



CadTpa

Version 1.4.0

Import DXF to Cad Tpa



Tecnologie e Prodotti per l'Automazione

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1 Introduction

This document describes the functioning specifications of the importation module from DXF format which is included in the standard installation

The conversion procedure must be obviously enabled by the machine constructor during the machine configuration.

The conversion settings are set in a dialog box, are divided in different pages, some of which are available only if the presence of an USB hardware key correctly programmed is recognized.

2 Conversion rules from DXF format

Before examining in detail the available settings, let us see which criteria are adopted during a file conversion in a DXF Format.

A CAD system, that produces a file in DXF format, is generally a drawing system, oriented to define geometrically some objects. Normally, it does not foresee the possibility to characterize geometric elements with the technological indications, e.g. concerning a type of working, tools, the manner in which the workings should be carried out. In contrast, it is normal to introduce in a drawing some information and graphic objects which are used out of documentation (e.g.: dimensioning), but anything concerns with the workings which are carried out by the machine.

The DXF file may contain graphical objects which don't have to be converted, while the geometric entities to convert need additional information. Hence the need to have a mechanism that filters the necessary information and that allows to introduce the missing information arose. Both the mechanisms of filter and of integration use layers (levels) of DXF file which allow the creation of groups of objects.

The filter action is defined in the page **Layers**: where are shown the layers or the blocks to filter or, in alternative, those to convert. In the first case it concerns the functioning in relative logic, in the second one it concerns positive logic.

The integration action can use two alternative methods:

- **basic procedure:** the drawing is converted as geometric piece description and all the technological definitions are directly introduced in TpaCAD after the conversion.
- **dedicated procedure:** the technological information are introduced in the phase of DXF drawing and the conversion can directly integrate them into the format for TpaCAD This procedure is used only if the presence of a hardware key correctly programmed is checked: then, the wording "dedicated procedure" will refer to the case of functioning with the checking of the presence of the hardware key. Both the procedures, basic and dedicated, apply the selected criteria to filter the layers and/or the blocks.

Basic Procedure

The converter carries out automatically the conversion according to the following guidelines:

- points are converted into point-related workings, with assigned diameter;
- lines are converted into setup working, followed by a L01 linear : Pf(X,Y,Z);
- arcs are converted into setup working, followed by an A01 arc : xy(Xf, Yf, centre, rot), Zf;
- polylines are converted in setup working, followed by A01 or L01 workings, according to the type of segment to translate.
- ellipsis and ellipsis arcs are converted into setup working, followed by A01 arcs for the original conical curve sampling.
- texts are converted in setup working, followed by A01 or L01 workings, to develop the related layout of each character.
- Piece dimensions are brought from piece layer (see later) or they are determined from the overall dimensions of the translated workings.

The working codes with whom had been translated the points and the setup, which open profiles, are geometric; thus without technological parameters, which is possible to replace directly in TpaCad.

ATTENTION: Contact TPA to install additional libraries to import Spline curves.

Custom Procedure

The basic mechanism of the custom procedure requires to characterize the geometric entities, which have a common technological characterization, with the same layer (or block), whose name contains the technological data.

Some geometric elements, which correspond to any face defining the basic program parallelepiped of TpaCad, can be inserted in a two-dimensional (2D) DXF file. In this case the layer of the geometric entities is interpreted (see on page: **Reference systems**).

Instead, the layer doesn't have to be used for three-dimensional (3D) drawings, where the corresponding TpaCad face is selected with regard to the set UCS.

According to the type of selected logic and to the included or excluded layers and/or blocks, the converter converts in accordance with the following rules:

- entities which have layer (or block) with defined prefix are translated with corresponding workings (see pages: **Workings and layers, Macro and layers, Subroutines and blocks, Macro and Blocks, Logical Conditions**). The technological characteristics of the working are inserted considering the defined parameter list for the prefix;
- entities whose layers were not treated in the point before are converted according to the general criteria, that are described in the basic procedure;
- piece dimensions are brought from piece layer (see later) or they are determined from the overall dimensions of the translated workings;

- the geometric entities, that can be translated, are converted either to working macros in one of the basic faces (1 to 6) according to the presence in the layer of the face identifier, or of the UCS set in the 3D DXF. If there are layers with face indicators there must be also the layer with the panel specifications;
- the Z coordinate is taken from the drawing, if it's not specified in the layer.

