TransTools For AutoCAD (Free Version) – Full Reference

While you can easily translate documents in most editable formats using Computer-Aided Translation software like SDL Trados Studio, memoQ, etc., this is not so easy with AutoCAD drawings. **TransTools for Autocad (free version)** offers you an easy-to-use workflow for translating AutoCAD drawings. It is a special Autocad file (DVB extention) that you can load into AutoCAD to take advantage of a number of useful commands to automate your translation tasks.

Features overview

Command	Description	Usage
Extract Translatable Text	Extracts all unique text from drawings (including TEXT, MTEXT, TABLE, REFERENCE, DIMENSION and MULTILEADER objects) and outputs them as a Microsoft Excel / Microsoft Word table for translation. The command can process multiple layouts within current drawing, multiple selections within current drawing, or multiple open drawings.	Create a translation table containing text used on drawing(s). Translate it manually or using CAT tools. This final table may be used to quickly translate drawings using Translate using Translation Table command.
Translate using Translation Table	Uses a translation table to merge translated text into drawing(s). The command can process multiple layouts within current drawing, multiple selections within current drawing, or multiple open drawings.	Translate drawings using the translation table. Get a huge speed improvement compared to traditional techniques.

The above commands offer you an easy-to-use workflow for translation of AutoCAD drawings, giving you a dramatic speed improvement as compared to the traditional method of typing over each text item. They work especially well when combined with CAT software.

Supported versions

TransTools for AutoCAD works in AutoCAD 2002 or newer versions, including 64-bit versions of AutoCAD.

Differences between TransTools for AutoCAD (Free version) and TransTools for AutoCAD (Professional version)

TransTools for AutoCAD (Professional version) includes the following features missing from the free version, which help simplify translation:

- Paragraph and line breaks are represented by regular breaks in generated translation tables (in the free version, they are represented by
 and <para/> tags). However, if the extracted text contains **\P** codes (which denote line breaks), these are not converted into regular line breaks. This will be changed in future releases.
- To merge translations into drawings, the translation table is selected from a file (in the free version, the translation table needs to be copied to the clipboard and then pasted into the Translate Using Translation Table dialogue).

For the Professional version of TransTools for AutoCAD, use **TransTools for AutoCAD.dvb** file available as part of the Automatic installer or the Manual Installation package.

Installation

To install **TransTools for AutoCAD (Free Version)**, download the latest version from http://www.translatortools.net/download.html (listed at the bottom of the Download page). Please note that active development of the free version has been discontinued and only major bugs will be fixed in it in the future. If you would like to use a more feature-rich, latest version, use **TransTools for AutoCAD** distributed as part of the main TransTools download (available as Automatic Installer or Manual Installation Package from the Download page), where TransTools for AutoCAD is available for registered users of TransTools Professional Edition (with a 45-day free

trial period for existing and new users). You can read about the latest features added in TransTools for AutoCAD at this location.

How does it work?

'TransTools for Autocad (free version)' works slightly differently under different versions of Autocad:

- **Autocad 2009 and newer versions:**

  Since Autocad 2009 and newer versions use a new user interface, how you control 'TransTools for Autocad' will depend on your workspace settings. If you have AutoCAD 2010 or later, read the Notes section below before proceeding.

  - **Initial Setup Workspace (default):** When this user interface is enabled, there are a number of tabs at the top of AutoCAD window (this user interface is also called 'scenic ribbon').

    To load 'TransTools for AutoCAD', click *Load Aplication* button [1] from *Applications* group under *Tools* tab, or type *APPLOAD* at the command prompt.
    To launch TransTools commands, click the small *VBA* button [2] located in *Applications* group under *Tools* tab, or type *VBARUN* at the command prompt.
    The operation of these dialogues is exactly the same as in AutoCAD 2008 or earlier.

