

ENGLISH

# PEPS

## V8

CAD/CAM  
SYSTEM



[Camtek.de](http://Camtek.de)

# SIMPLY PRODUCTIVE

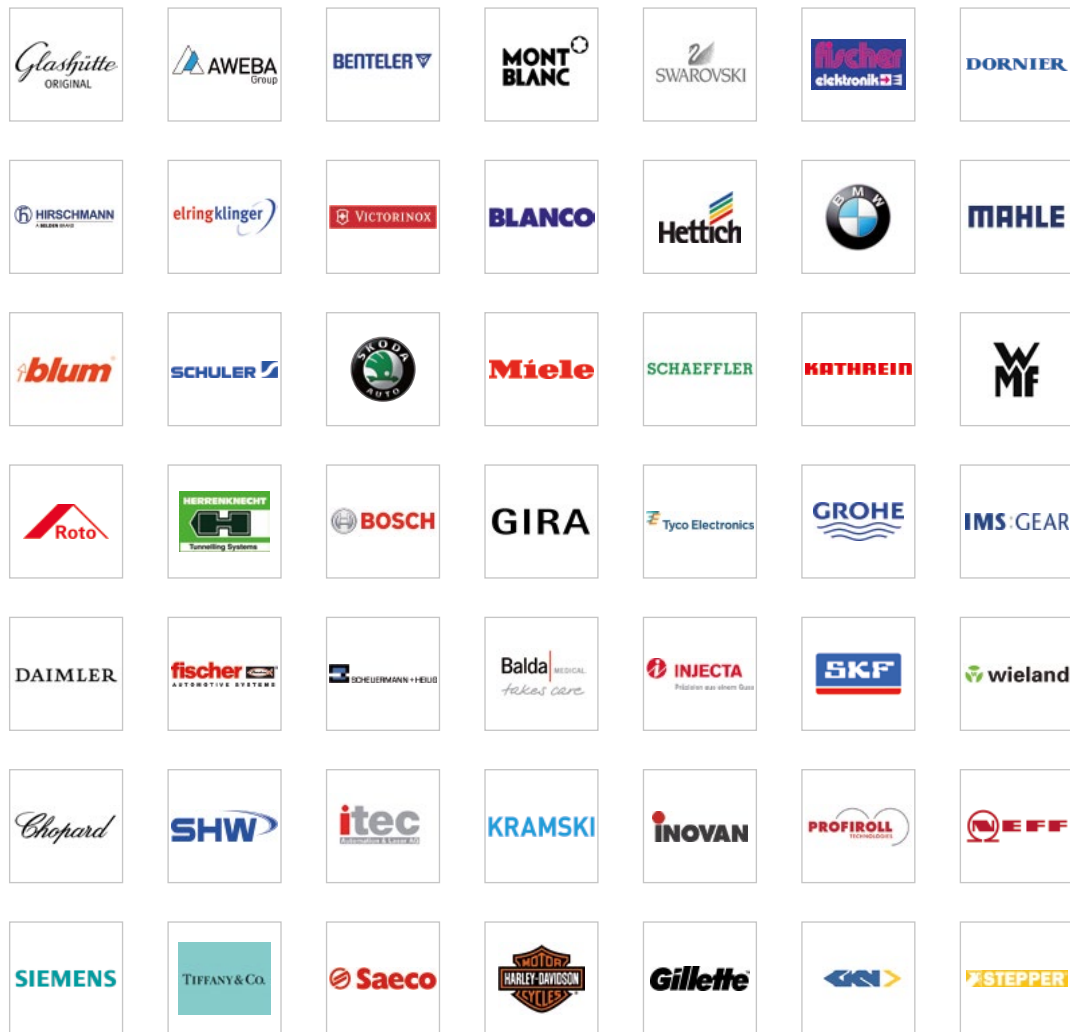


PEPS is one of the leading CAD/CAM systems. With more than 30 years of practical experience and more than 40,000 installations, PEPS is unparalleled: innovative, machine-independent, CAD-independent and flexible.

