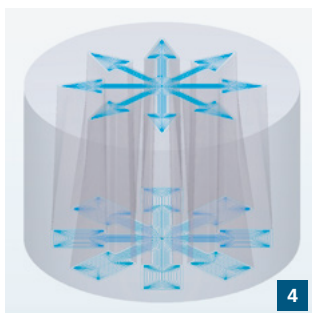
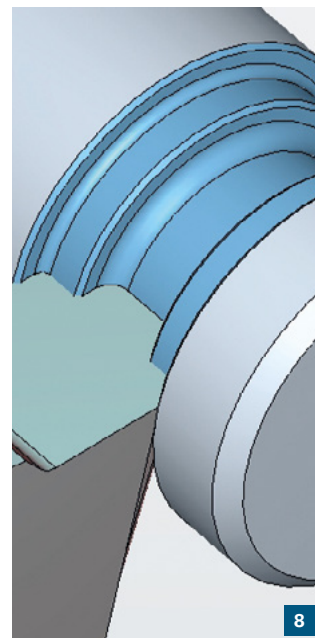
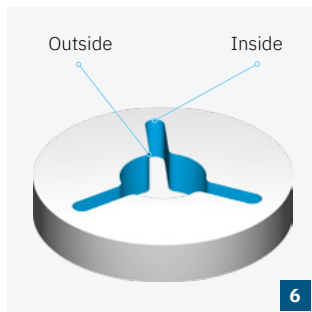
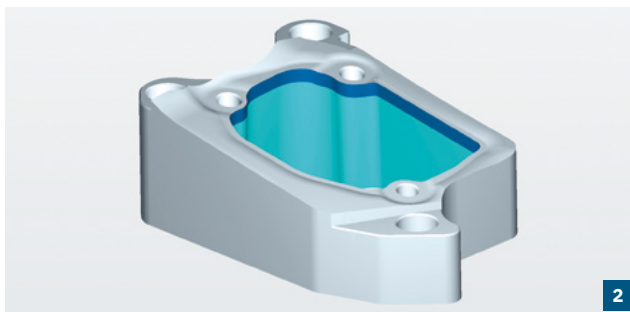
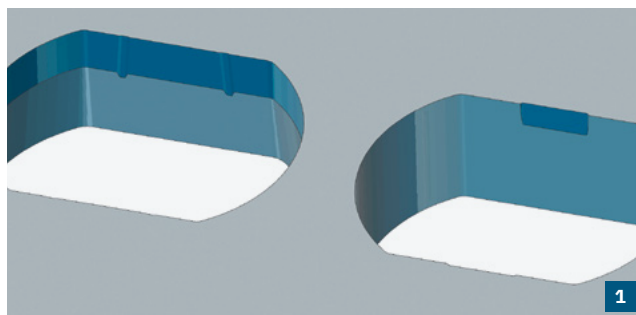
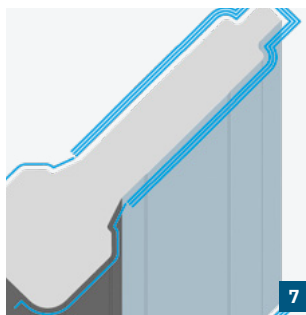
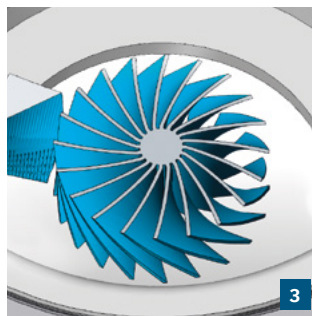
AC CUT* **AC Orange** **AC Fanuc** **AC Vision**
AC Millennium **AC Robofil** **Mitsubishi**
Fanuc **Sodick** **Makino** **ONA** **MSeibu**
Seibu **Excetek** **AccuteX** **Joemars**

* 20/30/200/300/400/E/Pxx0/Pxx0 Pro UNIQUA

Highlights

Optimisation in all fields of application.

- 1 Slug retention
- 2 Collar machining
- 3 Controlling rotation axes
- 4 Ruled surface pocketing
- 5 Partial pocketing
- 6 Radius manipulation
- 7 Part figure machining
- 8 Turning tool module
- 9 True contour machining



MILL-Expert

Automatic Feature Recognition

1,79s

Recognition of
open and closed
pockets

2,33s

Recognition
of holes and
contours



TINING

Select Expert

Interactive Feature Recognition



2,5D Milling

Simple and intuitive

- Multi plane machining
- Multi part machining
- Roughing strategies
- Finishing strategies
- Machine cycles

3D Milling

Efficient and easily operable.