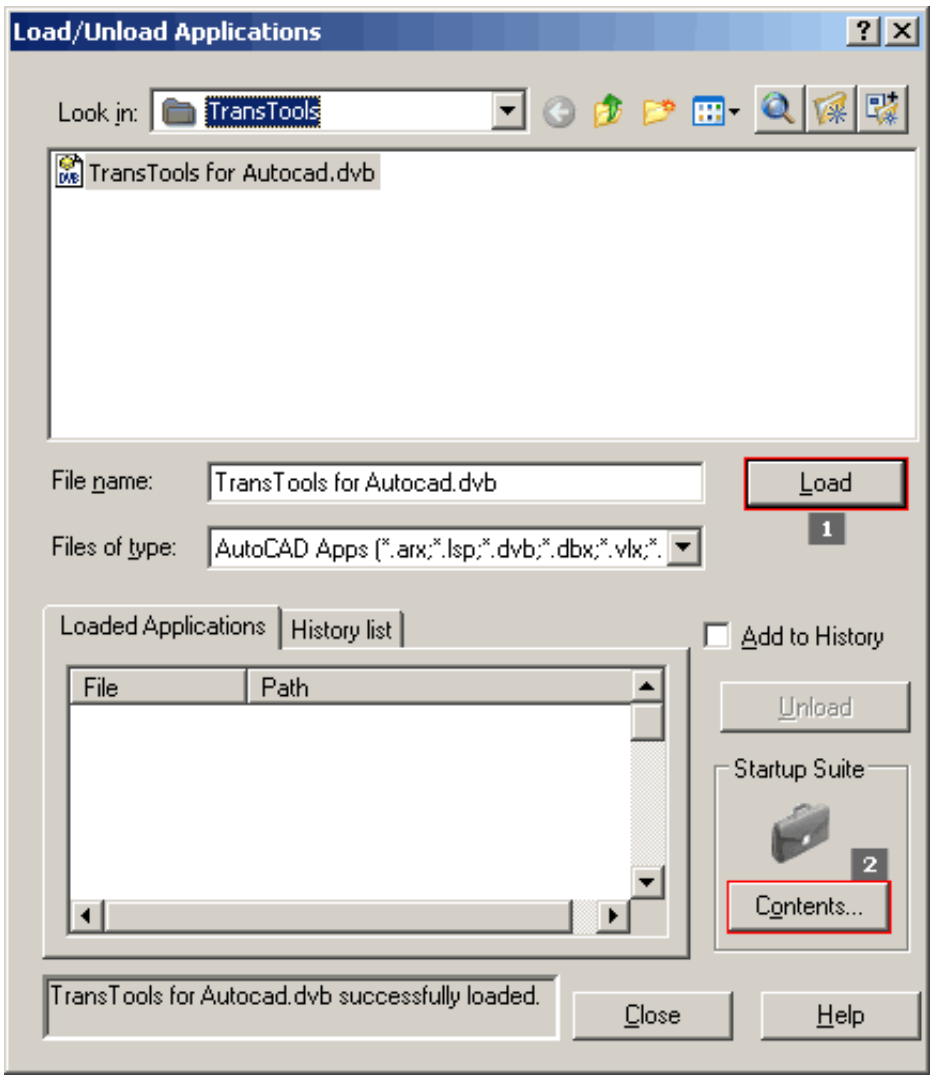
  - **AutoCAD Classic workspace:** When you use this workspace, 'TransTools for Autocad' works exactly the same as in AutoCAD 2008 or earlier.

