



**Installation and Usage Instructions for the
Basic Weeke DXF Post Processor
Bpp.exe Version 4.0.02
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stiles[®] *software support*

Michael D Macon

National Technical Support Specialist-Software

Phone: 616-698-6615

Fax: 616-698-2336

E-mail: mmacon@stilesmachinery.com

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Installation

Part I

In the “C:\windows\desktop\BP Postprocessor” directory (you should be able to now see a “BP Postprocessor” folder on your desktop if you are using Windows 95 or 98), you should find 16 files and two subdirectories:

1. README40.DOC - this manual
2. E0011.PDF - Adobe PDF manual from Weeke
3. SETUP.EXE - setup application files
 SETUP.BMP
 SETUP.INS
 CTL3D.DLL
 _SETUP.LIB
 _SETUP.DLL
 _ISRES.DLL
 _ISDEL.EXE
 INST16.EX
 DATA.Z
 BPP40.VBP
4. HORIZ.DWG - a common drawing used for horizontal boring
5. BPPPROTO.DWG - sample drawing that can be used as a template
6. BPPSMPL.DWG - sample drawing that is set up correctly and ready to be imported into WoodWOP

File number 1 (this one) should be printed out for reference. File number 2 goes into detail on the “inner workings” of BPP and can be (but is not necessary to be) reviewed if desired.

To install the BPP program, run (“double-click”) SETUP.EXE and follow the on-screen instructions. *Note: We have noticed that build 4.012 of BPP may not install correctly “over” an older build; therefore, we recommend first deleting all older BPP files from previous builds before installing 4.012.*

File number 4, 5 and 6 (listed above) should be copied into your AutoCAD directory. Also, number 4 should be opened in AutoCAD and using the WBLOCK command made into a block for later addition into programs using the INSERT command. You can use all of AutoCAD’s functions in any combination to achieve what you want and the program will work fine. I will always show you the typed command method in our demonstrations. Commands that you type in are shown in **Boldface** type. I will add explanatory notes as well. My notes will be between double aster (**). See below for an example.

Example

Open the Horiz.dwg drawing in AutoCAD.
 Zoom in and you will see a square bisected by three vertical lines down the center.

Command: **wblock**

Block name: **horiz.dwg**

Insertion base point: **int** ****hit Enter**** of ****click on the intersection of the top of the square and its intersecting line****

Select objects: ****drag a window around the entire object**** Other corner: 7 found

Select objects: ****hit the Enter key****

Now you are ready to use this block.

Part II

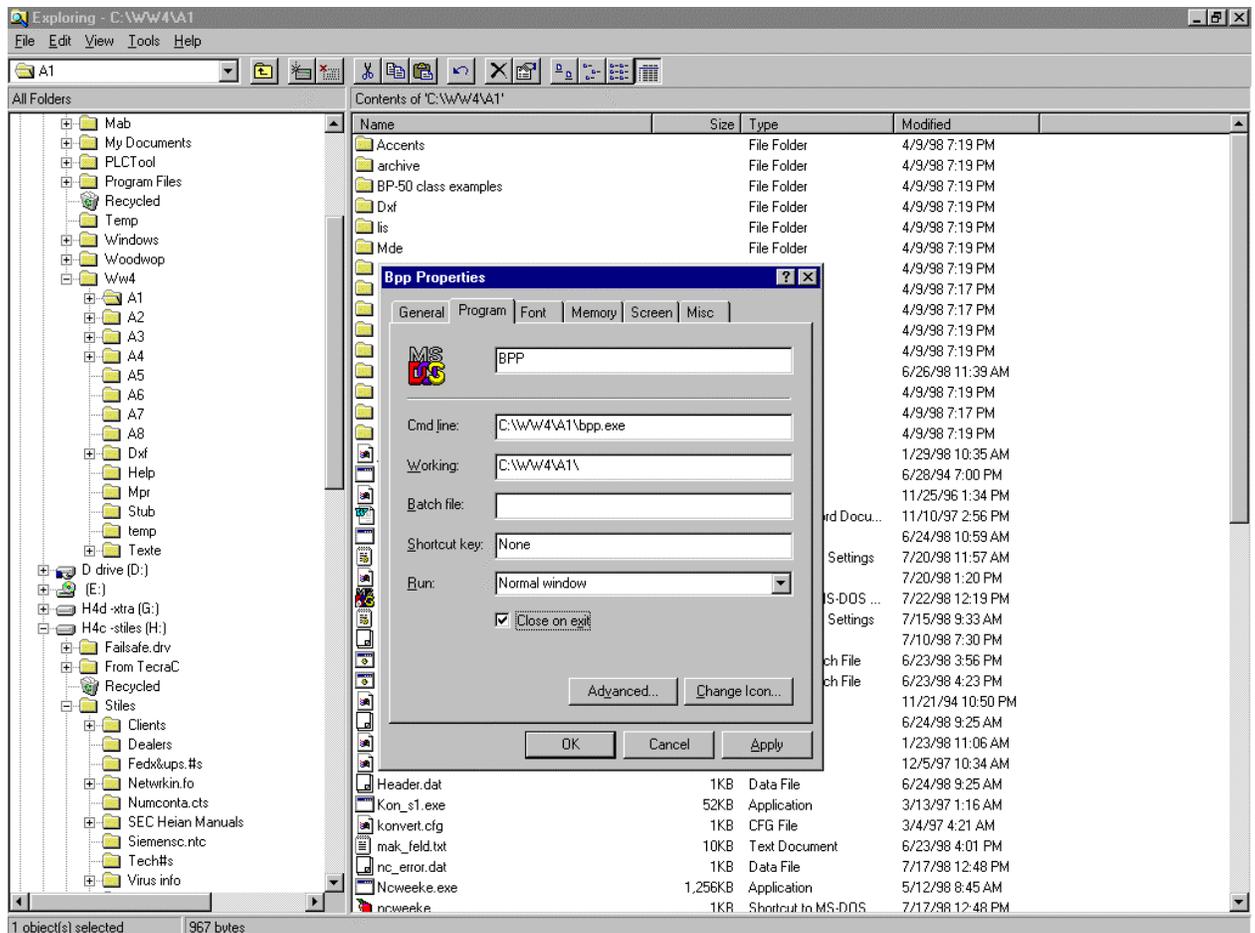
Now we need to update the program path statements.

