

CAD/CAM/CNC-Software

nccad9

An overview on the different versions

Date: 2017, January 19 / DB Subject to alterations

Basic-Version:

can be compared to the earlier milling version of *nccad8* No 3D-functions, 1 file to open, limited number of NC-sentences

Detailed info about *nccad9* on <u>www.max-computer.de</u> in Products/Software/.....

Function/Feature	nccad9basic	nccad9
Collaboration with MultiControllerControl unit MCS and CNC-machine, e.g. KOSY.	✓	✓
Connection to PC via RS232 (COM) or USB (different solutions)	✓	✓
PC-System requisits: Windows XP/Vista/7/8/10, MS DotNET.	✓	✓
Support of up to 6 axes (corresp. to existing axiscontroller)	✓	✓
Reverse play can be taken into account (makes not always sense)	✓	✓
Current reduction in standstill	✓	✓
Microstepping, position settings with 1/1000 resolution	✓	~
Feed control, LookAhead, adaptable ramps	✓	✓
Separate feed for XY a. Z. Feed range 0,01approx. 200 mm/sec (depending on drive)	✓	✓
Maximum step frequency about 100 kHz	✓	✓
Reference run and limit value control in all axes	✓	~
Manual operation by keyboard or optional handwheel	✓	~
Save/Edit 20 workpiece zeropoints	✓	✓
Contact to edge, different manual operation modes (jump, continuous)	✓	✓
Define special positions (unclamp, tool change, end of program)		✓
Interrupt machining by Stop & Go (hood contact required)	✓	✓
Safety through hood and emergency stop	✓	✓
Tool memory, tool change manual or automatic	✓	✓
Tool-length measuring and correction (hardware optional)	✓	~
Control of spindle speed (if spindle is controllable 010V)	✓	~
Dispensing functions (pad-/path dispensing, different dispensing methods)		✓
SPS-Functions, microjet dispensing, (order hardware separately)	✓	✓
Workpiece copies	✓	~
Edit machine parameters, assistant for individual installation	✓	✓
NC-Programming by texteditor and 3D-simulation	✓	✓
Teach In (Save manual positions, autom. generation of NC-Code)	✓	✓
G- and M-Codes (standard after DIN/ISO and machine specific)	✓	✓
Syntax-check, on/off	✓	✓
More than 5000 codesentences until limitation of memory		✓
Macro-programming (standard cycles, spindel on/off, individual)		✓
File-import DIN/ISO 66025 via adapted postprocessor	→	~
CAD part (draw by mouse or graphic dialogue, edit, convert)	~	~
Organisation via tree in groups (layers)	~	✓
More than 3 groups of drawing elements (max. 30)		~
Draw/edit all geometrical basic elements, engraving texts, dimensioning, lettering	✓	~

Operations: Shift, copy, scale, trim, catch, grid and others	✓	~
Spec. machine related drawing elements (thread, gear, pcb, 3Dpolygon, bore holes)	· · · · · · · · · · · · · · · · · · ·	
Draw in levels (up to 6 for multilateral machining)	· · · · · · · · · · · · · · · · · · ·	
Draw turning contour and surface elements <i>Turn & Mill</i>	•	
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Undo in more than 3 levels (max. 10, 200 drawing elements)	.4	
2D file import DXF, HPGL, 1 x image (GIF, JPG, PNG).	~	_
2D. drawing (plantic manus) with CTL managetion Contains 8 Body		
3D- drawing (plastic zones) with STL-generation <i>Contour & Body</i>		<u> </u>
- STL-viewer, interactive, with zoom and rotate		✓
- 6 different methods from contour to 3D-body		~
CAM Medule (define and assign technologies)	~	<u> </u>
CAM-Module (define and assign technologies)		
Paths, contour correction (radius correction), pocket, pocket with isle, infeed tot./part.	•	<u> </u>
Group technology, indiv. technology, change order of machining	•	<u> </u>
Start height, safety distance, interruption for manual operation	V	~
Multiple lateral machining, support of axes with angle position		~
SPS-functions integrated (hardware existing)	✓	~
Support of tool geometry, shaft	✓	~
Extended 4-axes-machining with turning unit (optional hardware turning unit)		<u> </u>
Approach and depart, infeed/out via 3D-polygon		✓
Special cycles for boring, thread cutting, engraving	✓	✓
3D- Simulation with tool/workpiece graphics, with NC-sentences and single step	✓	✓
3D milling machining of STL-files Quick & Simple , with assistant		✓
3D milling machining with external CAM as extension, on demand		✓
3D file import STL		✓
Support of specific tool geometries (ball, radius) with 3D		✓
File operations (load, save with documentation elements)	✓	✓
Open more than 1 file (up to 5 at a time)		✓
Network ability	✓	✓
Licencing via code key with first start	✓	✓
Service-file generable	~	~
Special functions and extensions, for extra charge		✓
3D-scanning, 3D-print with extruder (equipment existing)		✓
Axes switch		✓
Depth-controlling/measuring, by contact or by distance sensor		~
Service performances (DL-functions) after separate list, please contact us		~
Drive double axis (gantry)		~
Servo drives		~
Help/Support by MAX computer & mechatronics	~	~
Bringing in service/First steps (videoclips, assistants)	~	✓
Help topics as integrated helpfile or as PDF	~	✓
Hotline at fixed hours		✓
e-mail in special cases	✓	✓
Support via internet (download, FAQ,)	✓	✓
Operating manual with the delivered system KOSY or by OEM-partner	~	✓