



WOODWOP / NCAD / IMAWOP INTERCHANGEABLE CNC PROGRAMS

These CAD/CAM systems are in use world wide

IMAWOP/IMAWINCAD	from IMA Klessmann
NCAD	from COBUS ConCept
WOODWOP	from HOMAG/WEEKE group

WOODWOP and **IMAWOP** are delivered with machines from HOMAG/WEEKE and IMA, **NCAD** – as a general machine independent system – supports different machines with various interfaces to trade solutions like cabinets, doors, windows and work tops.

Starting with a solution like WOODWOP or IMAWOP the following may happen:

- You add a new machine from a different manufacturer or with a different software release
- You sell your old machine and want to use the existing programs for your new machine
- You work with a company that uses another software package or machine

In all these cases you want to read/import programs generated by another software into your system, as comfortable as possible and without losing technological details (e.g. tool data, feed rate) and use this data to easily generate cnc programs for your own CNC machines. Alternatively, you want to generate data with your software to be used in other programming systems e.g. in your own company or for an external business partner.

This is normally not possible because these systems don't offer import/export functions to competitors systems.

camSol - cam solutions for woodworking – offers solutions for these problems.

Using the module **MPRCONVERT** you can directly read MPR files from WOODWOP into NCAD, IMAWOP or IMAWINCAD and, based on this data, generate CNC files for any kind of CNC machine you use.

Alternatively, by adding a postprocessor for WOODWOP to your NCAD, IMAWOP or IMAWINCAD system you can generate MPR-files for a HOMAG/WEEKE machine.

Another group of problems results on the differences between the various FMC formats of **IMAWOP/IMAWINCAD (version 2.x – 6.x)** and **NCAD (version 6.x – 10.x)**. A customer using an IMA machine with IMAWOP 3.x cannot read and handle FMC files from newer versions 4.x to 6.x. Or NCAD users cannot handle files from IMA versions and vice-versa. **camSol** developed a module named **FMCCONVERT** that converts from one FMC format to another. Based on this module the programming of newer machines with an older software release is equally possible as using a new software to program old machines. **FMCCONVERT** can be used as a stand-alone solution to do this job or can be integrated into an existing software solution.

Gain more flexibility to program various machines and linking to various programming systems with solutions from **camSol**. Contact us – we help you to find a solution.

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Ottmar Petry (camSol) is working since 1985 in the development of CAD/CAM programming systems, post processors and CAD/CAM interfaces for the woodworking industry.



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The screenshot shows the NCAD software interface. On the left, a list of CNC program lines is visible, including comments and coordinate data for various operations like drilling and milling. On the right, a 2D CAD model of a rectangular plate with a central square hole and a circular hole is shown. The software title bar indicates 'NCAD - K:\CW100\FMC\muster.fmc' and 'COBUS cad/cam solutions'.

```
1 // generiert von MPR2PMC V.2.6 (R:\MPR\Master.mpr)
2 MPR-Ropf-Variablen
3 Variablenliste
4 Include: MPR2PMC_ROMTHOD
5 Konturen
6 Include: MPR2PMC_INIT
7 Werkstückmaße // NP L = WKST_L B = WKST_B
8 // DUEBELN FUER BODEN
9 [ Wenn_NONMIRROR == 1
10 | Nullpunktverschiebung X = 0.0 Y = 0.0
11 ] Blockende //NONMIRROR == 1
12 // Bohrung X = 109.5 Y = 482
13 // Bohrung X = 109.5 Y = 450
14 // Bohrung X = 109.5 Y = 322
15 // Bohrung X = 109.5 Y = 194
16 // DUEBELN FUER TRAVERER OBEN
17 Nullpunktverschiebung X = 0.0 Y = 0.0
18 // Bohrung X = 919 Y = 9.5
19 // Bohrung X = 982 Y = 9.5
20 // LOCH BOHDEN
21 [ Wenn_NONMIRROR == 1
22 | Bohrung X = 169 Y = 50
23 ] Blockende //NONMIRROR == 1
24 // LOCHREIHE BOHDEN 3ZER PASTER IN X
25 Lochreihe vertikal SPX = 220 SPY = 207 EPX =
26 Lochreihe vertikal SPX = 220 SPY = 463 EPX =
27 // LOCHREIHE BOHDEN 6ZER PASTER IN Y
28 [ Wenn_NONMIRROR == 1
29 | Lochreihe vertikal SPX = 631 SPY = 322 EPX =
30 ] Blockende //NONMIRROR == 1
31 // DUEBELN HORIZONTAL
32 // Bohrung X = 1000 Y = 26
33 // Bohrung X = 1000 Y = 154
34 // Bohrung X = 1000 Y = 282
35 // Bohrung X = 18 Y = 500
36 // Bohrung X = 82 Y = 500
37 // BOHDEN FUER STELSCHRAUBEN HORIZONTAL
38 // Bohrung X = 0 Y = 450
39 // Bohrung X = 0 Y = 50
40 // MUTEN FUER LAMELLO
41 [ Wenn_MIRROR == 1
42 | Sagenut Auslauf SPX = 890 SPY = 50 E
43 ] Blockende //MIRROR == 1
44 // TASCHE FRAESEN
45 [ Wenn_NONMIRROR == 1
46 | Kreis Tasche MPX = 781 MPY = 100
47 ] Blockende //NONMIRROR == 1
48 // RICH FRAESEN
49 // Kontur fräsen 101 R2 RENNUNG4 Z = 2
50 // Kontur fräsen 102 R2 RENNUNG4 Z = 2
```

Example of a part in NCAD

The screenshot shows the WOODWOP software interface. The main window displays a 2D CAD model of a rectangular plate with a central square hole and a circular hole. Below the model, there is a table of variables and a panel for setting dimensions. The variable table shows a variable 'd' with a value of 19. The dimension panel shows settings for the finished part (Fertigteil) and the raw part (Rohteil).

Variable	Wert
d	19

Fertigteil	Länge: 1000	Versatzmaße	Fertigteil in X: 0
	Breite: 500		Fertigteil in Y: 0
	Dicke: 19		
Rohteil	Aufmaß X: 0		
	Aufmaß Y: 0		

Example of a part in WOODWOP