## NEW:

### PEPS VERSION 8.0:

- ✓ NEW USER INTERFACE
- ✓ NEW MACHINE KINEMATICS SIMULATION
- ✓ NEW STRATEGY FOR SLUG REMOVAL
- ✓ NEW STRATEGY FOR THE MACHINING WITHOUT START HOLES
- ✓ NEW MODULE FOR THE PROGRAMMING OF ROTATIONAL AXES



The practical know-how of our leading CAD/CAM system has been built up in a variety of different industries, for example micro-technology, machine construction, tool manufacturing, metal processing, wood construction and sheet metal working. This experience helps us to recognize and resolve the problems of our customers beforehand, where possible.

## PEPS DELIVERS:

- An intuitive user interface resulting in short programming times
- Fully automatic creation of the NC program using integrated feature recognition
- Extensive machining functionality
- Intelligent operation strategies to increase unattended machine run times
- Intelligent post-processors including cycles and subprogram output
- Extensive technology databases
- 3D simulation including collision check

### Parasolid-based SolidCut CAD module and high-quality CAD interfaces:

STEP, XMT, SAT, PTC Creo Parametric (ProE), Catia Version 4, 5 and 6, Siemens NX (Unigraphics), SolidWorks, Inventor, HiCAD, SolidEdge, Rhino, VDAFS, STL, DXF, DWG, IGES, HP-MI, Gerber, Mecanic and Daveg.

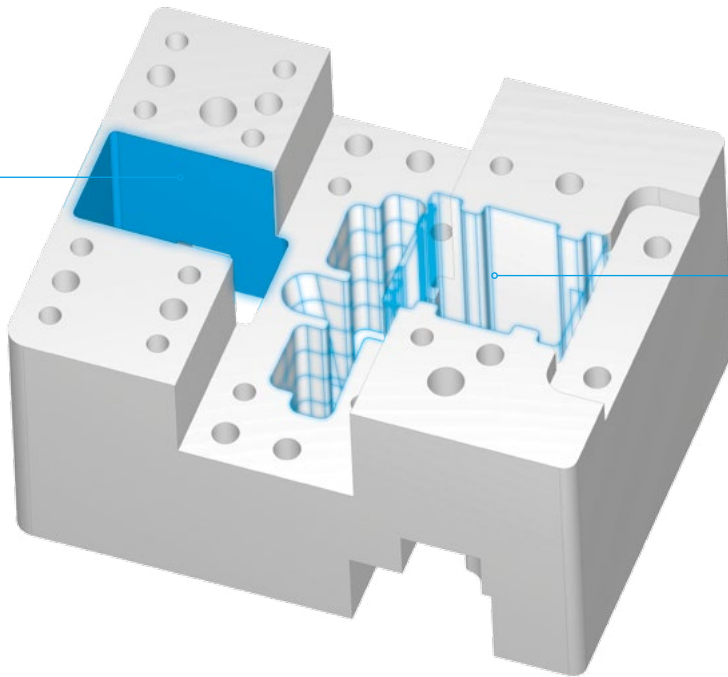
PEPS  
VO  
WIRE EDW



PROGRAM HIGHLY COMPLEX PARTS  
IN JUST A FEW SECONDS!

# WIRE- EXPERT

With the Wire-Expert module, everything points towards automation. Automatic feature recognition and automatic creation of machining features – in just a few seconds!