First, in Windows 95/98/NT, in order to display file extensions (so that you can tell what kind of file it is you're manipulating at any given time, open Windows Explorer. Choose VIEW | OPTIONS (or FOLDER OPTIONS), then click the VIEW tab. Make sure SHOW ALL FILES is checked, and HIDE FILE EXTENSIONS FOR KNOWN FILE TYPES is **un-checked**.

[Windows 3.1 or 3.11 users may ignore this step.]

Now we will edit the Bpp40.pif (or just "BPP40" in Windows 95/98/NT) file. In Windows 3.1x you can use the PIF Editor. In Win95, simply go into Explorer, find the file and right click on the file with your mouse. You should then see a pop-up menu. Choose the bottom item, Properties. You will now see a Properties pop-up box. Click on the Program Tab at the top of the box. In these instructions we are going to use the C:\Ww4\A1 directory as the default. You will need to change the path as necessary for your set up. Below I have inserted a copy of a file with all of the correct settings.

[Image on Following Page]



When you are finished making path changes, click on OK.

Part III

Next we will edit the Bpp.ini file.

1. Go into Explorer and right click on the Bpp.ini file. This time, choose the Open command. It should be the first option.
2. If an "Open With..." box appears, then scroll down the list and choose Notepad. Click OK.

This Bpp.ini file is divided into sections. Each section has a header in brackets, for example: [Order] or [Global].

3. Scroll down to the [Global] section. At the beginning of the Global section you will see some lines similar to the following:

```
; source directory for DXF files, default: current directory
INI_XDir=c:\ww4\A1\DXF
; destination directory for WoodWOP programs, default: MPR
INI_MDir=c:\ww4\A1\MP4
```

; destination directory for polygon programs, default: MEL
 INI_PDir=***c:\ww4\al\ML4***

The path statements that are bold and italicized need to be changed to reflect your settings. The above are for WoodWOP 4.0.

If you are using the Vari2000 directory, then they should look like this:

; source directory for DXF files, default: current directory
 INI_XDir= ***C:\Vari2000\DXF***
 ; destination directory for WoodWOP programs, default: MPR
 INI_MDir= ***C:\Vari2000\MPR***
 ; destination directory for polygon programs, default: MEL
 INI_PDir= ***C:\Vari2000\MEL***

If you are using the WoodWOP directory, then they should look like this:

; source directory for DXF files, default: current directory
 INI_XDir= ***C:\ WoodWOP \DXF***
 ; destination directory for WoodWOP programs, default: MPR
 INI_MDir= ***C:\ WoodWOP \MPR***
 ; destination directory for polygon programs, default: MEL
 INI_PDir= ***C:\ WoodWOP \MEL***

**** You *must* make sure
 that all directories that are
 referenced in these files
 actually exist!****

Note: If your machine is a BP-140 or smaller, change the **INI_103ANA** line under the [DEFAULT] section from “20” to “10”. This is the horizontal safety clearance, which must be smaller on the smaller machines.

Setup for DXF to MPR Conversions

*The following instructions are only for versions of WoodWOP **before** 4.0.* If you are using WoodWOP 4.0, then use the Import command located on the File pull down menu in the WoodWOP program to convert DXF files directly inside of the WoodWOP program.

The DXF conversion (*.DXF) into programs (*.MPR) is accomplished in Windows File Manager or Explorer. First the program associations must be established, follow these steps.

In WIN 3.1x - File Manager:

DXF

1. Go into Windows.
2. Open File Manager.
3. From the pull down menus choose File and then Associate.
4. In the box titled “files with extensions” type DXF.
5. The box titled “associate with” should read C:\WW4\A1\Bpp.pif or your correct path.
6. If it’s not there, type it.

MPR

1. Repeat steps 1- 4, and in step 4, type MPR instead of DXF.
2. Repeat step 5. For WoodWOP 2.5, it should read C:\WoodWOP\WoodWOP.exe or C:\Vari2000\WoodWOP.exe
For WoodWOP 4.0, it should read C:\WW4\WW4.exe
3. Repeat step 6 if necessary.

