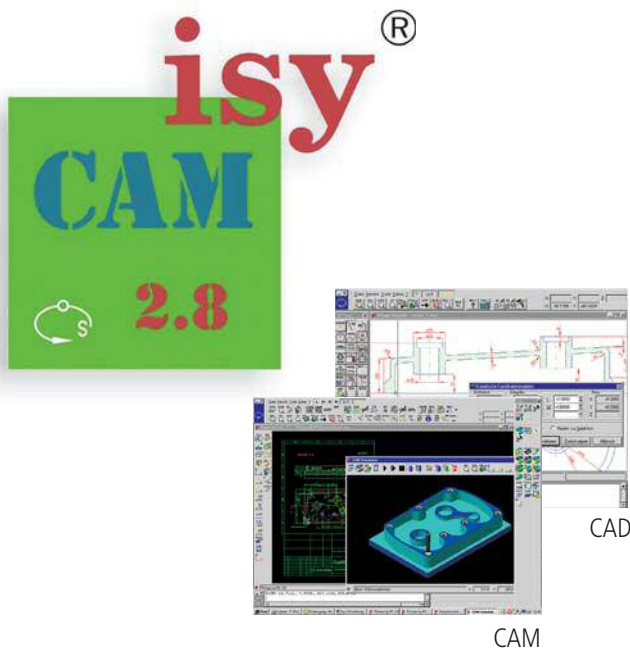


isy-CAM 2.8 and 3.6



Features isy-CAM 2.8

- CAD functionality (without volume modeller)
- works with Win XP, Windows 7 and 8, 32-/64-bit version
- Import: DXF / EPS / AI / 3D STL data
Export: NCP format
- proven CAM strategies
- for drilling / contour and pocket milling
- engraving with thinning
- engraving on cylinder surface with 4th axis
- 3D roughing and finishing of STL data (e.g. 3D scanning models)
- direct call of REMOTE out of isy-CAM

Features isy-CAM 3.6

- advanced mesh manipulation
- 32-/64-bit version
- Hybrid milling (steep and flat areas in one step)
- trochoidal milling
- revised residual material detection and handling
- Multi-sided machining (3+2 axis, hired milling)
- extendable to 5 simultaneous-moveable axes

Ordering data

isy CAM 2.8

Part-no.	Description
Z13-337070	isyCAM2.8, 2.5D CAD/CAM Software, including 3D STL manipulation, PC bound, without training
Z13-337070 0001	isyCAM2.8, 2.5D CAD/CAM Software, requirement: registered 2.5/3.0 version, including 3D STL manipulation, PC bound, without training
Z13-337070 0002	isyCAM2.8, 2.5D CAD/CAM Software, including 3D STL manipulation, PC bound, with training at isel
Z13-337070 0003	isyCAM2.8, 2.5D CAD/CAM second license, PC bound, without training

isy CAM 3.6

Part-no.	Description
Z13-337071	isyCAM3.6, 3+2 axis, including NCP - PPRO, PC bound, including training for 1 person at isel
Z13-337071 0001	Update isyCAM 2.0 / 2.5 / 2.5plus to isyCAM 3.6, 3+2 axis, including NCP - PPRO, PC bound, without training
Z13-337071 0002	Update isyCAM 3.0 / 3.2 to isyCAM 3.6, 3+2 axis, including NCP - PPRO, PC bound, without training
Z13-337071 0003	Update isyCAM 3.0 / 3.2 to isyCAM 3.6, 3+2 axis, including NCP - PPRO, PC bound, without training
Z13-337071 0004	Update isyCAM 2.8 to isyCAM 3.6, 3+2 axis, including NCP - PPRO, PC bound, without training
Z13-337071 0005	Update isyCAM 3.6 second license, PC bound, without training
Z13-337071 0006	Exchange-Package 3.6 (IGES, VDA, STEP)
Z13-337071 0007	Update Exchange-Package 2.0 to 3.6 (IGES, VDA, STEP)
Z13-337071 0008	Update Exchange-Package 3.0 to 3.6 (IGES, VDA, STEP)
Z13-337071 0009	Update Exchange-Package 3.2 and 3.4 to 3.6 (IGES, VDA, STEP)