- **Autocad 2008 and older versions:**

  1. First, load 'TransTools for Autocad':

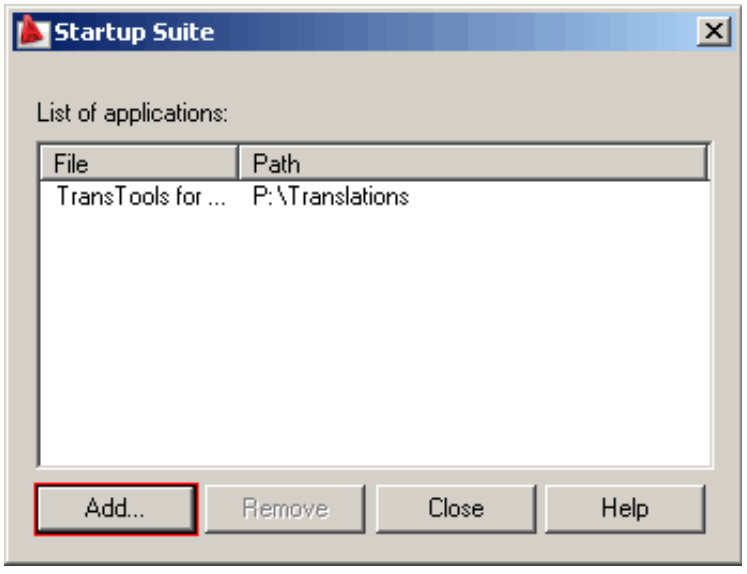
     Select *Tools -> Load Application...* menu or type *APPLOAD* at the command prompt.

     You will be presented with *Load/Unload Applications* dialogue. In this dialogue, select 'TransTools for Autocad (free).dvb' from disk (if you used the automatic installer, this should be in your My Documents\TransTools folder) and click Load button.



Click Close button at the bottom of Load/Unload Applications dialogue to continue. You need to perform this step each time you restart AutoCAD.

Note: If you want to load TransTools automatically every time AutoCAD starts, add it to *Startup Suite*: open Load/Unload Applications dialogue as explained above, click Contents... button, and click Add... to select 'TransTools for Autocad (free).dvb' from disk:

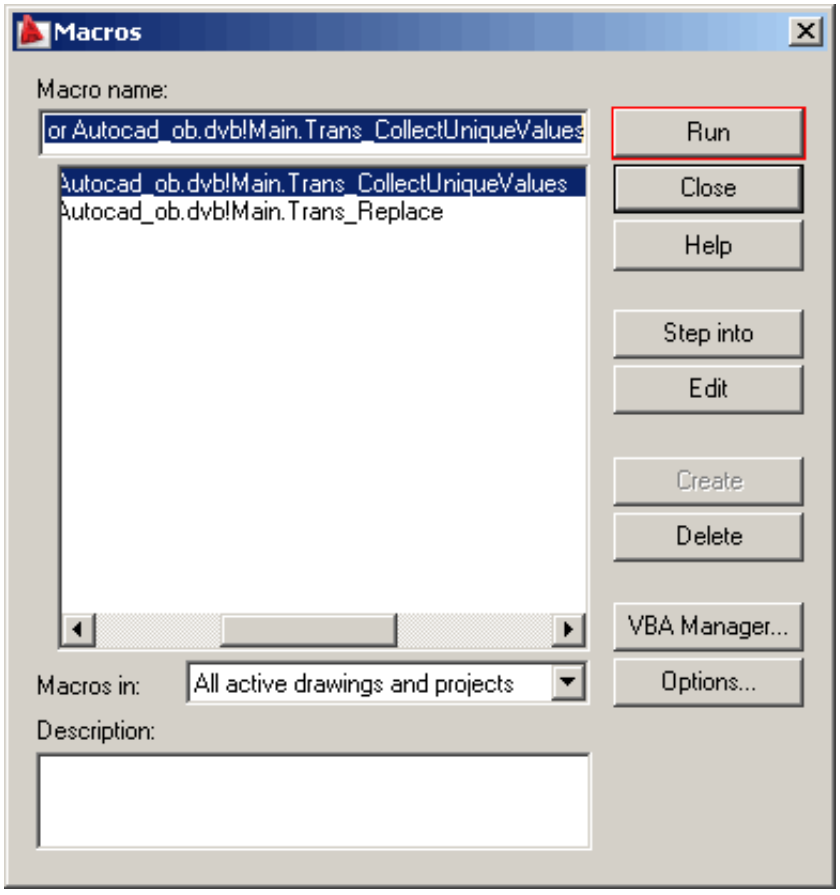


2. Launch TransTools commands:

   Open the *Macros* dialogue by clicking *Tools -> Macro -> Macros...* or type *VBARUN* at the command prompt.