In Windows95 - Explorer:

DXF

1. Go into Windows.
2. Open Windows Explorer.
3. Highlight a sample DXF file by Left-clicking on it one time.
4. Hold down the Shift key and Right-click on the same file.
5. On the pop up menu that will appear, the second line should say "Open with ...".
6. Choose this option.
7. On the new pop up menu, choose "Other".
8. Change to the directory containing the Bpp.exe program.
9. Select the Bpp shortcut that we modified back on page four, part two.
10. Click "Open".
11. Now you are back to the original "Open with..." menu. Click on the box next to the line that says "Always use this program to open this type of file".
12. Click "Okay".

MPR

1. Repeat steps 1-6, but choose a sample MPR file.
2. Repeat steps 7-9 but select the WoodWOP.exe or the WW40.exe program.
3. Repeat steps 10-12.

AutoCAD/Weeke Post Example of a Panel

914.4 x 609.6 x 19

With Typical Operations From a Base End

1. Start AutoCAD.
2. Load the provided Weeke prototype drawing (Bppproto.dwg). Each time you write a program for the Weeke, load up your prototype first. I have included a Bppproto.dwg drawing on this disk. We will be using this in our examples. Commands that you type in are shown in **Boldface** type. I will add explanatory notes as well. My notes will be between double asterisks (**).

Notice in the sample prototype drawing, that the UCS zero point has been changed to the upper right hand corner and that a variety of layers have already been created. In your own prototype drawing you will create all of the most common layers you use for your manufacturing methods. Then you will only need to edit the existing ones or create new ones as needed.

3. First, define your panel.

Make the panel definition layer the current layer (in our example, that would be S_19; see **Appendix A, page 19, for a detailed explanation of how to set up layer names**).

Use the Line or Polyline command.

Below is how you would type in the commands to create a 36x24 inch/ 914.4x609.6 millimeter panel.

Command: **pline**

From point: **0,0**

Current line-width is 0.0000

Arc/Close/Halfwidth/Length/Undo/Width/<Endpoint of line>: **914.4,0**

Arc/Close/Halfwidth/Length/Undo/Width/<Endpoint of line>: **914.4,609.6**

Arc/Close/Halfwidth/Length/Undo/Width/<Endpoint of line>: **0,609.6**

Arc/Close/Halfwidth/Length/Undo/Width/<Endpoint of line>: **0,0**

Arc/Close/Halfwidth/Length/Undo/Width/<Endpoint of line>: ****hit the Enter key****

Command: **zoom**

All/Center/Dynamic/Extents/Previous/Scale (X/XP)/Window/<Realtime>: **e**

4. Now, add a 2x4-inch toe-kick. Make the regular routing layer (FZ10T128; see Appendix A, for a detailed explanation of how to set up layer names) the current layer. Use the Line or Polyline command. There are some considerations when routing or grooving. Primarily, the tool you want to use and the correct tool offset (tool offset is defined as: to which side of the line do you want the tool to be offset to in order to compensate for the tool radius) as defined in the Layer name.

Command: **pline**

From point: **812.8,0**

Current line-width is 0.0000

Arc/Close/Halfwidth/Length/Undo/Width/<Endpoint of line>: **812.8,50.8**

Arc/Close/Halfwidth/Length/Undo/Width/<Endpoint of line>: **914.4,50.8**

Arc/Close/Halfwidth/Length/Undo/Width/<Endpoint of line>: ****hit the Enter key****

5. Now, add a ¼ inch / 6.35-mm saw groove. Make the regular grooving layer (NZ10_00L) the current layer. Use the Line or Polyline command. You must consider some things when grooving. Primarily, tool diameter and the resulting tool offset (tool offset is defined as: to which side of the line do you want the tool to be offset to in order to compensate for the tool radius). Notice that we did not define these things in the layer name this time. I will add notes to the command instructions below to explain how to deal with these issues. My notes will be between double asterisks (**).

Command: **pline**

From point: **0,599.6**

Current line-width is 0.0000

Arc/Close/Halfwidth/Length/Undo/Width/<Endpoint of line>:

****Groove width is automatic usually in WoodWOP; therefore, we will leave the line width at 0 and simply offset its placement according to the tool radius****

Arc/Close/Halfwidth/Length/Undo/Width/<Endpoint of line>: **914.4,599.6**

Arc/Close/Halfwidth/Length/Undo/Width/<Endpoint of line>: ****hit the enter key****

6. Next, we will add two rows of shelf holes. Make the regular shelf hole layer (ZG12_7) the current layer. Use the Circle command.

Command: **circle** 3P/2P/TTR/<Center point>: **100,37**

Diameter/<Radius>: **2.5**

Command: **array**

Select objects: 1 found ****choose the first hole you created****

Select objects: ****hit the Enter key****

Rectangular or Polar array (<R>/P): **r**

Number of rows (---) <1>: ****hit the enter key****

Number of columns (|||) <1>: **22** ****This will give us 22 holes****

Distance between columns (|||): **32** ****Center to center spacing of the holes****

Command: **copy**

Select objects: ****click and drag a window around the first row of holes**** Other corner:
22 found

Select objects: ****hit the Enter key****

<Base point or displacement>/Multiple: **cen** ****hit the Enter key**** of ****click on the first hole in the row**** Second point of displacement: **@0,400**

7. Now for some construction holes:

Command: **circle** 3P/2P/TTR/<Center point>: **9.5,37**

Diameter/<Radius> <2.5000>: **4**

Command: **copy**

Select objects: ****pick the hole**** 1 found

Select objects: ****hit the Enter key****

<Base point or displacement>/Multiple: **cen** of Second point of displacement: **@0,64**

Command: **copy**

Select objects: ****click and drag a window around the first two construction holes****

Other corner: 2 found

Select objects: ****hit the Enter key****

<Base point or displacement>/Multiple: **_cen** ****hit Enter**** of ****click on the bottom hole of the first two construction holes**** Second point of displacement: **9.5,572**

8. On the toe kick, we will add two horizontal boring holes for the kick plate. Make the horizontal hole layer (HO9_5) the current one.