General Criteria

While creating a DXF file you need to consider the following restrictions of a general nature:

- the DXF drawings must have a **1:1** with millimetres used as **a unit of measure**;
- the converter only interprets elements such as: **points, circles, segments, arcs, polylines made by arcs and segments, ellipses, texts**.

Criteria to assign layers and blocks

The conversion of a DXF file interprets the layers and the blocks and requires the observance of some general criteria to assign the names. Below there is an instructions and advices list:

- the interpretation is always case-sensitive (it distinguishes between capital and small letters);
- we recommend to assign different names between different tables. For example: faces names, in the page **Reference system**, have to be different from the prefix names of the workings, in order to avoid ambiguous interpretations;
- the interpretation of a name of layer or of block foresees to find, in the order: working prefix, face name, parameter prefix.

2.1 Parameters

- **Minimum circle radius:** a circle with a radius lower or equal than the set value will be interpreted as point, otherwise as an arc with a radius equal to that of the circle and start point coinciding with the end point. The set value must be included between 0.0 and 1000.0 [mm]. The value by default is 0.0.
- **Active connection:** if selected, it enables the connection of the geometric elements of arc, line or polyline type of the same layer and whose start and/or end points coincide. Two exterior points of a geometric entity must be considered coincident if the difference of their coordinates is lower than the **Connection distance**. Default is active.
- **Connection distance:** the setting is considered only if the entry **Active Connection** is selected. It sets the longest distance used in the connection procedure. The set value must be included between 0.0001 and 0.1 [mm]. The value by default is 0,001
- **Find the initial point:** the setting is considered only if **Active Connection** is selected. If selected, the conversion searches in the DXF file the points whose coordinates correspond with the start or end coordinates of an arc, of a line or polyline and which are on the same layer. These points will become the workings start points. In this way a no oriented geometry turns in an oriented geometry. The point entities used to assign the start of the polylines are then excluded from the conversion. Default setting is disabled.
- **Import text:** if selected, this option imports the assigned texts into layers valid for import. If not selected, this option does not execute any importation, even if the texts are assigned into valid layers. The texts are imported with the development of the paths directly in the profiles. Default is active.
- **Font space:** it sets the space to insert among the characters of a writing. The set value must be included between 0.0 and 1000.0 [mm]. The value by default is 0.0
- **Arcs of ellipse:** number of arcs which are solved in the ellipse quadrant. The value set should be an integer between 8 and 30. The value by default is 8. An ellipse is imported through the development of the path in a profile composed by a number of arcs which is the same of the set value, multiplied for the four ellipse quadrants.
- **Piece thickness:** it sets the thickness to assign to the panel, without other specifications (see: piece layer, in the Layers page). The values must be included between 1.0 and 1000.0 [mm]. The value by default is 20.0.
- **Absolute coordinates:** it sets the polyline points coordinates as absolute, as regards to the P(0,0) reference. If the option is not selected, the conversion changes the polyline points coordinates from absolute, as regards the polyline start point, to the relative ones. Default is not active.
- **Unit of measure:** selection field from a list This selection specifies the unit of measure that the procedure assigns to the converted file (file in TCN format). You can choose one of these three options:
 - [mm] the converted file is always in unit [mm] (default)
 - [inch] the converted file is always in unit [inch]
 - Interpretation from DXF the file unit is [mm] or [inch], according the assignment in the original DXF file (default, in case of invalid unit: [mm]).
- **Calculate 3D view faces:** the option is available only with **dedicated procedure**. If the option is

selected, it enables the 3D importation of a piece and of the workings in the faces, on the base of the set UCS for the elements of the DXF file. The 3D importation of the piece adds the height value to the depth of the imported workings, instead of the usual relation with the Z position. Default is not active.

- **Assign geometric construct workings:** the option is available only with **dedicated procedure**. If the option is selected, all the elements, which don't correspond to workings prefixes or set up macros, are imported as constructs. If the option is not selected, or in the case of **basic procedure**, the construct is not applied to the workings.
- **Block exclusion:** if this option is selected, all the blocks are excluded from the conversion.
- **Other:** field of text type. It should be used for assignments, that have been added between a release and the following one. In relation to the syntax, please follow the specific instructions.

The above parameters and the guidelines are applied both in the basic procedure and in the custom procedure.

