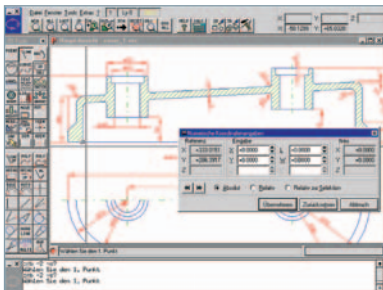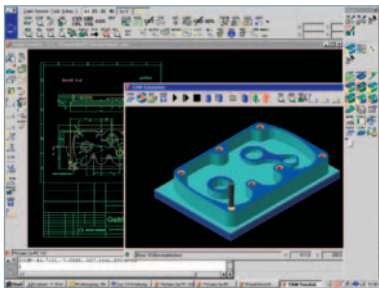**software**

isy-CAM 2.5 light

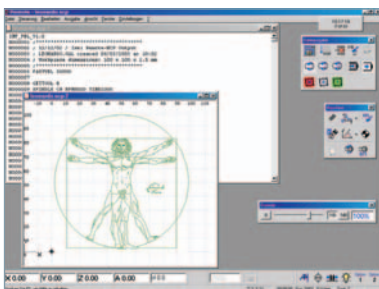a complete Package with:

- 2D CAD / Design
- 2,5D CAM up to 4 axes
- Integrated machine control software
- Service

CAD

CAM

REMOTE

With isy-CAM 2.5, the isel group provides it's customers with a "light" version of the Windows®-based CAD/CAM package.
It is directly coupled to isel controllers and offers a universal solution from the construction to the production by means of isel controllers and isel machines.

The offered software package is best suited for those who want to enter the world of CAD/CAM.
The operation takes place "windowslike" by means of graphic menus and dialogue boxes.

The CAD part includes all functions that are necessary for 2D constructions.

The CAM part makes it possible to create machining data simply and fast – directly from the design data.
With the integrated operating software RemoteWin, these machining data can be put out directly to the connected machine or controller.
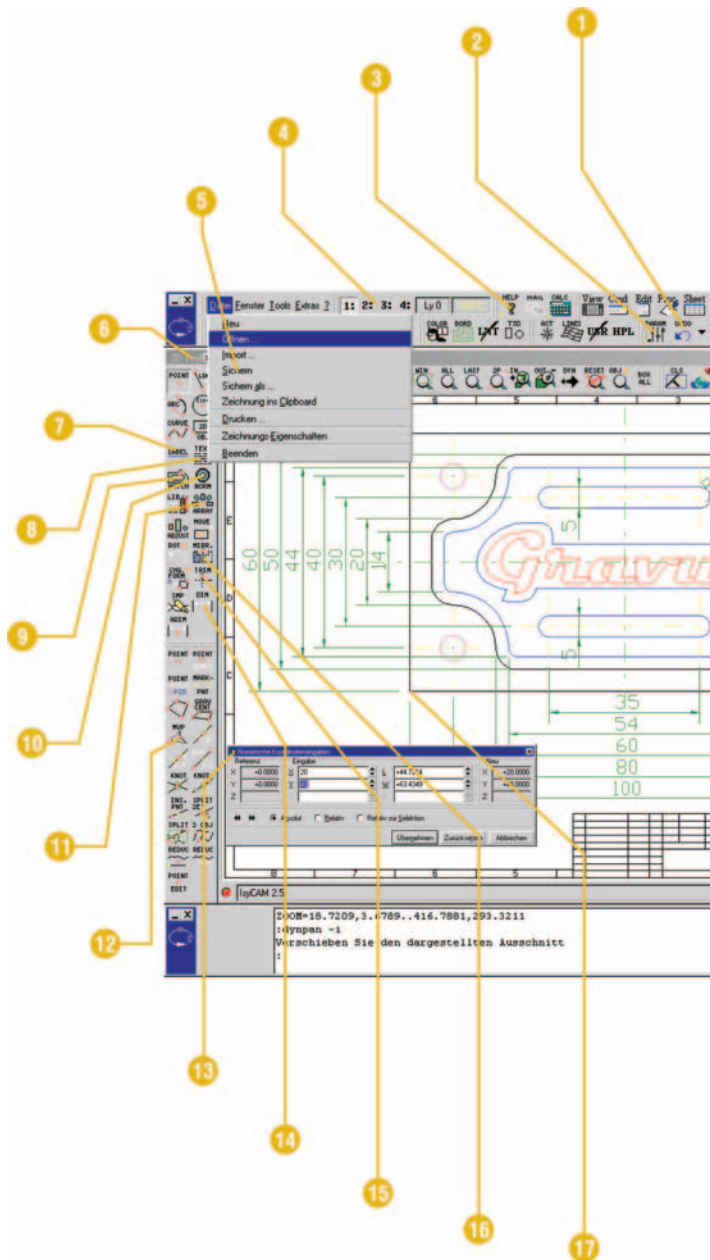
Therefore you get a universal solution to easily realize your ideas.