Command: **insert**

Block name (or?): **horiz**

Insertion point: **896.4,50.8**

X scale factor <1> / Corner / XYZ: **8** ****the X and Y scale factors are used to determine the diameter and depth of the hole. Which one applies to which is determined by the orientation of the block on the board.****

Y scale factor (default=X): **17**

Rotation angle <0>: **180**

Command: **insert**

Block name (or ?) <HORIZ>: ****hit the Enter key****

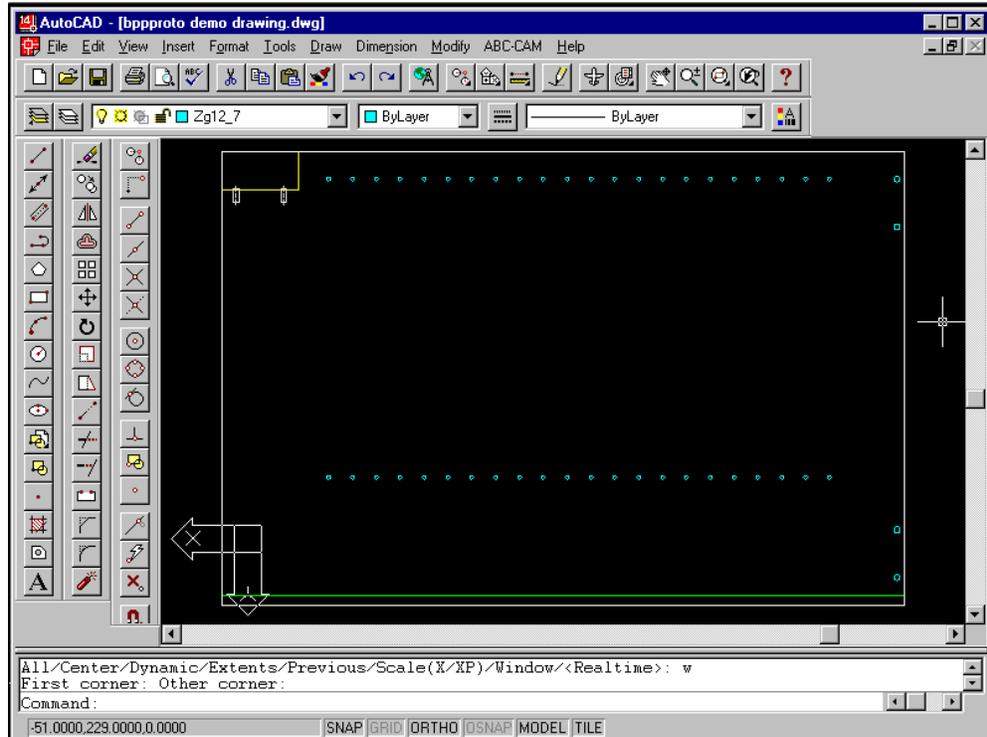
Insertion point: **832.4,50.8**

X scale factor <1> / Corner / XYZ: **8**

Y scale factor (default=X): **17**

Rotation angle <0>: **180**

You should now have a panel that looks very similar to the one below.



9. Save this drawing under a new name.

10. The last step is to type **DXFOUT** on the command line and hit the enter key. Save to the correct DXF directory. We set this up back in the installation instructions, section 3, page 5.

Importing the DXF into WoodWOP

If you are using WoodWOP 4.0:

1. Start the WoodWOP program.
2. Go to the File pull down menu. Choose Import. Choose DXF.
3. In the pop up box, change to your DXF directory.
4. Double click on your newly created DXF file.
5. WoodWOP will automatically convert and load the program.

If you are not using WoodWOP 4.0:

For the following instructions to work, you must have completed the “Setup for DXF to MPR Conversion” on page 6 successfully.

1. Open your File Manager or Windows Explorer.
2. Change to the correct WoodWOP DXF directory, as set up back in the installation instructions, section 3, page 5.
3. Double click on your newly created DXF file. You may see a DOS window flash up and then disappear.
4. Change to your WoodWOP MPR directory. Double click on the MPR file by the same name as your DXF file.
5. At this point, WoodWOP should start with your program loaded.