- Roughing
- Finishing

35 %
time saving due to
highspeed calculation



More efficiency

Highspeed Roughing (HPR)

Thanks to a larger Z infeed and definable trim cuts HPR is highly efficient. Avoidance of full cuts and of changes of direction of machining features as well as the intelligent adaptation of the feed increase the efficiency even more.

Highspeed Finishing (HPF)

New, specifically adjusted 5 Axes Milling strategies allow significantly larger infeed with equal surface quality. Furthermore the tool tilted angle is definable by means of dynamic contact point control or tight work angle.



More precision

High-Precision Machining

enables highest production accuracy and best surface qualities because the tool paths are calculated directly on the faces of the model. The rework time through polishing is significantly reduced.



More time saving

Up to 80 % more time saving compared to multipass milling with ball cutters.

Jig and Profile Grinding

- Jig grinding cycles for holes
- Roughing and finishing strategies
- Plunge roughing and longitudinal roughing cycle
- Contour grinding with automatic calculation of the C-axis positions and the feed rate
- Fully automatic calculation of collision-free C-axis positions and 3D Simulation (optional in combination with SolidCut CAD)
- Origin offsetting
- Multiple clamping

Tool Database

The Tool Database contains the complete tool information as well as tool and holder geometries. The latest tool types such as barrel tools, convex tip mills and tapered circle-segment cutters are available.



5 Axes Milling

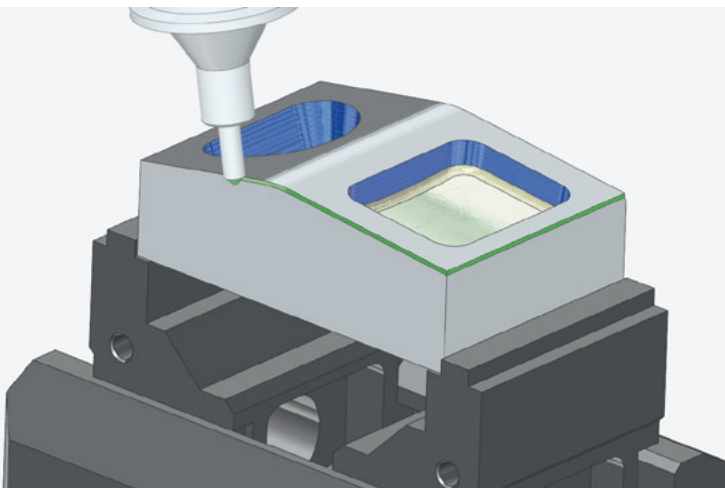
Simultaneous and efficient.

5 Axes Roughing

- Multiaxis roughing
- Multiaxis rest material roughing
- Adaptive high speed multiaxis roughing
- Calculation of collision-free tool paths
- Calculation of the lead on / lead off and connecting paths

5 Axes Finishing

- Swarf machining with / without tool tilted angle
- Constant Z
- Parallel cuts
- Between two curves
- Moulding channel machining
- Rotational machining
- Geodesic machining
- Corner machining



3D Simulation

High-quality 3D display of your machining in real time including material removal with no quality loss during detail magnification.



TURNING

Multiaxis Turn Milling

Optimum functionality.

The combination of turning and milling modules as well as the fully integrated Machine Kinematics Simulation offers an optimal solution for the programming of lathe-milling machines.

Multi-channel programming and Machine Kinematics Simulation: Main and counter spindle machining, simultaneous roughing with two tools, automatic synchronization and collision check by means of the integrated 3D Machine Kinematics Simulation.

Measuring the actual state

Part measuring in the current simulation status in the Machine Kinematics Simulation.

Fit dimension manufacturing without geometry modification

Calculation of the nominal dimension-dependent tolerance center without modification of the CAD model.

Technology change in sections of the geometry

Modification of feed rate and RPM or the insertion of an arbitrary M-Code and/or G-command.

Variants programming

Automatic creation of the geometry and machining features for families of parts

Machine cycle output

Shortening of the NC programs and simplified optimization through the supplementation of machining strategies.

Time calculation

Output of the machining times to an Excel list per tool, including the main, rapid motion and nonproductive times.



LASER & WATER JET CUTTING

2D 3D

Sheet Metal Working

Performance strength and efficiency.

