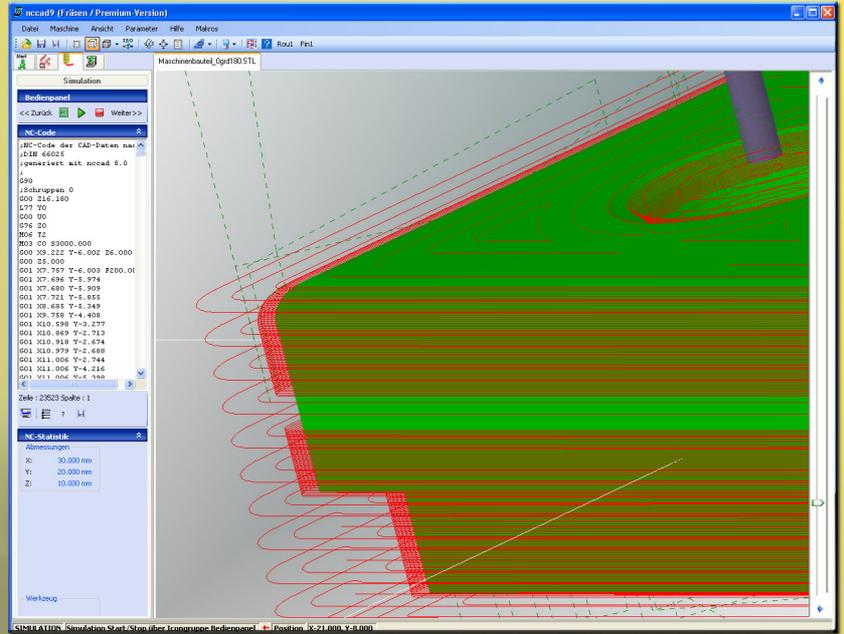


# nccad9

CAD / CAM / CNC - Program  
for quick results in machining

- Workshop programming simplified.
- The newcomer needs little time to get familiar with, the expert is pleased about the gain in time.
- Professional 3D-strategies, easy to apply without special knowledge.
- Contour accuracy in details in  $\mu$ -range.
- Delivery with matching control or with ready for use CNC-machine.
- Upgradable and fit for tomorrow.



## 3 ways to get a machining program.....

### 2D drawing 2<sup>1/2</sup>D machining

Draw patterns resp. contours, allocate technology parameters, simulate and start machining.

### 3D external drawing 3D machining

Import STL-file, choose settings, simulate and start machining  
(see also „Quick&Simple“ below).

### CNC direct

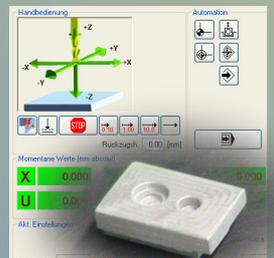
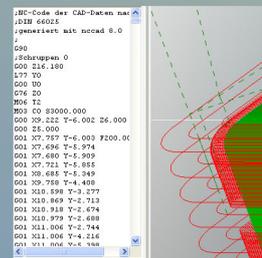
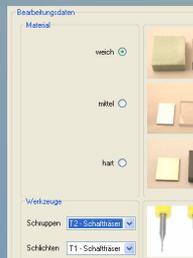
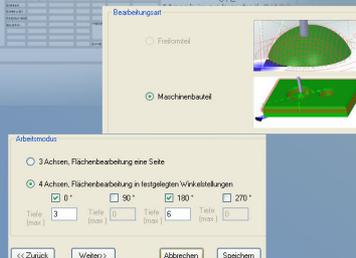
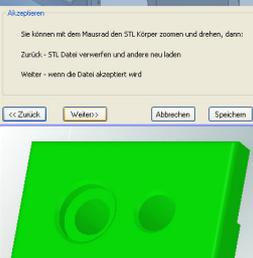
Input NC-codes, simulate and start machining.

## Function „Quick & Simple“

Fast and easy way to get a three-dimensional workpiece

- Import STL-file - Check it from all sides through rotation and zoom.
- Input working mode - 3-axes or 4-axes in fixed angle positions.
- Select type of machining - Free forming part (art) or mechanical parts (true to measure).
- Input machining parameters - Material (soft, medium, hard), tools (rough/finish).
- Check millings tracks by means of Simulation, prepare machine and start milling.

**New**



**CAD 2D**

**Draw and Edit 2D-contours in dialogue:**  
Line, polygon, rectangle, circle, arc, point, pointlist, oblong hole, engraving texts (TrueType, single track 1-/multi line).  
List in tree „Drawings“. Easy selection via tree or mouse on constructionpoint or intersection with variable catch-distance.

Direct allocation of technology to drawing element or group of drawing elements.

**Aids:** Intelligent catch, millimeter grid, reference point.

**Edit:** Delete, shift, copy, rotate, undo (up to 10 steps, max. 200 parts). Shift constructionpoint, mirror, circular arrangement, scale, trim, lengthen, convert into line or polygon, chamfer, round.

**Symbols:** Generate, load, detach.

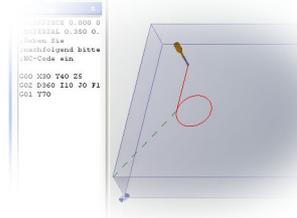
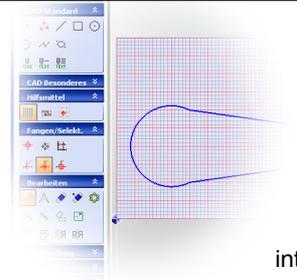
**Documentation:** Dimensioning, labelling

**CNC**

**Input/Edit CNC-Code** sentences after DIN/ISO 66025 with immediate simulation view, approx. 30 G- and M-codes, individual macro-programming.