## AUTOMATIC FEATURE RECOGNITION OF WIREABLE GEOMETRIES

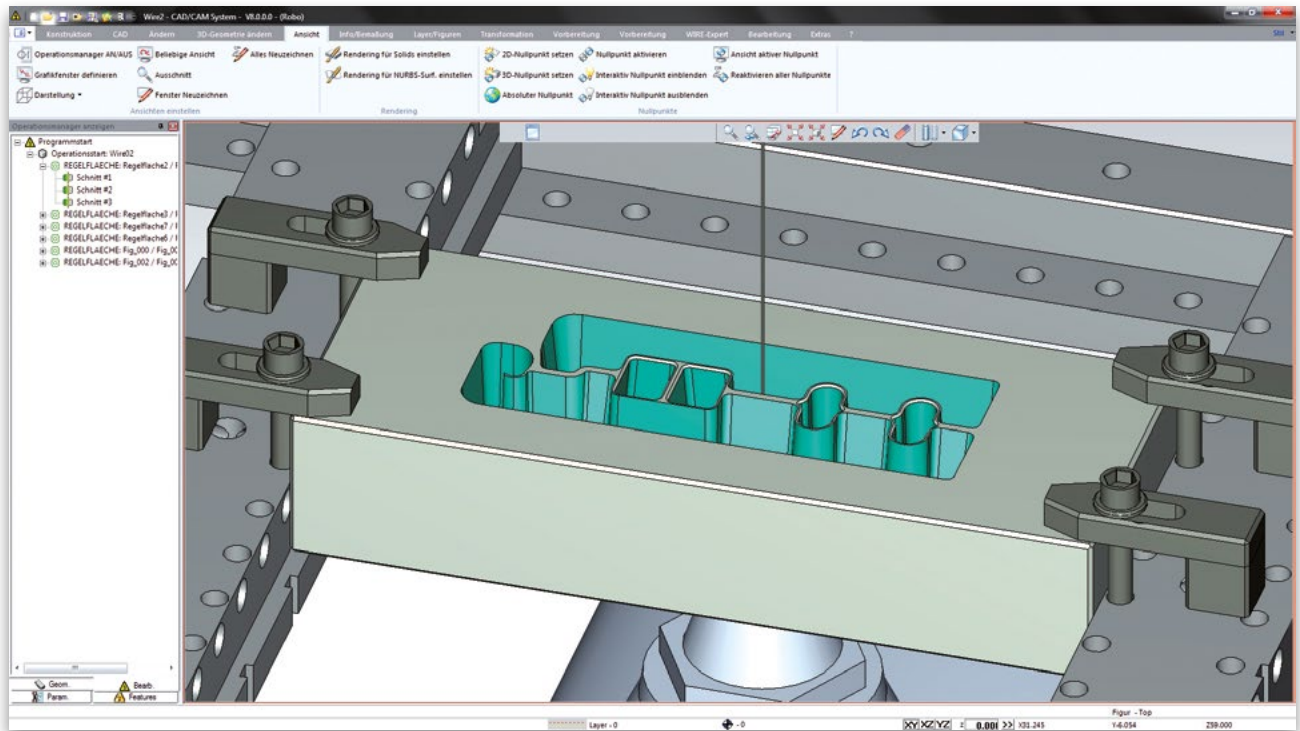
Wire-Expert searches the imported 3D part for wireable geometries. Accordingly, it is possible to either examine the complete part or to manually select individual geometries, surfaces or edges.

## AUTOMATIC CREATION OF THE MACHINING FEATURES

A proposed machining solution will be created for the recognized features. The user has the possibility to allocate existing cutting schemes beforehand or to automatically assign existing cutting schemes using the color recognition. Automatic machining features can be modified, expanded and optimized at a later time without any restrictions.

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# WIRE EDM MODULE



The PEPS Wire EDM module has been developed in co-operation with leading CNC-machine tool companies and is continuously improved with new machine functionality. The advanced capabilities of the product make PEPS the market leader in this field, and it is recommended by many machine manufacturers.