Range of Application

- General construction
- Mechanical engineering
- Tool manufacture
- Electrical engineering
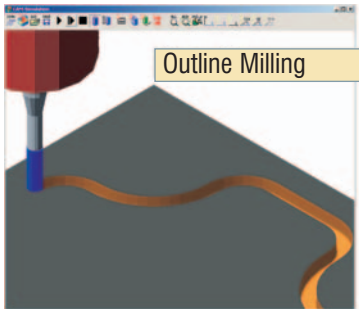- Engraving technology
- Artistic design
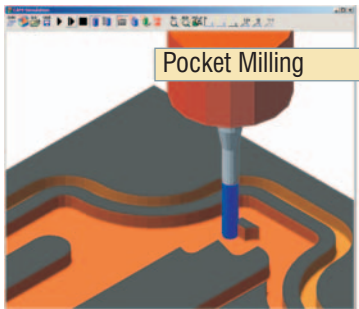- ...

isy-CAM 2.5 light

CAD-Funktions

1 Arbitrary "Undo" function (backward steps)

2 Freely definable line types and colours

3 Integrated online support, configurable control surface

4 Parallel and independent working on several drawings

5 Import/export functions
- Import: DXF, HPGL, AI, EPS, TIFF, BMP, NC, NCP
- Export: DXF, HPGL, AI, WMF, EMF, TIFF, JPG, BMP

6 Extensive geometry elements such as points, lines, ellipses, circles, curves (polygons, splines, Bezier curves, NURBS)

7 Direct use of the Windows® fonts

8 Professional number and text editing functions

9 Hatch and freely definable types of hatch

10 Standard parts

11 Automatic arrangement and orientation functions

12 Sketch and interactive change of outlines

13 Numeric input opportunity for absolute, relative and polar coordinates

14 Extensive measuring and dimensioning functions, corresponding to DIN/ISO

15 Trimming, separating and pulling curves, conversions of different kinds of geometry

16 Geometry manipulation by shifting and copying like e.g. translation, rotation, scaling, mirroring
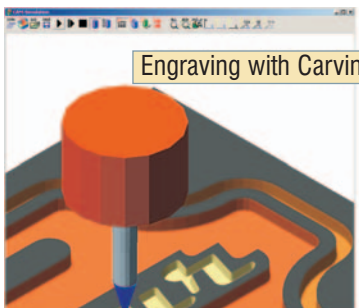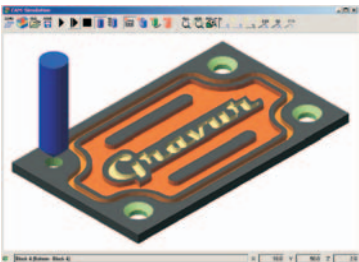
17 Intelligent object locking
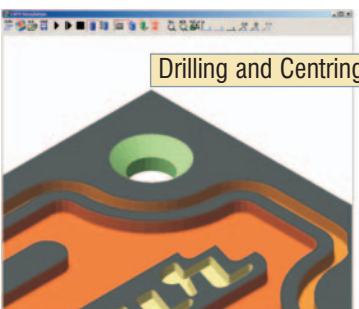
software

isy-CAM 2.5 light

CAM-Funktions

Outline Milling

Pocket Milling

The CAM functions of the software package provide the user with a practice-orien-ted and effective tool for the creation of machining data for all typical 2D and 2.5D production jobs with three-axis or four-axis machines.