Appendix A

A Copy of the Bpp.ini File with Explanatory Notes

all added notes will be on a line starting with a semi-colon (;) and will be in double astir ()

```
; init file for BPP.EXE, Vers. 4.0 for HOMATIC / WoodWOP 4.0 Format
; lines, that start with a semicolon are comments (this line
; is a comment). The value range of the paramters were given in angular
; brackets. e.g.: <1..50> or <yes,no>.
; There must be [ENDE] in the last line
```

[ORDER]

```
; Parameter for the sequence of program operations.
; The program operation sequence runs from steps 1 to 8
; and can be changed through the order numbers.
;
; BORING: VERTICAL (single) ->
INI_Set1=1
; BORING: VERTICAL (multiple) ->
INI_Set2=2
; BORING: HORIZONTAL ->
INI_Set3=5
; GROOVING SAW ->
INI_Set4=3
; ROUTER ->
INI_Set5=4
; ASSEMBLE AGGREGAT ->
; Only used for specific customers with hardware insertion machines.
INI_Set6=6
; SUBPROGRAMS WITH BLOCKS ->
INI_Set7=7
; NC-STOP FUNCTION AT STEP ->
INI_Set8=8
;
;
; ATTENTION: 1. Use order numbers only once.
; ===== 2. You must insert all 8 order numbers.
;
;
```

[GLOBAL]

; 1 Version of WoodWOP, default = 2.5, BSTWOOD = 1.0, WW4.0 B200+ = 4.0
INI_WWVersion=2.5

; 2 Installation directory, default: none
INI_IDir=C:\ WW4\

; 3 Source directory for DXF files default: current directory
INI_XDir=C:\ WW4\A1\DXF

; 4 Destination directory for WoodWOP programs default: MP4
INI_MDir=C:\ WW4\A1\MP4

; 5 Destination directory for polygon programs default: ML4
INI_PDir=C:\WW4\A1\ML4

; 6 Set postprocessor to WEEKE, JOHNSDORF or HOMAG, default: WEEKE
INI_machine=WEEKE

; 7 Generate additional vertical contour routing macro <yes, no>, default: yes
INI_addcont=yes

; 8 Zero point representation, Weeke -> 0 (upper right), Homag -> 1 (lower left)
INI_WNpRep=0

; 9 Zero point of panel in CAD drawing, default: 1
; **This is for machines with a NUM 750 controller only**
; Upper right -> 1, upper left -> 2, lower left -> 3, lower right -> 4
INI_WNp=1

; 10 Language, 0=GERMAN, 1=ENGLISH
INI_Lang=1

; 11 Version
INI_Version=US

; 12 Use AutoCAD as CAD-System <yes, no>
; If NO, routing contour elements will be arranged in order; this also activates item number 24
INI_ACAD=yes

; 13 Use EEDs instead of layer names for Z-values <yes, no>
INI_EEDs=no

; 14 Measure angles clockwise <yes, no>, yes = CADdy, no = AutoCAD, yes = Spirit
INI_Uhrz=no

; 15 DXF-file contains only section ENTITIES <yes, no>
; no = CADdy, no = AutoCAD, yes = Spirit/OSD
INI_Section=no

; 16 DXF-format: group codes
; AutoCAD=0, CADdy=0, AutoSketch=1, Spirit=0, FastCAD=0
; ShapeCAD=0, Corel Draw=2
INI_DXF=0

; 17 Include Z-coordinate as 3-D-value (object-height) <yes, no>
; For use with single UCS, 3-D drawings
INI_Z3D=no

; 18 Include Z-coordinate as 3-D-value, lines for routing only (Z-coordinate) <yes, no>
INI_Z3C=no

; 19 Layer name includes Z-coordinate <yes, no>
; For use with 2-D drawings, see Layer section for layer name format
INI_ZLay=yes

; 20 If INI_ZLay=yes, length of layer codes is fixed (e.g. "S_").
; Length of the layer codes <1..8>
; Layer code refers to the first two digits in the layer name that identifies the operation type
INI_LLay=2

; 21 Default router, if no width information or no tool number in layer
INI_VorF=12

; 22 Default router feed speed <e.g. "STANDARD">
; A setting of STANDARD will cause the program to use to specified Feed values from the
; TechEdit (tool library) file.
; This value is in meters per minute.
INI_KVors=7

; 23 Default router insert mode, default=0 <1=on the fly>
INI_OnFly=0

; 24 Default saw unit, if <none> switch to "unit automatic", default <none>
INI_DefSaw=140

; 25 Default boring form feed, if special boring macro
; This is for metal only and works with layers 31, 32 and 33 described in the [LAYER] section.
; This is the maximum feed speed allowed in meters per minute.
INI_PBf=1.0

; 26 Horizontal borings defined by two or four lines <yes, no>
INI_HBor=yes

; 27 Vertical borings defined with one line <yes, no>
INI_VBor=no

; 28 On floating values -> digits behind decimal point
INI_Digi=6

; 29 Epsilon area to join entities, which were not direct connected
; Default: 0.1 mm
INI_Epsi=0.1

; 30 Checking for user coordinate system, group230 <yes, no>, default = no
INI_Ucs=yes

[DEFAULT]

; 1 Set panel dimension to default values, if no panel is found in drawing
; Default: 1000.0 x 600.0 x 19.0 mm
; Other global defaults can be set with the Bpp.pif file. See Appendix B of this manual.
INI_DefX=1000.0
INI_DefY=600.0
INI_DefZ=19.0

; 2 Set default form feed for polygons only
INI_Feed=5.0

[EXTEND]