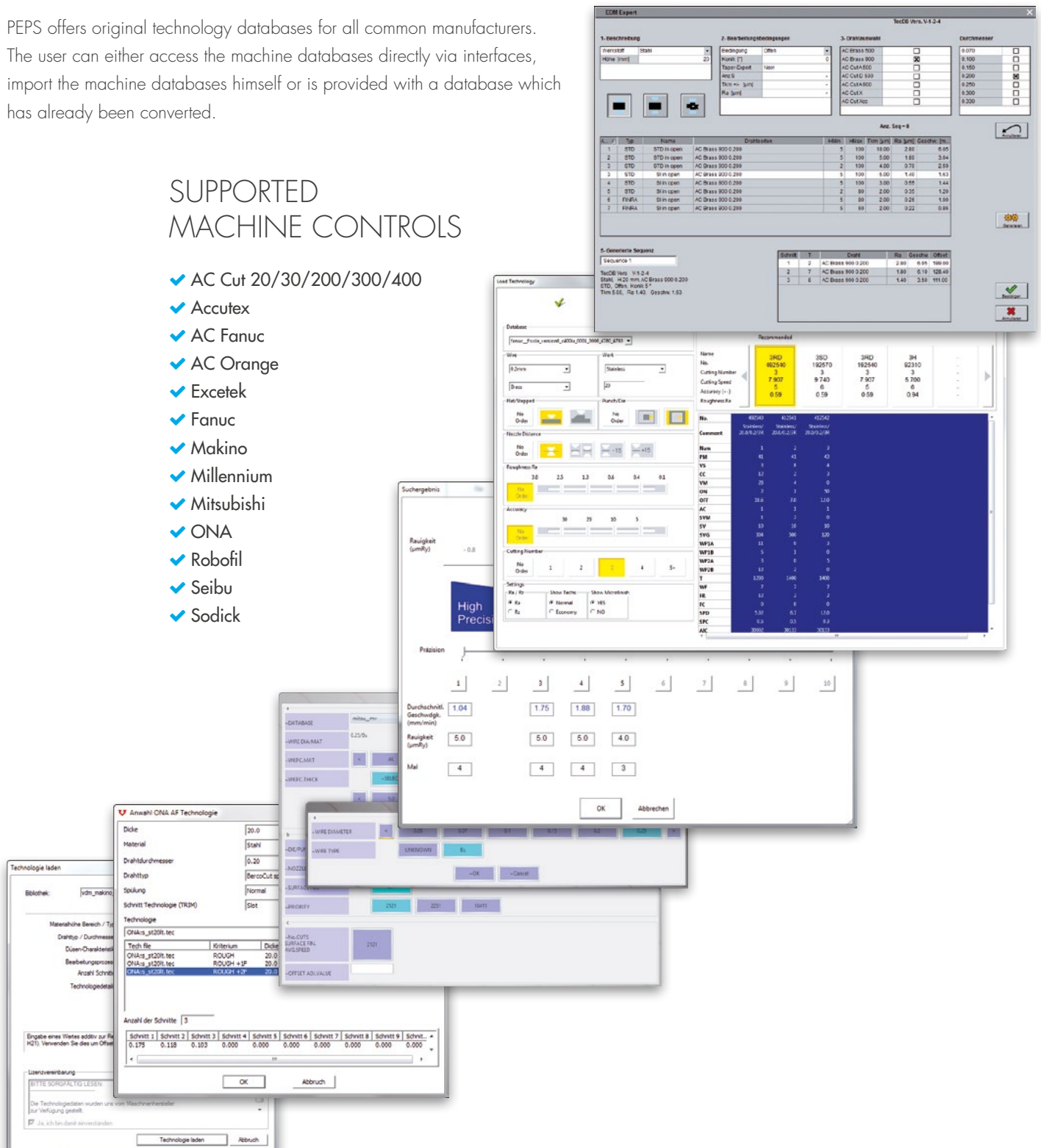
- Projection Wizard for the automatic creation of Z-constant geometries
- Simulation including offsetting, demoldability and collision checking
- Automatic threading, cutting and positioning of the wire
- Automatic calculation of the start position, including start hole output
- Constant and variable taper
- Ruled surface machining
- Undercut checking
- Inclined machining
- Tapered and cylindrical pocketing
- Automatic removal of slugs
- Triangular and multiple tagging
- Section offsetting
- Variable Reference Plane Height
- Technology databases for all common machine types
- Lead-in and Lead-out technology
- Operation strategies can be saved for rapid reuse
- Automatic creation of a graphical setup sheets

# ORIGINAL MANUFACTURER TECHNOLOGY DATABASES

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.