2.2 Layers

- **Piece layer:** name of the layer identifying the geometry of the overall dimensions of the piece. The geometric entities typically belonging to this layer are the four segments of a polyline forming a rectangle, with:
 - the source of the piece layer (point of minimum overall dimensions, for X and Y coordinates) assigns the zero point for the conversion procedure: all the elements are converted in relation to the source of the layer piece;
 - the Z of the layer piece is ignored for the evaluation of the depth positioning of the geometric elements;
 - the polyline height sets the panel thickness, if positive and if it's unset on the layer (see at a stretch).

Anyway the piece layer is assigned: the overall dimensions in depth, which is determined on the same piece, assigns the thickness of the panel.

In the piece layer it's possible to set:

- the thickness of the panel, specifying the "ZP" string (ATTENTION: capital letters) followed by the value;
- the program comment, specifying the string "DN" (ATTENTION: capital letters) followed by the description: we recommend to assign the comment at the end of the piece layer name.

ATTENTION: the recognition of the piece layer and of the thickness and comment strings is for capital characters (the format is case-sensitive).

If in the DXF file the entities of the piece layer are missing, the piece dimensions are taken by the largest overall dimensions of the translated graphical objects and translated to the axes origin.

Example of full assignment of the layer piece: "PEZZOZP40DNpippo":

- the piece layer is "PEZZO";
- the panel thickness is 40 mm;
- the program comment is "pippo".

- **Positive/Negative Logic:** shows the current work modality for the filter action of the geometrical objects:

Positive: the conversion only works on the geometrical entities assigned on the layers in the list below (Active layers; Blocks included);

Negative: the conversion doesn't work on the assigned geometrical entities and/or on the layers in the list below (Layers excluded; Blocks excluded).

- **Layers included/excluded:** list of the layers to include or exclude from the conversion. It's possible to insert in the list up to 100 layers names and each name is composed by a maximum of 32 characters. The not allowed characters are <>^:?*|`= ". The buttons **[Insert]** and **[Delete]** allow to add or to delete an option from the list. The user should select the entry **Negative Logic** to import all the layers of a DXF file, otherwise: the layers names to convert have to be inserted in the list
- **Blocks included/excluded:** list of the layers to include or exclude from the conversion. It's possible to insert in the list up to 100 blocks names and each name is composed by a maximum of 32 characters. The not allowed characters are <>^:?*|`= ". The buttons **[Insert]** or **[Delete]** add or delete an entry from the list.

2.3 Reference systems

The accessibility of the page is allowed only through **dedicated process**.

The two tables allow the user to assign the rules to import the workings from geometric units of the DXF draw in anyone of the six faces of the base piece.

The settings here assigned define the correspondence between the reference systems of the DXF drawing and the faces of the TpaCAD system.

The use of the settings of the two tables requires the assignment of the piece layer.

The first table is used to import 2D DXF pieces (entry **Calculate 3D view faces** is not selected).
The second table is used to import 3D DXF pieces (entry **Calculate 3D view faces** is selected).

A face is determined by:

- **Name**: sequence of alphanumeric characters (from 1 to a maximum of 10 characters, the first character can't be numerical) which is in the name of a layer.
ATTENTION: the recognition of the name in the layer distinguishes capital and lower-case characters (the format is case-sensitive).
ATTENTION: we recommend to assign names of a length which is not less than 2 characters, preferably alphabetical (letters and no figures).
The name is used in the case of the 2D DXF drawing: all the geometric entities belonging to one side are characterized by different layers, whose name includes the name of the face.
In the 3D DXF drawing: the indication of the face, to which an entity belongs, shall be deducted from the geometric information of the face (triad of the points of the plan and direction of the depth axis).
- **Face**: number of the face in TpaCad system.. The values must be included between 1 and 6 and not repeated.
- **P1,P2 and P3 three points** defining, with reference to a right-ward cartesian system, the oriented plan and, therefore, the face position in the space. The P1 point (with coordinates: X1, Y1, Z1) is the reference of zero in every face workings. Vectors P2-P1 and P3-P1, perpendicular to each other, define the plane orientation of the face (they have the meaning of vectors);
- **Z+**: if it's selected, it inverts the sign of the position set as coordinate Z of the workings which are imported on the corresponding face.