**Support of the MultiController control**

**MCS:** Manual operation, handwheel (optional), Administration of up to 20 workpiece zeropoints (WZP), run of program (with



/without LookAhead resp. Spooler).

Software resolution 0.001 mm = 1 µm.

**Older MAX-controls** with IF2, 3 and 4 are supported, too.

**Specialties**

**Special functions**

Design and milling of circuit boards, generation of pads/paths and outlines.

**Import**

2D: DXF and 3D: STL. Connection to LabVIEW (optional).

**Drawing files**

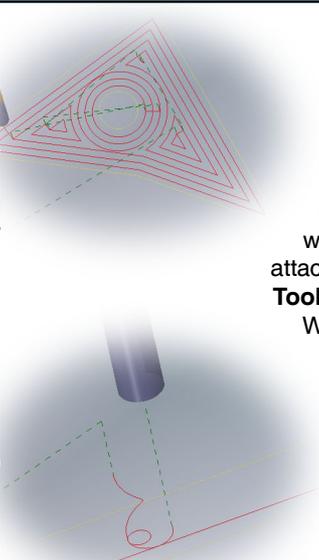
Administration/storage of up to 5drawings.

**Options**

Support of 4th/5th axis simultaneously, StandAlone, analog depth measuring.

Application as coordinate table, dispensing system, measuring machine.

Customer specific solutions.



**CAM 2<sup>1/2</sup> / 3 D**

**Technology data** in any number of machining groups: Feed XY, separate feed Z, total depth, depth per steps, tool diameter, contour correction interior/exterior, blind hole, pocket (with/without isle), approach/depart, helix-attack.

**Tool administration** with correction memory, WZP-shift, support of the options automatic toolchanger and tool-length measurer.

**Generate NC-codes** automatically, NC-editor with code check.

**Simulation**, also per single steps.

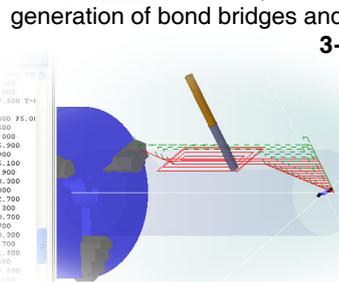
**CAM +**

**Quick & Simple STL** - The fast and simple way to get to 3D-workpieces (see pictures on page 10f of the flyer). Automatic generation of bond bridges and removal of raw material.

**3-axes-multiple-sides machining** with automatic OP calculation.

**Turning & Milling** with optional turning unit:

Draw/import the turning contour. Input of revs for roughing and finishing, partly feed and finishing height. Draw the contour for surfacing with input of start height and angle position, with repetition in different angle



positions.

**General information**

**Licence**

Machine-/control related licence: Machining at related hardware only, programming/simulation at any number of PCs. 30-digit licence-key with delivery.

**Help and support**

Electronic manual, introductory videos (in German), Slides assitant, examples, hotline, further developments, Internet.

**Computer**

PC with Windows XP/Vista/7(32 or 64 bit)  
Serial port RS232 (COM-Port) or via USB-converter.

\* **nccad9** in performance level **A** replaces **nccad7.5P**Prof and corresponds at present **nccad8.xStd** + the following extras: STL-milling in 3D-zone with „Quick & Simple“, turning & milling, approach/depart, helix.

**nccad9 Versions and ordering designations**

SK 9a	CAD/CAM/CNC-Software nccad9 perform.level a.	Data as above. Prof. 3D-strategies, automatically allocated to application. 3-axes machining + 4th and 5th axis fixed.	----	**
SU 9a9b	Software-Upgrade from nccad9a to nccad9b	Data as 9a+4 axes simultaneous ***	280,-	--
SU 9a9c	Software-Upgrade from nccad9a to nccad9c	Data as 9b+CAMopen (access to all 4-axes CAM-strategies) ***	760,-	--
SU 9a9d	Software-Upgrade from nccad9a to nccad9d	Data as 9c+5-axes simultaneous (advice/delivery on demand)		o.d.
SU 169a	Software-Upgrade from nccad1...6 to nccad9a	For customers, who have got no prior upgrades.		o.d.
SU 7s9a	Software-Upgrade from nccad7.xStd to nccad9a	For OEM-partners: Upgrade from simple to professional version	620,-	--
SU 7p9a	Software-Upgrade from nccad7.xProf to nccad9a	For OEM-partners: Upgrade to newer version	250,-	--
SU 8a9a	Software-Upgrade from nccad8.xStd to nccad9a	For OEM-partners: Upgrade from simple to professional version	310,-	--
SU 8p9a	Software-Upgrade from nccad8.xProf to nccad9a	Price for gain of efficacy	80,-	--
DL10	Problem-solution for individual workpiece (programming example, instruction for solution, sample, advice)		120,-	--

\*\*Complete offers f. control MCS a. CNC-Machine, with other controls o.d. \*\*\*Available from Nov./Dec.12 All prices are suggested retail prices in EURO plus current VAT