Common features

- Multi-core support
- dynamic rotatable simulation
- freely definable line styles and colors
- integrated online help, configurable user interface
- parallel and independent work on several drawings
- geometric elements such as points, lines, ellipses, circles, curves (polygons, splines, bezier curves, NURBS), polygons etc.
- direct use of the Windows fonts
- professional functions for editing figures and texts
- hatching, user-defined hatch patterns
- automatic functions for positioning and aligning
- contours sketching and change interactively
- numeric input methods for absolute, relative and polar coordinates
- extensive DIN / ISO-compliant measuring- and dimensioning functions
- trimming, cutting and drawing curves and conversions of different geometrical types
- geometrical manipulation by moving and copying as translation, rotation, scaling, mirroring
- intelligent object snap
- optimal control of the calculated NCP data through integrated online simulation of tool paths
- production of processing data for all typical
- 2D and 2.5D machining tasks
- Output format: NCP format

OneCNC milling



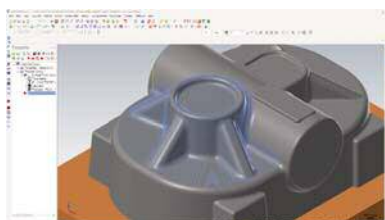
Advantages

- High speed toolpaths for 2D and 3D machining that creates a toolpath that delivers more consistent cutting
- Automatically machine flat areas using smooth entry, exit and cut motion.
- Feature based milling for hole making with automated feature detection
- High speed scallop cutting delivers a consistent finish.
- Planar and Z level finishing delivers a smooth cut with consistent material contact.
- High speed Z level cutting delivers constant Z moves with smooth entries and exits.
- Smooth, automated clean circle milling
- High speed pencil tracing removes material from the outside in with smooth motion.
- High speed pocket milling from the inside out safely around islands with the automatic rest ability
- High speed rest roughing smoothly removes material left from a previous rough pass.

Mastercam



Mastercam®



General

Mastercam is the most commonly used CAM software and the first choice among CNC programmers. It gives your manufacturing operation, the best possible foundation for fast and efficient milling. From general procedure as the optimized pocket machining to highly specialized toolpaths such as the 5-axis milling turbine, with Mastercam you are guaranteed ready for any assignment.

Whether simple or complex 2D machining - with the tools of Mastercam you optimize the time required.

Advantages

Contouring

- separate entrances and exits for contour and pocket finishing
- several roughing and finishing passes and several deep cuts for a contour
- easy processing of 2D and 3D contours with parametric and NURBS splines

Drilling

- automatic detection and pre-drilling of multiple operations at their plunge points
- automatic calculation of the countersink depth
- Optimization of drilling routines to minimize the traverse of the tool

... and much more!

Pocketing

- dynamic milling (toolpath with constant cutting conditions)
- area link for quick and easy adjustment of the areas for 2D high speed machining
- Pocketing with various rough-out strategies (HSC, zig-zag, one-way, true spiral, constant overlap and blend spiral - each with optional finishing pass)

... and much more!

Rest machining

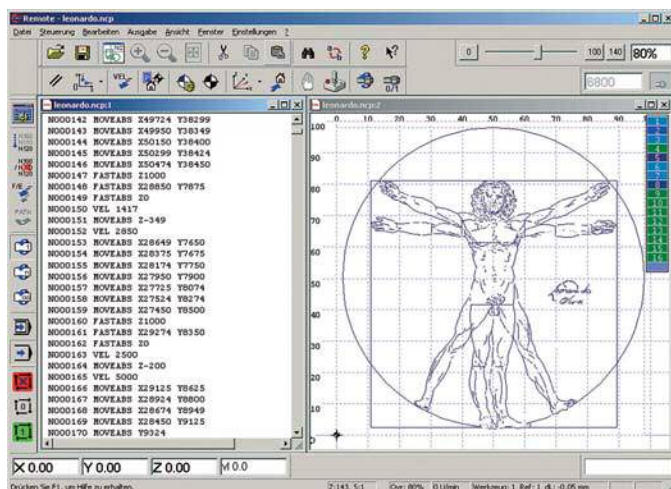
Powerful roughing

Versatile finishing

Feature based machining (FBM)

... and much more!

Remote



Control software for Windows

General

Remote is a universal control program for outputting files for machining methods milling, drilling, adhesive bonding, engraving, applying and water jet cutting or laser cutting/welding.

Supported file formats are the isel-specific NCP format (ASCII file with machining data generated by a CAM post-processor, the isel-specific CNC format (ASCII files in an expanded format for universal use in the process automation area, generated by ProNC) and the G-code format to DIN 66025.