   In the Macros dialogue, select either 'Trans_CollectUniqueValues' (to extract text from the drawing) or

'Trans_Replace' (to merge text back into the drawing) and click Run.



Notes

- **AutoCAD 2010 and newer versions** do not include VBA support in the installation program. You will need to download and install a special free module from this location: http://visiblevisual.com/jupgrade/index.php/195-autocad-vba-enabler (although this link is not from the official Autodesk website, it aggregates all versions of VBA Enabler, providing links to their download locations at Autodesk website).
- **AutoCAD 2009 and older versions:** VBA support is an optional component in the AutoCAD installation program. Please ensure that it is enabled during installation (you will not be able to perform the above steps unless VBA is installed)

Extract Translatable Text

This command is designed to extract text from drawings in order to speed up translation of repetitive information (e.g. notes, holds, equipment descriptions, labels, etc). Combined with Translate using Translation Table command, it will dramatically improve your translation speed and quality when dealing with Autocad drawings.

How it works?

This command processes drawing layouts or user selections and extracts all unique text from drawing objects (including TEXT, MTEXT, TABLE, DIMENSION, MULTILEADER and EXTERNAL REFERENCE objects). All this text is then output into a Microsoft Excel or Microsoft Word document as a translation table. After you finish translating the second column of the translation table (manually or using CAT software), you use Translate using Translation Table command to merge the translation back into the drawing.

Features

- Process multiple layouts in the current drawing and/or multiple selections within the current drawing;
- Batch-process multiple drawings opened in AutoCAD;
- Support for TEXT, MTEXT, TABLE, DIMENSION, MULTILEADER and EXTERNAL REFERENCE objects;
- All text is sorted by coordinates in top-to-bottom, left-to-right order (by X, Y and Z coordinates);
- Text is extracted with formatting codes, making it easy to preserve formatting when the text is imported back into drawings with Translate using Translation Table;

- Formatting codes are specially formatted to make it easy to differentiate between them and translatable text. Most formatting codes are marked with DO_NOT_TRANSLATE style in Microsoft Word translation tables, which is handy for Computer-Aided Translation users;
- Option to process specific layers only (e.g. if the text you need to translate is in 'TXT_EN' layer);
- Option to process text only (i.e. text objects containing letters as opposed to digits, punctuation marks, etc.);
- Option to exclude text based on specific conditions (e.g., to ignore text like 'LG-123-456');
- Configure the format of translation tables (optionally add layer or object type information).