Each point of the three points of the face is assigned by means of three coordinates (X,Y,Z):

- point P1 (X1, Y1, Z1): places the face origin in the system of absolute reference(0,0,0) or related to the layer piece. The coordinates of Point P1 may also be expressed in the parametric form using as variables:
 - dimensions: L,H,S (as results of the piece layer);
 - programmed coordinates: X,Y,Z. Now the variables are obsolete and maintained only for compatibility with the already assigned configurations: they will be useful to take back the reported elements at the origin of the piece layer, that now is moreover always done, even if the origin is not assigned (0 =).
 - numeric values;
 - mathematical operators of sum (+) and subtraction (-);
- point P2 (X2-X1, Y2-Y1, Z2-Z1): places the point P2 in relative with reference to the P1 point. Settings have the meaning of vectors: they so indicates the vector direction between the two points and they are applied to: +1.0, -1.0 or 0.0;
- point P3 (X3-X1, Y3-Y1, Z3-Z1): places the point P3 in relative with reference to the P1 point. Settings have the meaning of vectors: they so indicates the vector direction between the two points and they are applied to: +1.0, -1.0 or 0.0.

Assigned the element position in a DXF file like (x; y; z), let's see how the coordinates (X; Y) of the converted element are calculated:

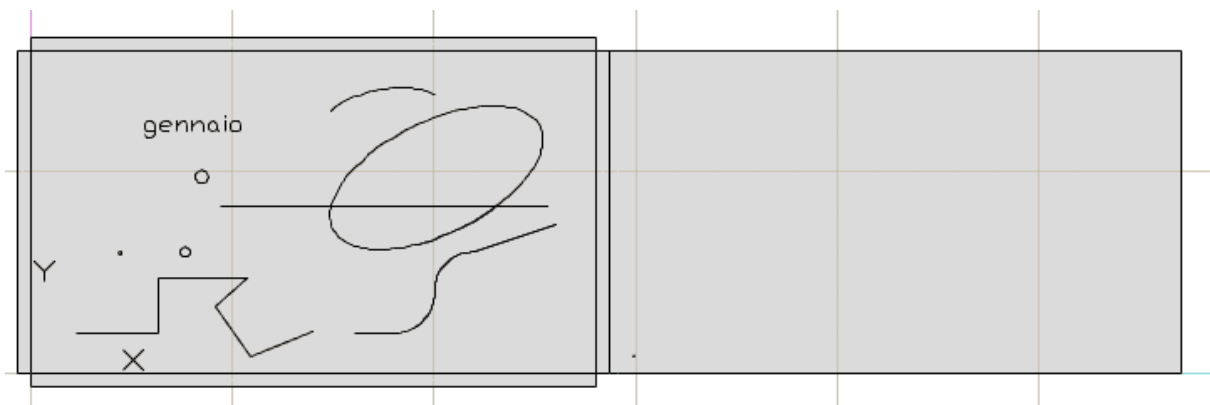
$$X = X1 + x * (X2 - X1) + y * (Y2 - Y1) + z * (Z2 - Z1)$$

$$Y = Y1 + x * (X3 - X1) + y * (Y3 - Y1) + z * (Z3 - Z1)$$

for the depth coordinate of the converted element are applied different rules:

- with 2D drawing conversion: the depth corresponds to the Z of the DXF drawing;
- with 3D drawing conversion: the depth corresponds to the height of the DXF drawing;

Let's see, for instance, how to assign a DXF file (2D) as in the figure:



The big rectangle on the left corresponds to the piece layer and it defines the face 1 system with origin point in (0:0:0).

Beside rectangles which define the other 5 faces of the parallelepiped piece are assigned with the same logic of piece "loading" of the box view with side development:

- faces 3 and 5 respectively in low and above from the face 1;
- faces 4 and 6 respectively on the right and on the left from the face 1;
- face 2 on the right (big rectangle).

Space is not left between the rectangles of the faces.

Except for the rectangle of face-piece, it will be required to indicate the names of the excluded layers to the rectangles of the faces.