; 1 This section only applies to multi-head processing machines

; Include extended information for machine line <yes, no>

INI_ExtD=no

; 2 Look for rectangle borings, length, width <mm>

INI_ExLe=256.0

INI_ExWi=320.0

; 3 Variable name for condition machine 2 <_m2>

INI_ExVa=_m2

; 4 If one of the following conditions is FALSE, INI_ExtD is set to FALSE

; Side criterion 1

; Condition 'L<' or 'L>' for length of the panel <mm>,

INI_ExCl1=L>1824.0

; 5 Condition 'B<' or 'B>' for width of the panel <mm>

INI_ExCw1=B>447.7

; 6 Condition diameter <mm>

INI_ExDi1=12.0

; 7 Side criterion 2

; Condition 'L<' or 'L>' for length of the panel <mm>,

INI_ExCl2=L>1366.8

; 8 Condition 'B<' or 'B>' for width of the panel <mm>

INI_ExCw2=B>447.7

; 9 Condition diameter <mm>

INI_ExDi2=5.0

[INSERTS]

; 1 Insert aggregates
; Generate boring macros with selection 'boring only 0/1/2' <yes, no>
INI_BIns=no

; 2 Default settings of insert aggregates
; Aggregate 1 -> diameter
INI_MoD1=5.0

; 3 Aggregate 1 -> boring depth
INI_MoT1=6.0

; 4 Aggregate 2 -> diameter
INI_MoD2=5.0

; 5 Aggregate 2 -> boring depth
INI_MoT2=6.0

[ZCOOR]

; 1 Set Z-coordinate with default variable <yes, no>
; Only variable names in upper case letters allowed
INI_ZCoor=no

; 2 Variable name for board thickness and default
INI_WVar=S
INI_WDef=19.0

; 3 Variable for boring depth and default
INI_FVar=T
INI_FDef=10.0

; 4 Variable for depth of groove and default
INI_NVar=N
INI_NDef=8.0

; 5 Variable for router depth and default
INI_BVar=B
INI_BDef=9.0

[LAYER]

; The format for each layer is different.
 ; Custom layer codes are alphanumeric with a max. of 2 function characters
 ; unless specified otherwise on page 10, item number 13
 ; numeric code from <0..1024>

; 1 Board, entity LINE or POLYLINE, "S_"
 ; Syntax of the layer name is S_(Panel thickness).
 ; Example: S_19_05; the S_ defines this operation as the board and the 19_05 defines a 19.05 mm thickness

;Note: If you use the RECTANGLE command to define your board outline, you must EXPLODE it prior to DXFOUT; otherwise, you will receive an "Error in Panel Edges" error upon importation into WoodWOP.

INI_w=S_

; Only for special versions of WoodWOP 2.5

; 2 Board, side view *RIGHT*, entity LINE, "SR" , for horizontal routing,
 INI_wr=SR

; Only for special versions of WoodWOP 2.5

; 3 Board, side view *LEFT*, entity LINE, "SL", for horizontal routing only
 INI_wl=SL

; Only for special versions of WoodWOP 2.5

; 4 Board, side view *UPPER*, entity LINE, "SO", for horizontal routing only
 INI_wo=SO

; Only for special versions of WoodWOP 2.5

; 5 Board, side view *LOWER*, entity LINE, "SU", for horizontal routing only
 INI_wu=SU

; 6 Vertical boring BoreSF_d, Slow fast to depth, entity CIRCLE, "Z_"

; Syntax of the layer name is Z_(depth).

; Example: Z_6_35

INI_b=Z_

; 7 Horizontal boring, entity INSERT or LINE, "HO"

; Syntax of the layer name is HO(Z placement). Hole diameter and depth are based on the length
 ; and width of the block itself.

; Example: HO9_35

INI_h=HO

; 8 Horizontal boring right, entity INSERT

; Syntax of the layer name is HR(Z placement). Hole diameter and depth are based on the length
 ; and width of the block itself.

; Example: HR9_35
INI_hr=HR
; 9 Horizontal boring left, entity INSERT
; Syntax of the layer name is HL(Z placement). Hole diameter and depth are based on the length
; and width of the block itself.
; Example: HL9_35
INI_hl=HL

; 10 horizontal boring lower, entity INSERT
; Syntax of the layer name is HV(Z placement). Hole diameter and depth are based on the length
; and width of the block itself.
; Example: HV9_35
INI_hv=HV

; 11 Horizontal boring upper, entity INSERT
; Syntax of the layer name is HH(Z placement). Hole diameter and depth are based on the length
; and width of the block itself.
; Example: HH9_35
INI_hh=HH

; 12 Horizontal boring with C-axes, entity INSERT
; Syntax of the layer name is HC(Z placement). Hole diameter and depth are based on the length
; and width of the block itself.
; Example: HC9_35
INI_hc=HC

; 13 Grooving saw, entity LINE or POLYLINE, "NZ"
; Syntax of the layer name is NZ(depth).
; Example: NZ10
INI_n=NZ

; 14 Grooving saw -X-, entity LINE or POLYLINE
; Syntax of the layer name is NX(depth).
; Example: NX10
INI_nx=NX

; 15 Grooving saw -Y-, entity LINE or POLYLINE
; Syntax of the layer name is NY(depth).
; Example: NY10
INI_ny=NY

; 16 Grooving saw -C-, entity LINE or POLYLINE
; Syntax of the layer name is NC(depth).
; Example: NC10
INI_nc=NC

