

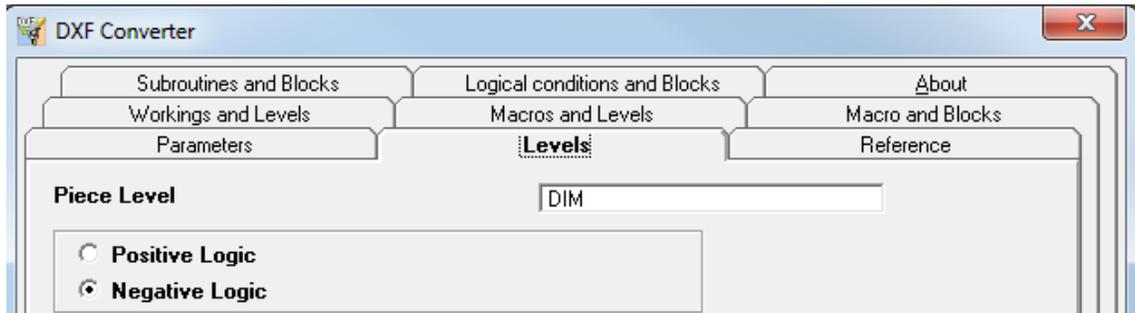
DEFINITION OF CONFIGURATION AND PROGRAMMING OF DXF-FILE FOR IMPORT IN TPAEDI32

I. Layer-definition in CAD program depending on definition on TPAEDI32

(example according to DraftSight)

1) Define Layer with name "DIM". This layer is used to define the piece dimension,

a. Definition in TPAEDI32



2) Layer for definition of a Mill-Setup

a. The Layer-name starts with the prefix for definition of a MILL-SETUP. (in this case „ST“)

b. Different functions can be assigned

i. Tool number (in this case „T“)

ii. Radiuscorrection (in this case „K“)

1= correction left, 2=correction right

iii. Nesting-contour (in this case „N“)