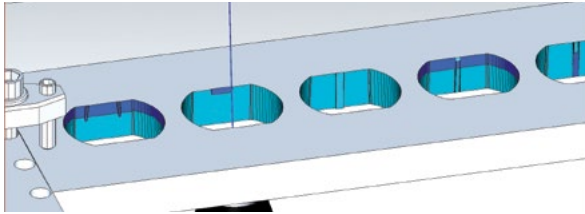
## SUPPORTED MACHINE CONTROLS

- ✓ AC Cut 20/30/200/300/400
- ✓ Accutex
- ✓ AC Fanuc
- ✓ AC Orange
- ✓ Excetek
- ✓ Fanuc
- ✓ Makino
- ✓ Millennium
- ✓ Mitsubishi
- ✓ ONA
- ✓ Robofil
- ✓ Seibu
- ✓ Sodick



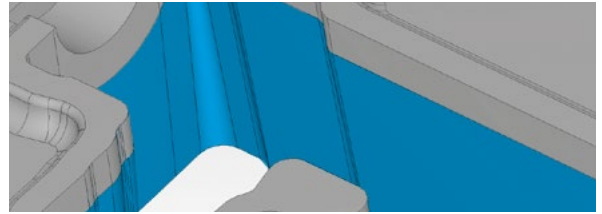
## HIGHLIGHTS

# OPTIMIZATION IN ALL FIELDS OF APPLICATION



## SLUG RETENTION

The Slug Retention Module automatically creates markings in cutting plates; these markings prevent the punched-out part (created during the punching process) from sticking to the punch and thus from damaging the cutting tool. This extends the service life of cutting tools significantly.



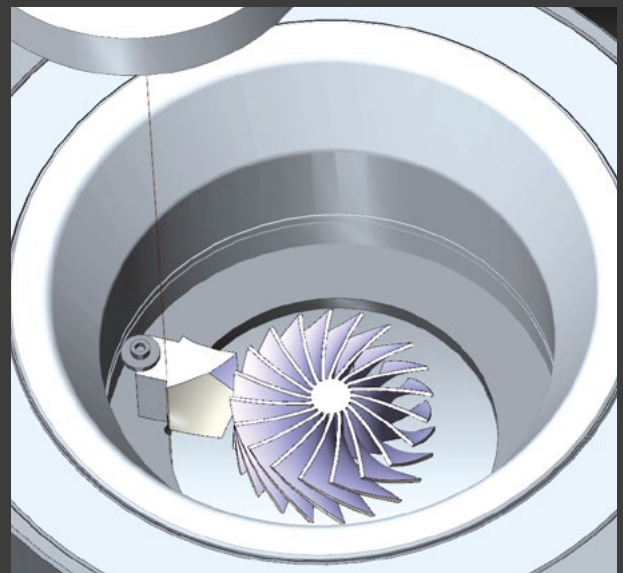
## COLLAR MACHINING

The projection under an angle enables the machining of variable reference heights. Accordingly, a circumferential cylindrical collar of constant height can be created in the work-piece. The tapered section is calculated by PEPS – it does not have to be included in the construction of the 3D model.

## CONTROLLING ADDITIONAL AXES OF ROTATION

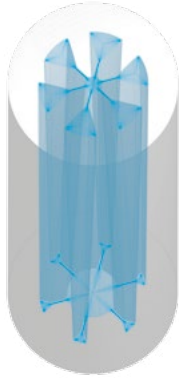
PEPS offers the functionality to control additional axes of rotation to provide multi-axial machining during wire EDM. Consequently, it is possible to machine complex work-pieces without any restrictions.

- ✓ MAXIMUM TAPER ANGLE
- ✓ MAXIMUM ACCURACY
- ✓ MAXIMUM SURFACE QUALITY
- ✓ MACHINING IN ONE CLAMPING OPERATION



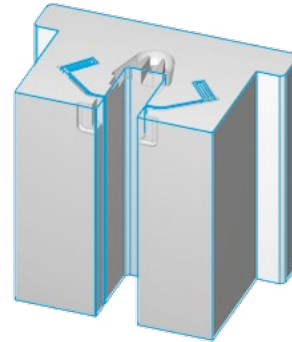


## POCKETING



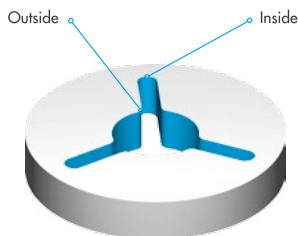
### RULED SURFACE POCKETING

Ruled Surface Pocketing enables the machining of ruled surfaces without any slugs. This reduces the programming effort significantly, and the machining operation can be executed without having to be monitored.