; 17 Router contour, entity LINE, ARC or POLYLINE, "FZ", vertical, **for WW2.5 only**
 ; Syntax of the layer name is FZ(depth)T(tool number).
 ; Example:FZ12_7T11
 INI_f=FZ

; Only for special versions of WoodWOP 2.5

18 router contour, entity POLYLINE, "FR", view *RIGHT*, horizontal
 ; Syntax of the layer name is FR(depth)T(tool number)R(tool compensation,
 ; R= right hand, L= left hand)
 ; Example: FR12_7T128R
 INI_fhr=FR

; Only for special versions of WoodWOP 2.5

19 router contour, entity POLYLINE, "FL", view *LEFT*, horizontal
 ; Syntax of the layer name is FL(depth)T(tool number)R(tool compensation,
 ; R= right hand, L= left hand)
 ; Example: FL12_7T128R
 INI_fhl=FL

; Only for special versions of WoodWOP 2.5

20 router contour, entity POLYLINE, "FO", view *UPPER*, horizontal
 ; Syntax of the layer name is FO(depth)T(tool number)R(tool compensation,
 ; R= right hand, L= left hand)
 ; Example: FO12_7T128R
 INI_fho=FO

; Only for special versions of WoodWOP 2.5

21 router contour, entity POLYLINE, "FU", view *LOWER*, horizontal
 ; Syntax of the layer name is FU(depth)T(tool number)R(tool compensation,
 ; R= right hand, L= left hand)
 ; Example: FU12_7T128R
 INI_fhu=FU

; 22 Router contour polyline, entity POLYLINE, generate as polygon
 ; This layer is designed for vector graphics. When used in conjunction with a program which
 ; creates a vectored image in a DXF polyline format, this will create a WoodWOP Polygon
 ; which can then be scaled, rotated and stretched inside of WoodWOP. For AutoCAD 14, use
 ; regular Polylines, not LightWeight Polylines; To change the poly line type, on the command
 ; line type: Command: plinetype; New value for PLINETYPE <2>: 0
 ; Syntax of the layer name is FP(depth)T(tool number)R(tool compensation,
 ; R= right hand, L= left hand)
 ; Example: FP12_7T128R

INI_fp=FP

; 23 Router contour **for WoodWOP 4.0**, entity LINE, ARC, POLYLINE. This layer will create
 ; a contour pattern in WoodWOP 2.5 with no tooling information.
 ; Syntax of the layer name is FK(Z-depth[from the bottom of the board])T(tool number)R(tool
 ; compensation, R= right hand, L= left hand)
 ; Example: FK5 T128R

INI_fk=FK

; 24 BoreFFft, entity CIRCLE, Fast, fast, fast through boring
 ; Syntax of the layer name is ZA(depth).
 ; Example: ZA

INI_ba=ZA

; 25 BoreSFFt, entity CIRCLE, Slow, fast, fast through boring
 ; Syntax of the layer name is ZB(depth).
 ; Example: ZB

INI_bb=ZB

; 26 BoreFFSt, entity CIRCLE, Fast, fast, slow through boring
 ; Syntax of the layer name is ZC(depth).
 ; Example: ZC

INI_bc=ZC

; 27 BoreSFSt, entity CIRCLE, Slow, fast, slow through boring
 ; Syntax of the layer name is ZD(depth).
 ; Example: ZD

INI_bd=ZD

; 28 BoreFFd, entity CIRCLE, 'ZE', fast, fast to depth
 ; Syntax of the layer name is ZE(depth).
 ; Example: ZE5

INI_be=ZE

; 29 BoreFFd, entity CIRCLE, **with inserts**, fast, fast to depth
 ; Syntax of the layer name is ZF(depth).
 ; Example: ZF5

INI_bx=ZF

; 30 BoreSFd, entity CIRCLE, Slow, fast to depth
 ; Syntax of the layer name is ZG(depth).
 ; Example: ZG5

INI_bf=ZG

; 31 **Metal** ->, entity CIRCLE
; Syntax of the layer name is ZQ(depth).
; Example:ZQ12
INI_bm=ZQ

; 32 **Metal** -> BohrFM_t, entity CIRCLE
; Syntax of the layer name is ZN(depth).
; Example:ZN12
INI_bn=ZN

; 33 **Metal** -> BohrSM_D, entity CIRCLE
; Syntax of the layer name is ZP(depth).
; Example:ZP12
INI_bp=ZP

; 34 Multi spindle SFt, entity CIRCLE, Slow, fast through
; Syntax of the layer name is LO.
; Example: LO
INI_l=LO

; 35 Multi spindle FFFt, entity CIRCLE, Fast, fast, fast through
; Syntax of the layer name is LA.
; Example: LA
INI_la=LA

; 36 Multi spindle SFFt, entity CIRCLE, Slow, fast, fast through
; Syntax of the layer name is LB.
; Example: LB
INI_lb=LB

; 37 Multi spindle FFSt, entity CIRCLE, Fast, fast, slow through
; Syntax of the layer name is LC.
; Example: LC
INI_lc=LC

; 38 Multi spindle SFSt, entity CIRCLE, Slow, fast, slow through
; Syntax of the layer name is LD.
; Example: LD
INI_ld=LD

; 39 Multi spindle FFd, entity CIRCLE, Fast, fast to depth
; Example: LE12

INI_le=LE

; 40 multi spindle SFd, entity CIRCLE, Slow, fast to depth

; Syntax of the layer name is LF(depth).