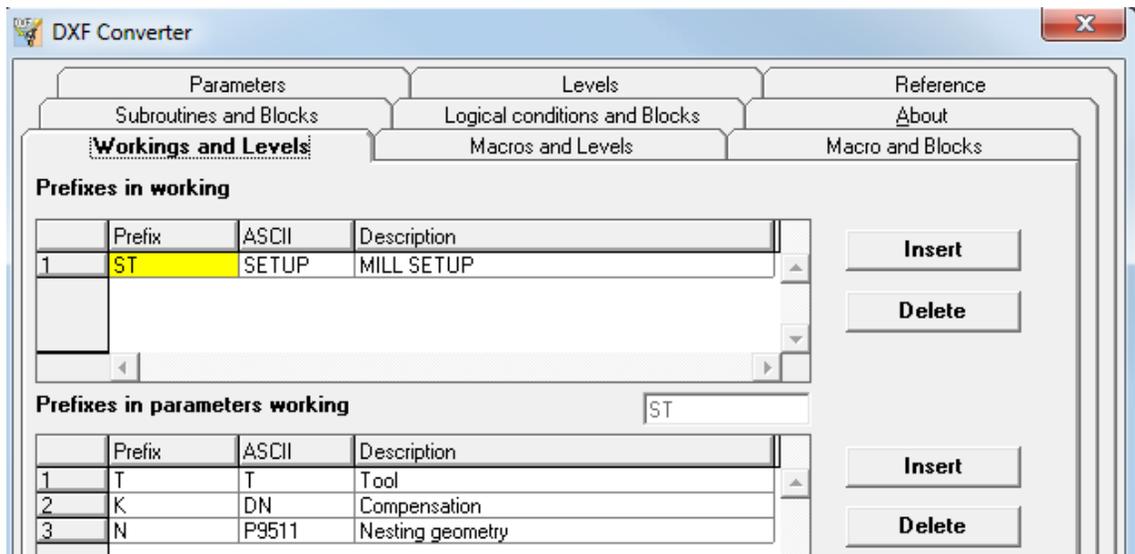
1=will be defined as a nesting contour

c. Normaly each tool has a separate layer

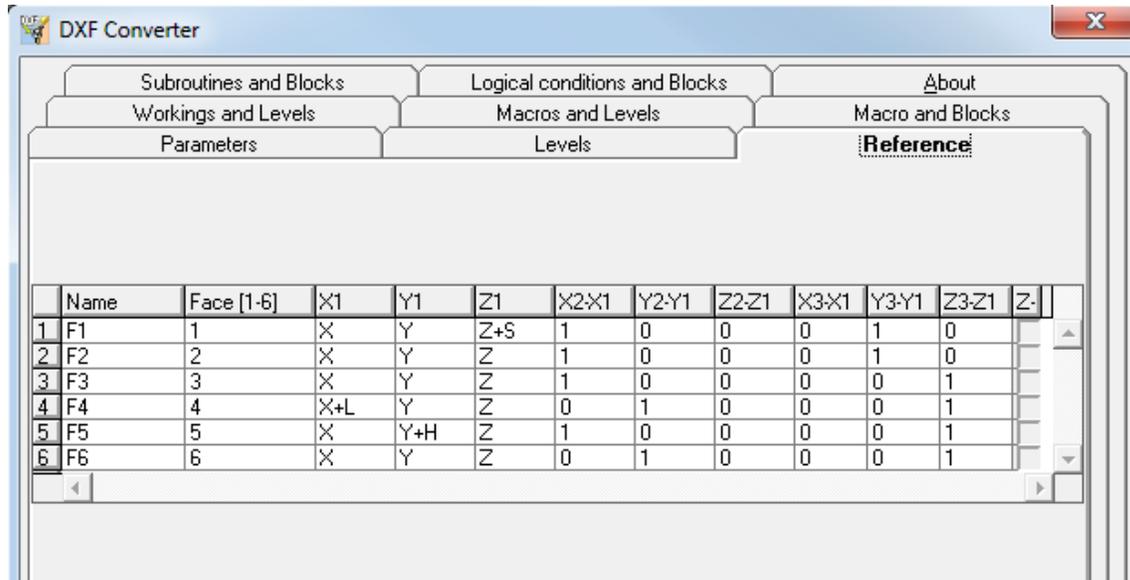
As an example here the layer definition of a standard mill set-up:

„STT1234K2“

This would define a mill set-up with tool ID 1234, radius-correction to the right



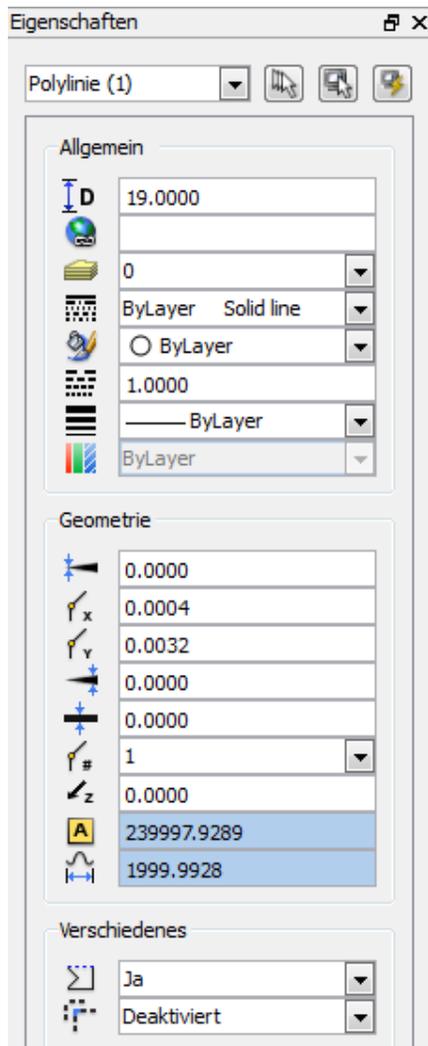
It is required that the DXF IMPORT settings are made like shown in the picture.
 (under „C:\WDFlash\CADCFG\CUSTOM“ there is the file „DXFTOCAD.ini“ This file included
 the settings)



II. Generate the work-piece in the CAD program

- 1) Generate the work-piece contour:
 - a. Select Layer with name “DIM”
 - b. Draw a rectangle, the left, lower corner has to be in the zero-
 - c. Assigne a depth to the rectange

Attention: It has to be a polyline and not a solid valume shape.