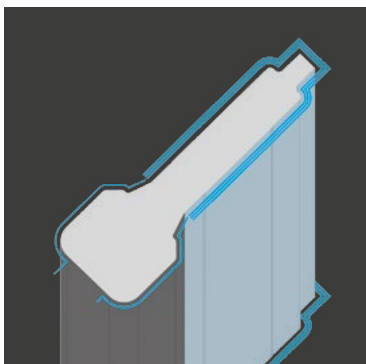
### PARTIAL POCKETING

Partial Pocketing is used to combine normal roughing and pocketing. It prevents the creation of slugs during roughing, enabling unattended and undisturbed production processes.



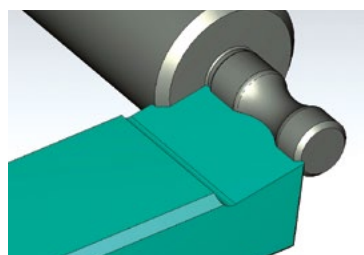
## RADIUS MANIPULATION

To improve the accuracy of fit between punches and dies, this macro modifies the radii contained in a geometry.



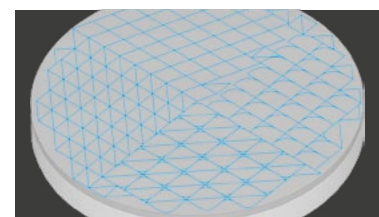
### PART FIGURE MACHINING

The Part Figure Machining is used to machine geometry sections with different qualities.



### TURNING TOOL MODULE

The Turning Tool Module calculates the geometry necessary for the wire EDM of profile turning tools, depending on the cutting angle and the frontal and lateral clearance angle on the turning tool.

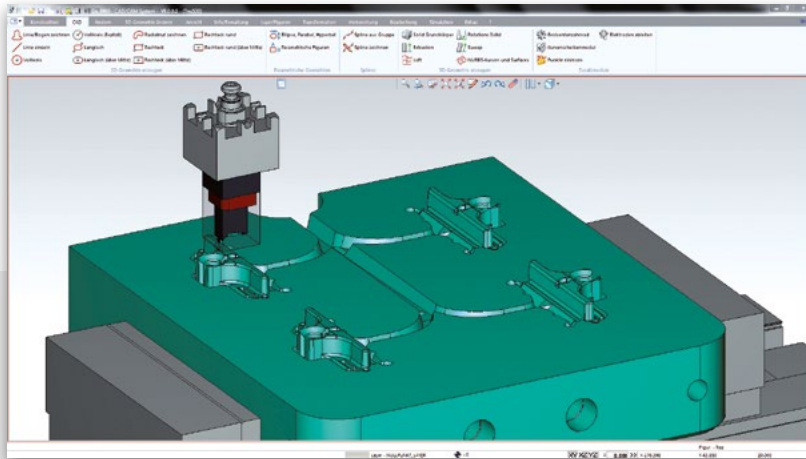


### TRUE CONTOUR MACHINING

The True Contour Machining is used for the production of industrial diamonds (PCD). An optional possibility is the automatic nesting of geometries. The machining is executed on the given geometry without radius compensation.

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# ADDITIONAL MODULES



## SOLID-ELECTRODE

The Solid-Electrode module is used for the creation of electrodes as well as for machining simulations with collision check. In conjunction with the corresponding post-processor, it enables the creation of NC programs for EDM sinker machines.

- Deriving and archiving of 3D electrode geometries
- Modification of the electrode geometry
- Assignment of the solid geometry of the electrode holder
- Archiving of electrode blanks
- Automatic creation of a measuring frame with alignment surface
- Placing the electrodes in the CAMMAN database, including additional information such as position, depth of erosion, electrode ident number, undersize, measurement data, program name, name of the roughing/finishing electrode as well as any additional information
- Automatic creation of a graphical setup sheet