Now let's set the first table to assign the faces of the TpaCad piece (with the selection of faces in transparency):

Face	Name	X1	Y1	Z1	X2-X1	Y2-Y1	Z2-Z1	X3-X1	Y3-Y1	Z3-Z1
1	SD1	0	0	0	1	0	0	0	1	0
2	SD2	2*L+S	0	0	-1	0	0	0	1	0
3	SD3	0	-S	0	1	0	0	0	1	0
4	SD4	L+S	0	0	0	1	0	-1	0	0
5	SD5	0	H+S	0	1	0	0	0	-1	0
6	SD6	-S	0	0	0	1	0	1	0	0

In "Z2-Z1" e "Z3-Z1" column, the 0 value has to be set: being here the geometry assigned to two dimensions, the axis directions on Z have no meaning.

For instance, a geometric point has to be imported in face 2:

- the piece layer assigns dimensions: L=1000 (Length); H=500 (Height); S=20 (Thickness);
- in the point layer has to be assign the name "SD2";
- in the drawing DXF, the point is programmed to the position (X=1120; Y=100).

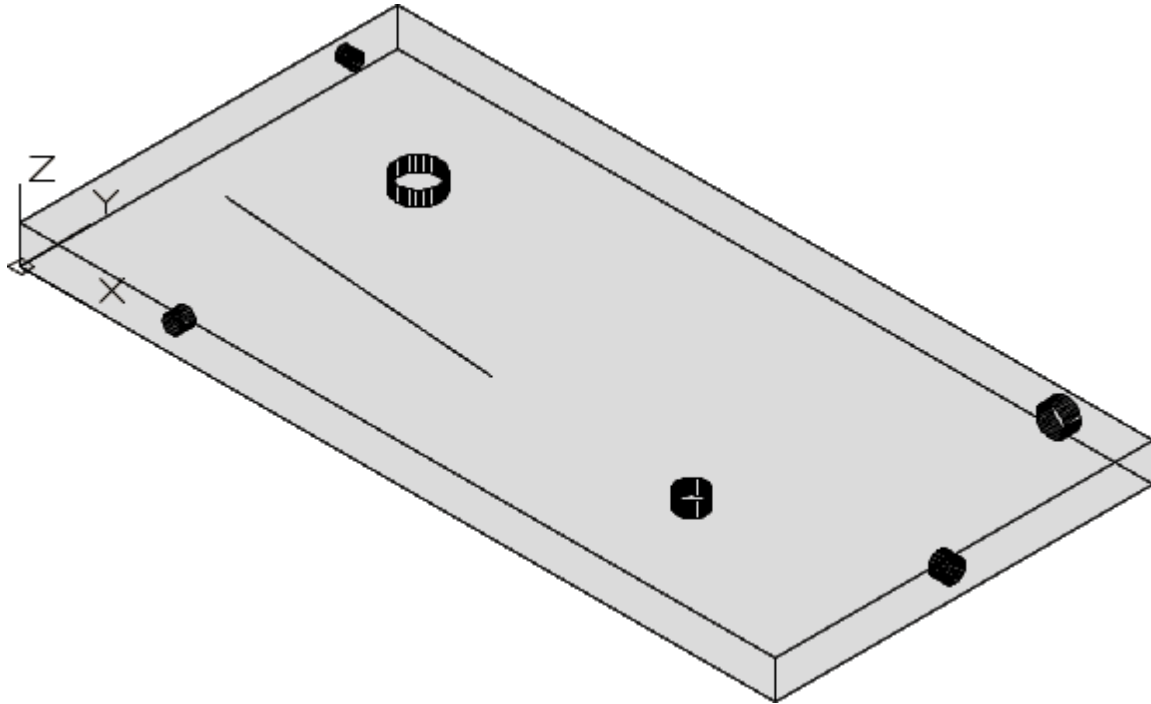
On the basis of the settings which are shown in the table for the face "SD2", the point is imported to the positions: X=900; Y=100.

On the same DXF drawing, consider now a geometric point which has to be imported in face 4:

- in the point layer, it has to be assign the name "SD4";
- in the drawing DXF, the point is programmed to the position (X=1015; Y=100).

On the basis of the settings which are shown in the table for the face "SD4", the point is imported to the positions: X=100; Y=50.

Let's now see, for instance, how to assign a DXF file (3D) as in the figure:



The parallelepiped which draws the piece is defined with a polyline and it corresponds to the piece layer: it defines the 3 dimensions, particularly the thickness on the Z direction. The drawing elements are assigned on the UCS of the drawing, in order to correspond to the XY panel and to the thickness (z axis) requested.