In contrast to conventional numerical control programming, the workpiece geometry data are directly taken from the CAD system (designing instead of programming!) and trans-ferred into numerical control data. In the CAM module, technological (material- and tool-dependent) machining instructions are assigned to the outline data. The integrated onli-ne simulation of the milling paths ensure an optimal supervision of the computed nume-rical control data.

- Tool list with selection and default of the tool geometry
- Machining feed motion and speed of the spindle
- Immersing variants/start-up strategy
- Automatic remaining material treatment
- Synchronism/reverse rotation
- Zero point shift and/or program zero point
- Feed reduction when immersing and in the full cut
- Roughing and smoothing with depth increment

- Treatment of oversize/undersize
- Computation tolerances
- Tool path distance
- Repeat functions e. g. for mass-production
- Arbitrary definition of the machining sequence of technology blocks
- Simulation of the milling paths
- Post-processor run for the generation of the NCP data for a three-axis machining or the developed view on a fourth axis (rotational axis)
- Possibility to edit NCP data

Engraving with Carving

Outline Milling

- Tool correction by means of the CAM
- Closed outline, open outline, on the outline
- Start-up strategies - straight line, circle, tangential
- Special functions e.g. for water jet and laser cuttings, glue dispensing etc. (own functions and/or commands on arbitrary positions of the geometry that will be executed with the machining can be defined)

Engraving with Carving
(Die Manufacturing)

- On the outline
- Elimination of free, closed outlines with arbitrarily complex islands
- Smoothening with cut-out of the cor-ners for tools with opening angle via 3D movements
- Automatic recognition of inner and outer contours

Drilling and Centring

Pocket Milling

- Arbitrary geometry, automatic island recognition
- Clean out outline parallel or with paral-lel straight lines according to angle details
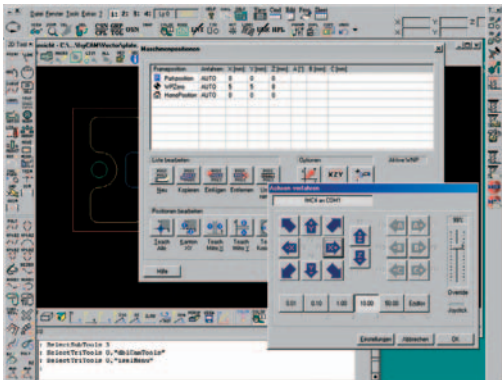- Immerse through ramp, helix, or with pre-drilling

Drilling and Centring

- Deep hole drilling with chip removing or with chip breaking
- Rubbing, centring
- Thread milling

isy-CAM 2.5 light

REMOTE

REMOTE is the universal operating and output software for processing NCP files in the fields of milling, drilling, glueing, water jet cutting, laser cutting and laser welding - for all ideas that can be realized by means of isy-CAM 2.5.

Due to the high flexibility and expandability of isy-CAM and REMOTE, you can also automate complex processing procedures.

Due to various options and adjustment possibilities, REMOTE can also be integrated into superordinate manufacturing processes.

Features of Performance:

- Universal processing and control software
- Flexible and expandable
- Direct call and control by isy-CAM 2.5
- Stand-alone mode possible (shop manufacturing, network operation ...)
- Available for a large number of isel machines and isel controllers
- Operates under Win 98, 2000, NT and XP
- Intuitive program operation
- Integrated editor for comfortable handling of NC data
- Graphical representation of the milling data with measuring functions
- Dialogue-supported machine configuration
- Dialogue-oriented management of workpiece zero points, park positions, output positions
- Dialogue-supported management of copy manufacturing/multiple output
- "Set advance" (process restart at a break point)
- Online support system
- Extensive command line options

Ordering Data

isy-CAM 2.5 light	Z13-337020
Update isy-CAM 2.0 to isy-CAM 2.5 light	Z13-337020-0001
isy-CAM 2.5 light (secondary licence)	Z13-337020-0300
Update isy 2.5 light —> isy 3.0	Z13-337020-0900
School licence for 10 additional places (addition to main licence)	Z13-337000-0140
User Manual	970 Z13 HD001