## GEAR MODULE

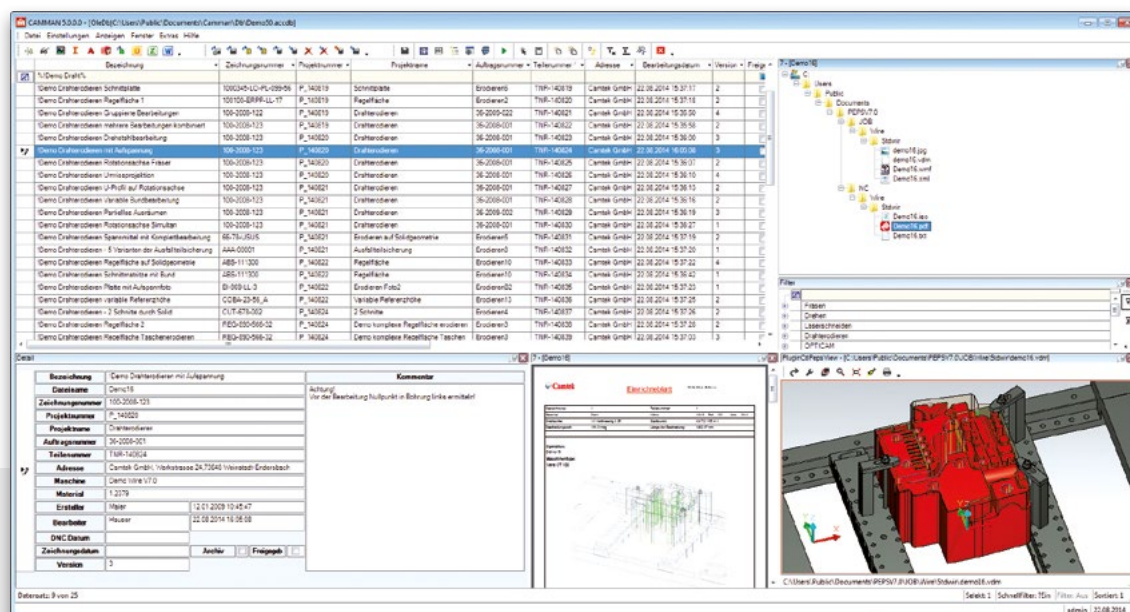
The gear module is used to calculate involute gears. The involute can be manipulated very easily by entering a profile shift, the roller distance, testing mass across teeth, tip and root diameter in addition to tip and root radii. Furthermore, the gear module provides all the data and dimensions for machining and inspecting the gear.

## TRAINING

Our committed and experienced engineers impart basic and advanced knowledge of each PEPS module at our training centers or at the customer's site.

A relaxed atmosphere, small groups and practice-oriented examples make sure that PEPS can be used efficiently within a short period of time.

You can find our training dates online at [Camtek.de](http://Camtek.de)



## CAMMAN 5.0

NC-program and  
drawing management

CAMMAN is a powerful data management system for the administration of NC programs, fixture plates and CAD data including SAP and ERP-interfaces. CAMMAN gives you easy access to existing data files and allows the input of additional information, e.g. drawing number, order number, project number, version number, customer, comment, date, programmer and machine as well as security confirmations for DNC systems. The file selection is supported by an integrated 3D graphic viewer. By using the CAMMAN data management system, the designer, the programmer and the machine operator share the same database, thus avoiding file duplication and mistakes.

It is easy to individually adjust and connect to existing databases.

## JOBMAN 5.0

Job Manager in connection  
with automatic nesting

The JOBMAN Job Manager automatically creates lists for nesting orders. Parts of the same material and thickness are selected by JOBMAN and transferred to the Random Shape Nesting module. The parts are automatically selected from all available orders and then nested on the sheet. With the JOBMAN Job Manager it is guaranteed that all parts of an order are made out of the correct material at the right time.

## INTERFACES

to PPS-systems

For CAMMAN and JOBMAN several interfaces to all ERP/PPS-systems, e.g. SAP, 3R Sigma, Zwickler, Schubert etc., are optionally available.

## SUPPORT & SERVICE

We offer our customers a free telephone and internet support, free test installations and a free software download.

Support hotline:  
**+49 71 51-97 92 02**

E-mail:  
**support@Camtek.de**

Test installation:  
**www.Camtek.de**



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