Now let's set the second table to assign the faces of the TpaCad piece (with the selection of faces in transparency):

Face	Name	X1	Y1	Z1	X2-X1	Y2-Y1	Z2-Z1	X3-X1	Y3-Y1	Z3-Z1
1	SD1	0	0	S	1	0	0	0	1	0
2	SD2	0	0	0	1	0	0	0	1	0
3	SD3	0	0	0	1	0	0	0	0	1
4	SD4	L	0	0	0	1	0	0	0	1
5	SD5	0	H	0	1	0	0	0	0	1
6	SD6	0	0	0	0	1	0	0	0	1

As it has already been said: the faces names are not used to associate a drawing element to the face. In the case as above for the UCS correspondence table, a geometric entity inserted in the DXF file must assign the direction of the three points concerning its own UCS, as follows:

- face 1: (X0; Y0; Z1)
- face 2: (X0; Y0; Z-1)
- face 3: (X0; Y-1; Z0)
- face 4: (X1; Y0; Z0)
- face 5: (X0; Y1; Z0)
- face 6: (X-1; Y0; Z0).

2.4 Working and levels

The accessibility of the page is allowed only through **dedicated process**.

In this page the conversion criteria are set for the blocks to translate. A working and its parameters are associated to the present characters in the layer name of a DXF entity.

In the DXF file the layer is characterized by a 32 characters name:

- first characters, which we call prefix, are associated to a current working in the workings data-base of TpaCad, among those of punctual or setup typology (the workings which have the application point programming in polar system are excluded);
- the remaining characters are associated to the working parameters defined by the prefix and, if necessary, to the face name.

The prefix:

- is composed from 1 to 30 alphanumeric characters (the first character can't be numerical);
- cannot be repeated;
- must be assigned.

Regarding the workings prefixes, we recommend to assign names of a length which is not less than 2 characters, preferably alphabetical (letters and no figures). Moreover, we recommend to set names which are not inclusive among them: e.g. it's to avoid the use of two prefixes like "HOL" and "HOLE". The parameters indicators are assigned with a single alphabetical character. For each prefix it is possible to have up to 26 parameters indicators.

In the layer as assigned in DXF files:

- after an indicator have to appear a number (integer or with a decimal part with regard to the parameter type) showing the value to be assigned to the corresponding parameter;
- as decimal separator it is possible to use the point (.), the comma (,) or the underscore (_).

In the third table shown in the window, up to 2 of the parameters common to all the profile workings (arcs or lines) may be assigned, as resulting from the working database of TpaCad.

Even if they are not imposed, we show some useful rules to assign the prefix; these can avoid possible situations of unclear interpretations:

- assigning only alphabetical prefixes, of a fixed length (e.g.: 3, 5, characters);
- among different workings, assigning the same indicator for homogeneous meaning parameters (e.g.: use always the indicator "T" for the tool).

Let's see an instance:

The accessibility of the page is allowed only through **dedicated process**.

In this page the conversion criteria are set for the blocks to translate. A working and its parameters are associated to the present characters in the name of the layer of a DXF entity.

In the DXF file the layer is characterised by a 32 characters name:

- First characters, which we call prefix, are associated to a current working in the workings data-base of TpaCad, among those of punctual or setup typology (the workings which have the application point programming in polar system are excluded);
- the remaining characters are associated to the working parameters defined by the prefix and, if necessary, to the face name.

The prefix:

- is composed from 1 to 30 alphanumeric characters (the first character can't be numerical);
- cannot be repeated
- must be assigned

Regarding the workings prefixes, we recommend to assign names of a length which is not less than 2 characters, preferably alphabetical (letters and no figures). Moreover, we recommend to set names which are not inclusive among them: e.g. it's to avoid the use of two prefixes like "HOL" and "HOLE". The parameters indicators are assigned with a single alphabetical character. For each prefix it is possible to have up to 26 parameters indicators.

In the layer as assigned in DXF files:

- after an indicator have to appear a number (integer or with a decimal part with regard to the parameter type) showing the value to be assigned to the corresponding parameter;
- as decimal separator it is possible to use the point (.), the comma (,) or the underscore (_).