; Example: LF11

INI_lf=LF

; 41 metal -> multi spindle, entity CIRCLE

; Syntax of the layer name is LM(depth).

; Example:LM12

INI_lm=LM

; 42 metal -> multi spindle, MultFM_d, entity CIRCLE

; Syntax of the layer name is LN(depth).

; Example:LN12

INI_ln=LN

; 43 metal -> multi spindle, LoreFM_t, entity CIRCLE

; Syntax of the layer name is LP(depth).

; Example:LP12

INI_lp=LP

; 44 insert aggregate, entity INSERT, "MA"

; Syntax of the layer name is MA(depth).

; Example:MA13

INI_ma=MA

; 45 block layer for subprograms "BL"

; Example:

INI_bl=BL

[ENDE]

Appendix B

Options List for Set Up of the Bpp.pif File

Function: DXF post processor for HOMATIC Weeke machines

Syntax: BPP <-f=> [<opts>]

Options :

- f= Name of the DXF file
- m= Name of the Variant programs (* .MPR)
- o= Optimization mode (0-2)
- v= Feed speed percentage (For WW2.5)
- k= Comment line
- r= Parking mode (0-2)
- w= Parking position
- h= Horizontal safety mode (0-2)
- u Generate as a subroutine
- s Generate as a mirrored program
- t= Name of the temporary file for WoodWOP 4.0
- h1= Path and Name of the H1 file
- l= Name of the Log file (No screen display)
- i= Name and Path of the INI file
- k= comment
- p= define order
- e use AutoCAD Extended Entity Data
- ? this message

Example: Command line of the PIF / Shortcut: Bpp.exe -o=2 -r=1 -w=1200
In this example, all programs started with this set up would have defaults of Optimization Mode 2, Parking Mode 1 with a Park At value of 1200.

Appendix C

ALL TEXT IN APPENDIX C IS DIRECTLY FROM THE RESPECTIVE AUTOCAD HELP FILES

Section 1: How to create layers in AutoCAD 12

Command LAYER

The LAYER command lets you control which drawing layer you are currently drawing on, and which drawing layers are displayed. It also controls the color and line type associated with each drawing layer.

Format: LAYER

?/Make/Set/New/ON/OFF/Color/Ltype/Freeze/Thaw/LOck/Unlock:

Options

? wildname	Lists layers, with states, colors and line types.
Make name	Creates a new layer and makes it current.
Set name	Sets current layer.
New name, name	Creates new layers.
ON wildname	Turns on specified layers.
OFF wildname	Turns off specified layers.
Color c wildname	Assigns color "c" to specified layers.
Ltype x wildname	Assigns line type "x" to specified layers.
Ltype ?	Lists loaded line types.
Freeze wildname	Completely ignores layers during regeneration.
Thaw wildname	"Unfreezes" specified layers.
LOck wildname	Disallows editing of specified layers.

Unlock wildname Allows editing of specified layers.

Where "wildname" appears above, the layer name(s) can include "*" and "?" wild cards. A single "

" selects all existing layers.

See also: AutoCAD Command Reference

"Basic Concepts of Layers" in chapter 7 of the AutoCAD User's Guide

Section 2: How to create layers in AutoCAD 13&14

Command line LAYER

1. From the Format menu, choose Layer.
2. In the Layer & Line type Properties dialog box, choose New. A layer called Layer1 is displayed.
3. Click Layer1 and enter a new layer name. The layer name can include up to 31 characters. Layer names can contain letters, digits, and the special characters dollar sign (\$), hyphen (-), and underscore (_). Layer names cannot include blank spaces.
4. To change a layer's color, select the layer and click its Color icon. In the Select Color dialog box, select a color and choose OK.
5. To change a layer's line type, select the layer and click its Line type icon. In the Select Line type dialog box, select a line type.
6. Choose OK to exit each dialog box.

Tips, Tricks & Reminders

1. AutoCAD 14 has the ability to use regular polylines and lightweight polylines. **Always use regular polylines.** Lightweight polylines may cause errors in the DXF post depending on how you use them. In order to change the polyline default type that AutoCAD is using, at the command line type: PLINETYPE, then type in 0 (zero). This will cause all polylines to be drawn in the regular format. For any existing drawings that were made with LWPolylines, simply export them in AutoCAD 12 DXF format.
2. The maximum radius the Weeke can cut is 99,999.00 millimeters. For an arc above this range, create a polygon with 1024 sides and the desired radius. Then break the resultant polyline at the correct points to get the desired arc.
3. When importing images into AutoCAD from another package that creates a vectored image (for example Corel Draw), be aware that the resolution may be poor. If you export one of these images directly into the Weeke, you will see all the sides look very jagged. Therefore, be sure to scale the image up in AutoCAD before exporting it to the Weeke. Scaling in AutoCAD increases resolution. You can scale back down in WoodWOP without adversely effecting the resolution.
4. A similar problem as described in number 1, may occur with Ellipses. To create an ellipse using polylines instead of creating a true ellipse, at the command line type: PELLIPSE, then type in 1 (one). All future ellipses will be drawn as a series of polylines.