Remote is used first and foremost for controlling CNC machines operating different tasks and processes, which is why flexibility is a key feature of the program. A large choice of options allows easy adaptation to current requirements in each case.

Features

- Support for digital joysticks
- "Fast file selection" control panel for serial production
- Milling/multiple output with movements
- Graphic depiction of the processing file with zero point and dimensions

isel-NCP, DIN66025/G-code file formats

- Linear and circular interpolation, helical interpolation, drilling cycles
- Access to digital and analogue inputs and outputs
- When using a CAN controller: "On-the-fly" input/output (without stopping the movement) for metering applications
- Message window, messages in the status line, time delay, input of variable values
- Definition and use of machine positions (tool zero point, park position, home position, etc.)

Additional features for the isel-CNC file format (ProNC output format)

- Repeating loops, counting loops, unconditional and conditional branches
- Arithmetic and trigonometric functions
- Sub-program systems
- Real and symbol chain variables
- Loading and storing process variables
- Access to user-specific expansions, option to call up user software

Ordering information

Part no.: **Z12-334500**

Remote - software for CAN-CNC controllers (Windows)

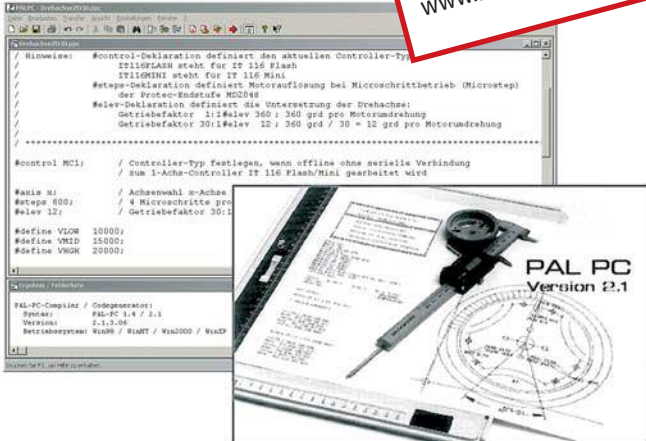
Features

- runs with Windows operating systems (Windows 2000, XP, Vista)
- compatible with previous software versions
- Processing of DIN66025 (G-code) file formats, NCP or CNC
- immediate processing without conversion, File translation or conversion
- integrated text editor with numerous features for rapid corrections to the present NC program
- Use of up to 6 interpolating axes (Cartesian coordinates system and 3 auxiliary axes)
- Look-ahead track processing with CAN controller
- Managing a milling spindle
- 2 I/O units can be used (max. 64 inputs, 64 outputs)
- Signalling inputs and outputs for process synchronisation
- manual axis movement with joystick, keyboard and mouse
- incremental processing and system monitoring for commissioning
- Configurable interface for user-friendly operation, serial production, handshake with master PLC, etc.
- Control panel for movement control, input/output, spindle and tool change with buttons
- Control panel for max. 6 handling axes independently of the interpolating axes
- available in various languages (German, English, French, Magyar)

PAL-PC

Process automation software for Windows

free updates
under
www.isel-germany.de



General

PAL-PC enables rapid, easy and low-cost implementation of automation projects such as handling systems, drilling machines, clocking devices, test and measurement systems, machines for individual and serial processing and much more....

PAL-PC is a modern program development environment for CNC step motor controllers and CNC machines

PAL-PC uses **memory operation** (CNC mode) for the target controller. PAL-PC produces automation solutions in which the controller works in standalone mode, i.e. independent of a control computer.

PAL-PC runs with Windows 2000, XP and Vista operating systems.

Features

- Path commands for relative and absolute positioning
- Carry out movement until event occurs at an input
- Teach-in-programming (linear)
- Linear 2D interpolation, switchable to 3D interpolation
- Circular interpolation
- Input signal analysis for process control
- Loops for repeating of instruction blocks
- Unconditional and conditional branches
- Analysis of the program selection unit
- Output of messages to a display
- Sending and receiving synchronisation marks
- Additional aids for automated processing of typical tasks