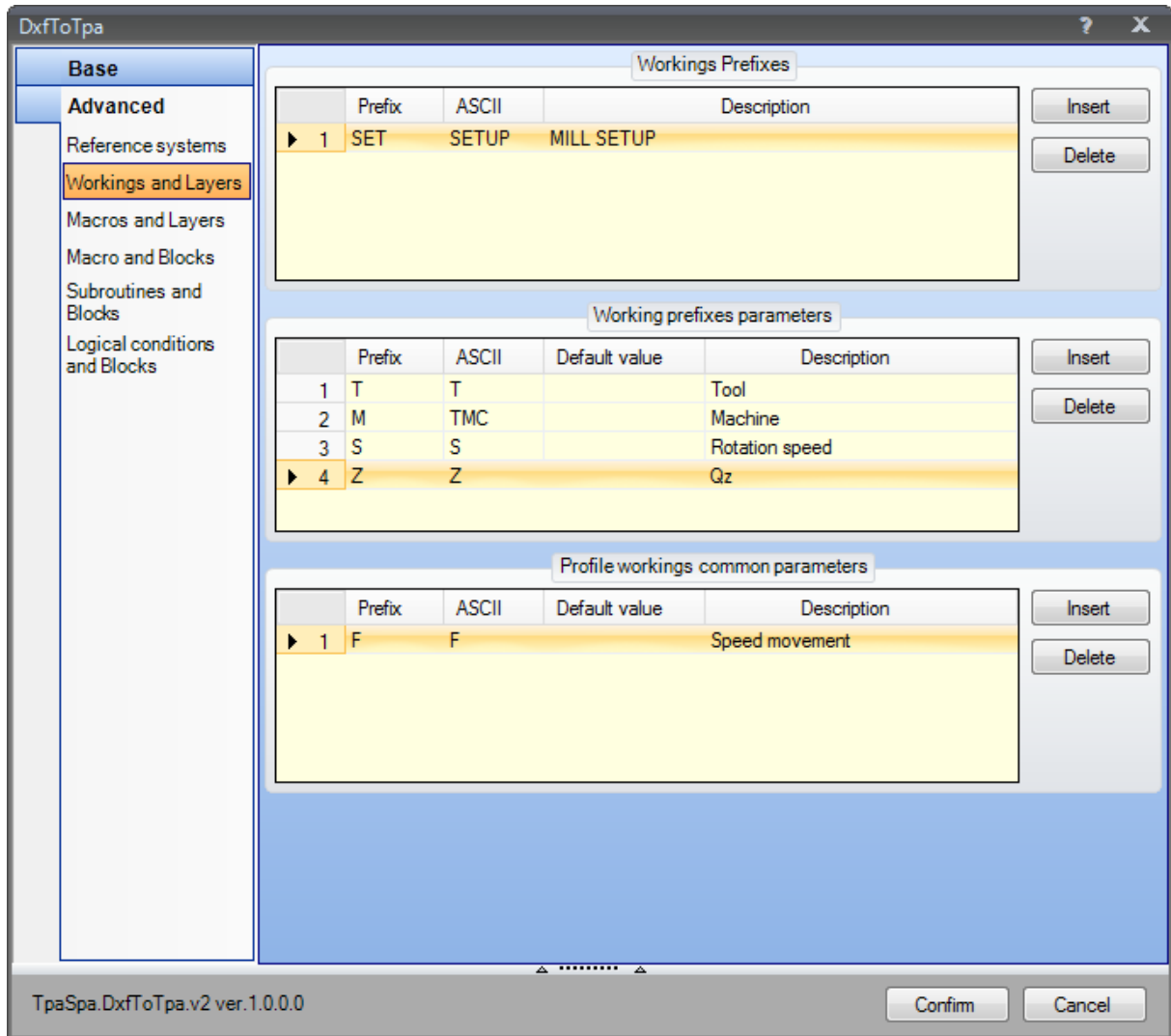
In the third table shown in the window, up to 2 of the parameters common to all the profile workings (arcs or lines) may be assigned, as resulting from the working database of TpaCad.

Even if they are not imposed, we show some useful rules to assign the prefix; these rules can avoid possible situations of unclear interpretations:

- assigning only alphabetical prefixes, of a fixed length (e.g.: 3, 5, characters);
- among different workings, assigning the same indicator for homogeneous meaning parameters (e.g.: use always the indicator "T" for the tool).

In the column "Default value" (in the two tables of the parameters) you can set a numerical value (integer or with decimals), that will be assigned to the parameter, if it is not assigned in the layer.