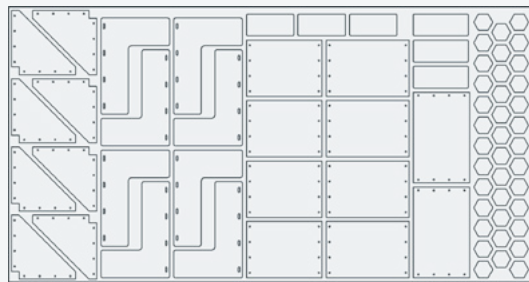
2 Axes Laser, Plasma and Water Jet Cutting: high-impact due to an effective NC program creation, a high automation level and optimal material utilisation. Fully automatic creation of the machining features including job management for machines of various manufacturers.

Complex, but still simple

6 Axes Laser and Water Jet Cutting: the integrated feature recognition not only creates tool paths fully automatically, but also a potential optimisation of the created machining suggestion is possible at any time. Thanks to a very high automation level high working efficiency can be achieved.

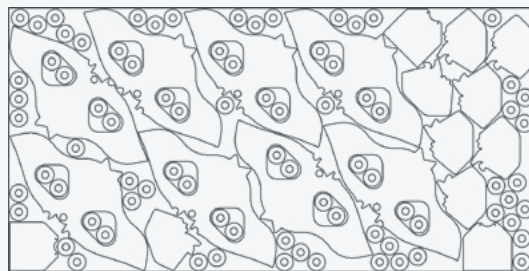
Cluster Nesting

Cluster Nesting enables semi-automatic nesting of parts on metal sheets and contains many functions that support the interactive nesting of parts.

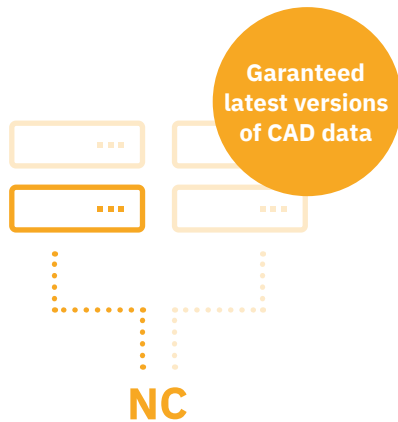


High Quality Random Shape Nesting

Optimal material utilisation: Thanks to multiple calculations the best possible result will be determined. Both the sizes of the metal sheets, the distances between the parts as well as the desired angular steps for the rotation of the parts are taken into account.

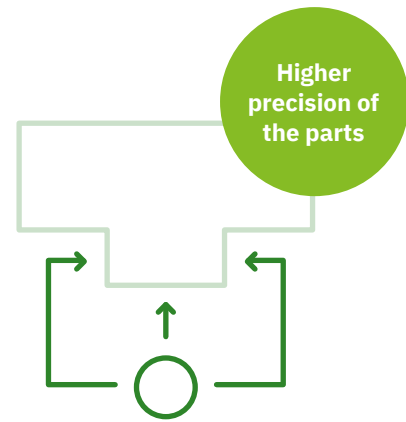


ADDITIONAL MODULES



CAMMAN

NC Program and Drawing Management system with latest version check of the CAD data.



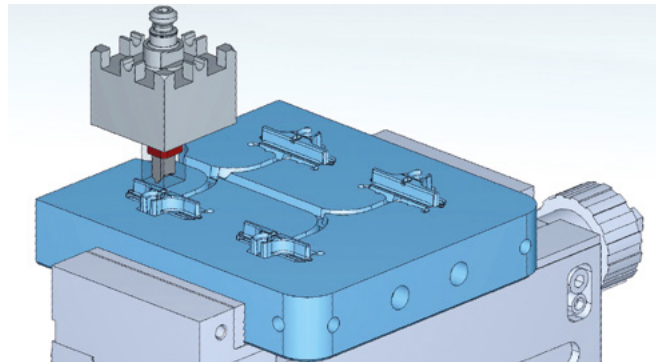
Measurement cycles

Determination of the exact position of a part before machining.



Gear module

Calculation and optimisation of involute gears via input of various parameters including all inspecting dimensions.



SolidElectrode

Creation of electrodes as well as for machining simulations with collision check. In conjunction with the corresponding postprocessor, it enables the creation of NC programs for vertical eroding machines.

JOBMAN

Fully automatic creation of nesting orders in consideration of material and thickness from various projects.

DNC systems

Safe data transfer between the server and the machine, including recharging.

Interfaces to PPS systems

Interfaces to all ERP/PPS systems, e.g. SAP, 3R Sigma, Zwicker, Schubert etc., are optionally available for CAMMAN and JOBMAN.



Get productive fast Training and introduction courses

Either in one of our training centers or on site, committed and practice-oriented coaches impart the basic and further content of the respective PEPS modules using practice-oriented application examples.



Training

Information, dates
and registration

All inclusive Support, trial installations and downloads

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