Ordering information

Part no.: **Z11-331810**

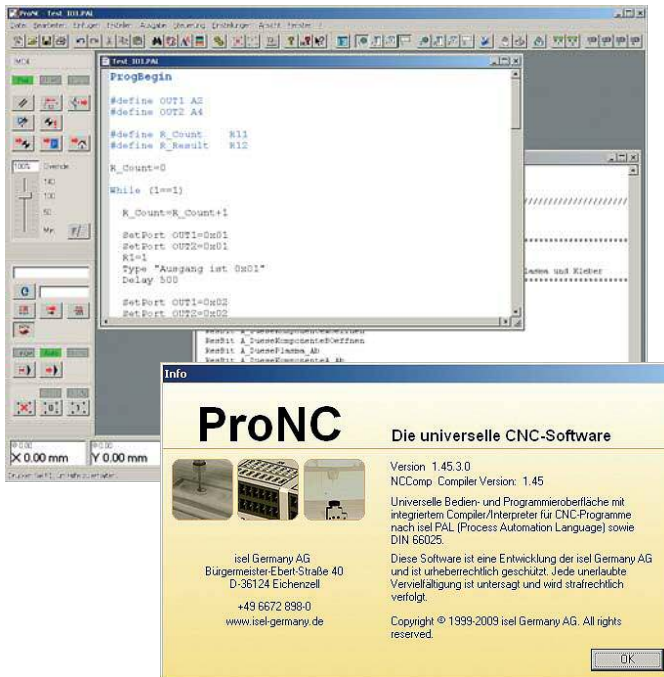
PAL-PC - software for CAN-CNC controllers (Windows)

Features

- compatible with previous versions (PAL-PC programs, which were produced with an earlier release of PAL-PC, can be used without adaptation)
- Programming to isel-PAL or DIN66025: In addition to the PAL format, users who know programming to DIN66025, can also produce their PAL-PC applications with corresponding G-code commands.
- Integrated editor: fast and convenient editing of source texts, editor features such as "Search", "Replace", "Copy" and "Insert" automated code generation, multiple Undo/Redo for efficient programming
- PAL-PC can (depending of the type of controller used) control controllers with up to 4 axes
- Terminal for direct communication with the controller
- Downloading of externally generated CNC programs
- Automatic calculation of type and data transfer rate of the connected controller
- Display of compiler errors and navigating to an error in the source code
- Command rapid overview with optional insertion into the program
- Teach-in-programming with keyboard or mouse
- Acceptance in the editor of target positions as formatted source code
- Live status display at the inputs
- Setting outputs during program generation
- available in German and English

ProNC

Process automation software for Windows



General

The basis of any automation solution is a powerful software that enables implementation of practical solutions for existing tasks quickly and conveniently. In these cases, the operating and programming interface ProNC provides an ideal solution.

- ProNC** runs with the Windows 2000, XP and Vista operating systems.
- ProNC** is available for a variety of control systems and controllers from isel
- ProNC** applications can be produced to isel-PAL or DIN66025

ProNC is outstandingly suited to automation solutions in the milling, drilling, metering, installation, handling, loading and quality control fields, in which application programs are produced mainly in text format, using teach-in-features and the integration of contour data sets (e. g. NCP format).

Features

- Path commands for relative and absolute positioning of the interpolating axes
- Programming of additional axes in handling mode
- Circular interpolation, helical interpolation, drilling cycles
- Repeating loops, counting loops, unconditional and conditional branches
- various mathematical and trigonometric functions
- Sub-program systems, symbolic variables
- Real and symbol chain variables
- Message window, messages in the status line
- Loading and storing process variables
- Access to digital and analogue inputs and outputs
- "On-the-fly" input/output (without stopping the movement) for metering applications
- Access to user-specific extension DLLs
- convenient support for debugging (interruption points, monitoring of status and variable)

Ordering information

Part no.: **Z11-333500**

ProNC - software for CAN-CNC controllers (Windows)

Features

- Programming to DIN66025 (G-codes) or isel-PAL
- compatible with previous software versions (ProDIN, ProPAL)
- integrated text editor with numerous features for rapid and efficient source code processing
- Import of geometric data (NCP, e.g. from isy-CAD/CAM)
- Use of up to 6 interpolating and up to 6 handling axes (with CAN controller)
- Look-ahead track processing with CAN controller
- up to 4 spindle motors can be used
- up to 4 I/O units can be used (max. 64 inputs, 64 outputs)
- Signalling inputs and outputs for process synchronisation
- Teach-in-with joystick, keyboard and mouse
- Offline programming with simulation modules
- incremental processing, hold points and system monitoring for commissioning
- individually expandable with software libraries
- Control panels for movement control, input/output, spindle and tool change with buttons
- Control panel for max. 6 handling axes independent of the interpolating axes
- available in German and English

Training courses and application solutions to order.

Space for your notes