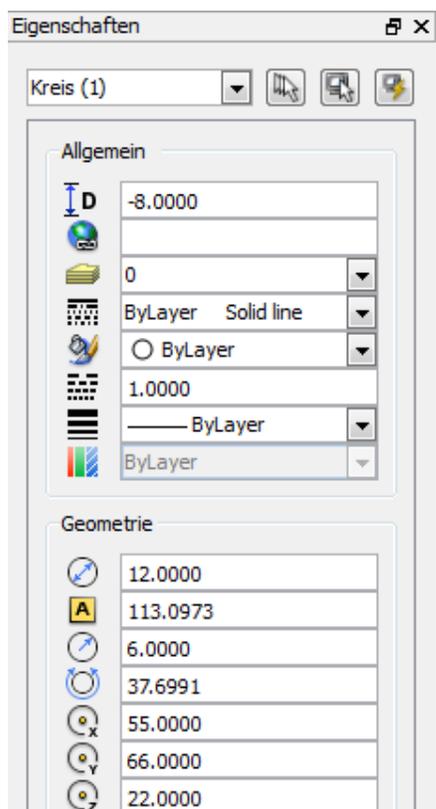


Piece-thickness

WERKSTÜCKSTÄRKE

III. Definition of a Hole

- 1) Select the upper face, (DRAFTSIGHT: Unter „Ansicht“ die Auswahl „Benannte Ansichten“ und dann hier die Ansichtsname „Oben“ auswählen)
- 2) Draw a circle
 - a. ATTENTION: The layer „0“ should be used, in any way you must not use the layer that assigns the piece-dimension (DIM) or a layer assigned to do mill set-ups. es
 - b. Define X and Y Position of the center of the hole
 - c. Define diameter
 - d. Check if the circle is in the correct Z dimension. Z should be equal to the thickness of the piece. If not assign the correct depth
 - e. Assign a depth to the circle (negative value, equals the drilling depth)



Eigenschaften Kreis
(Achtung: nicht Zylinder!)

Tiefe (negativ)

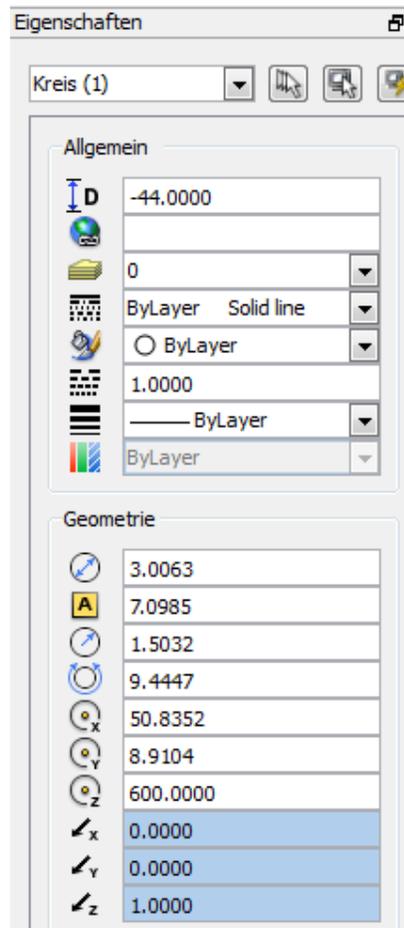
Durchmesser

X Maß
Y Maß

Z Maß muss ident mit der
Stärke des Werkstücks
sein

If drills are programmed into a lateral face the sequence is the same but in the beginning you have to select the corresponding face.
For the face #4 and face #5 you have to assign the correct Z value depending to the zeropoint (e.g. face #4 the Z value equals the length of the piece, depth is negative)

As an example the definition of a hole in face #4
(DraftSight: Ansicht nach rechts)



Bohrungstiefe

Z Maß entspricht Länge
des Werkstücks

IV. Definition of a Milling

- 1) Select the necessary face
- 2) Draw the contour that you want to mill. You can use lines, arches and polylines
- 3) Depending on the defined Z position the depth can be assigned from the top or the bottom of the piece
 - a. if $Z=0$ and $\text{depth}=-2$ the cutting depth is 2mm below the lower face of the piece
 - b. if $Z=\text{piece-thickness}$ and $\text{depth}=-5$, the cutting depth is 5 lower than the top face
 - c. If a line is defined it is possible to assign different Z values for the start and end. So the definition is relative to the lower face of the piece
- 4) For the face #4 and face #5 you have to assign the correct Z value depending to the zeropoint (e.g. face #4 the Z value equals the length of the piece, depth is negative)

V. Save Programs

The file has to be saved as a ASCII DXF. (In DraftSight this works up to V2010, in other Cad programs this might be different, try to use a lower version e.g. R12)