Let's see an instance:



In the first list the prefix SET is associated to the working which has the ASCII name "SETUP" and description "MILL SETUP". Regarding this working are defined the parameters (second list):

- Tool associated to the T indicator (in the working the parameter has ASCII name "T" and description "Tool")
- Machine associated to the M indicator (in the working the parameter has ASCII name "TMC" and description "Machine")
- Rotation speed associated to the S indicator (in the working the parameter has ASCII name "S" and description "Speed rotation")
- Qz associated to the Z indicator (in the working the parameter has ASCII name "Z" and description "Qz")

The third list shows there are some parameters not necessarily related to one only working, but to all the profile workings. For instance, F indicator is associated to the speed of movement.

As a result, if the conversion reads a layer of the type SETM1T10S4000F5Z12_8, this last one is

translated as

- Mill setup on basic face;
- Machine 1:
- Tool 10:
- The speed rotation rate of the milling machine is 4000 rpm;
- The speed feed rate is 5 mt/min;
- Working depth is 12.8 mm.

The working application point on the plan of the face is taken from the DXF file. In the example, the working depth is assigned through the layer interpretation: otherwise it's deduced from DXF file.

2.5 Macro and levels

The accessibility of the page is allowed only through **dedicated process**.

In this page the conversion criteria are set for the blocks to translate. A working and its parameters are associated to the characters which there are in the layer name of a geometric entity of point or line type of DXF. In this page it is only dealt with the corresponding workings to fix cycles (macro-program codes). The rules of the name interpretation of a layer are the same described for the page before.

For each working it is possible to assign:

- up to 26 parameters of generic assignation (with prefix assigned over one only alphabetical character)
- three parameters corresponding to the three coordinates of the application point.

In the column "Default value" (in the two tables of the parameters) you can set a numerical value (integer or with decimals), that will be assigned to the parameter, if it is not assigned in the layer.

A considerable association Layer-Macro was entered to code the sawing work. If in the DXF file the reference layer of a line is associated to a macro (typically sawing work), the geometrical information of the line can be transmitted to the macro interpreting considerable prefix:

- "&A" for the angle,
- "&U" for the module,
- "&X"/"&Y"/"&Z" for the X/Y/Z at the end of the line.

Application point

This list allows the corresponding parameters to be assigned to the application point coordinates of the current working.

The option **Assign application point Z from the layer** is applied to all the assigned workings of the page. If the option is selected and the layer sets a "Z..." field, this is assigned to the Z position of the application point of the macro. If the option is not selected, the Z position of the application point of the macro is assigned only through the corresponding parameter, if it's set in the table.

2.6 Macro and blocks

The accessibility of the page is allowed only through **dedicated process**.

In this page the criteria of translation are set for the blocks to translate. A working is associated to the characters into the block's name and to the block's attributes its parameters. Only the workings which correspond to fixed cycles are considered (macro-program codes). The prefix name corresponds to the block's name and it can have a length from 1 to 30 alphanumerical characters, when the file, which records the block, is assigned.

For each working it is now possible to assign:

- up to 26 parameters of reassignable r-variables of the macro (over one only alphabetical character)
- three parameters corresponding to the coordinates of the application point.

2.7 Subroutines and Blocks

This page is accessible only if there is a hardware key and it's recognized as valid. In this page the criteria of translation are set for the blocks to translate. A working is associated to the characters into the block's name and to the block's attributes its parameters. The prefix name corresponds to the block's name and it can have a length from 1 to 30 alphanumerical characters, when the file, that records the block, is assigned. To the prefix a subroutine is associated, assigned with the name of the search,

possibly with its extension and concerning the product\sub folder of the subroutines. A length of no more than 100 characters is accepted

For each working it is now possible to assign up to 8 parameters of reassignable r-variables of the subroutine (over one only alphabetical character).

2.8 Logical conditions and Blocks

The accessibility of the page is allowed only through **dedicated process**.

In this page the criteria of translation are set for the blocks to translate. A logical working is associated to the characters into the block's name and to the block's attributes its parameters. The prefix name corresponds to the block's name and it can have a length from 1 to 30 alphanumerical characters, when the file, that records the bloc, is assigned.

For each working it is now possible to assign:

- up to 26 parameters assigning working parameters (over one only alphabetical character)
- three parameters corresponding to the coordinates of the application point.



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