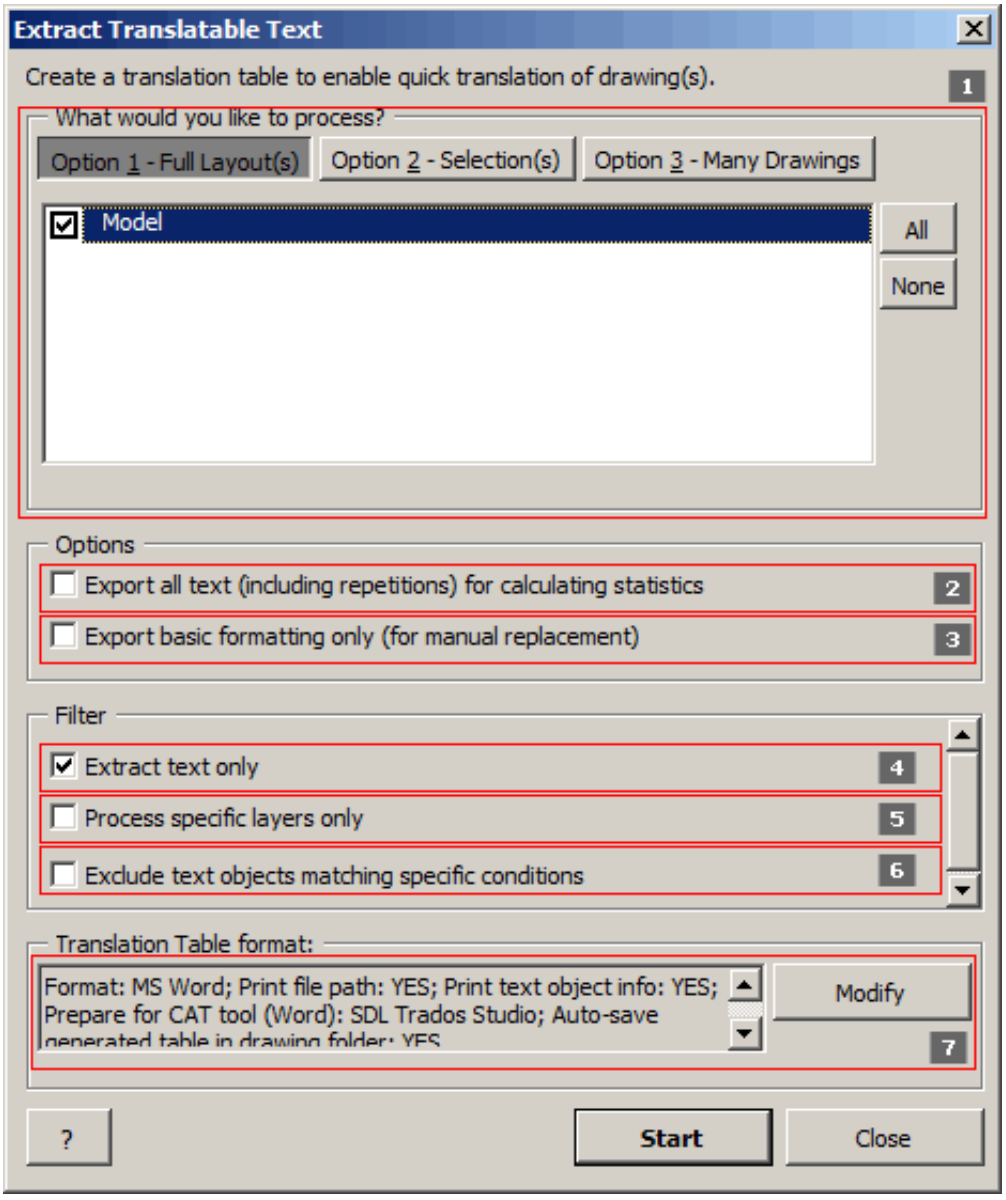
Running the command

Extract Translatable Text is launched from Autocad's Macros dialogue. Click here for more information on how to execute the macro.

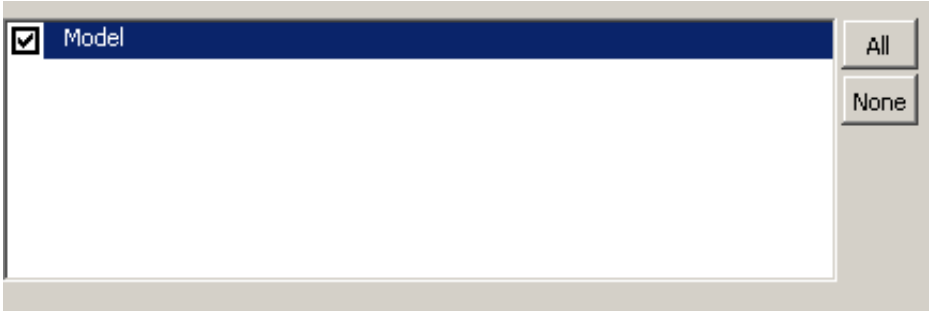
Tips for CAT software users

Many drawings contain slightly different text. Using TransTools for Autocad in conjunction with CAT software, you will be able to speed up translation even further. For ease of use, remove the first several rows and the third column before importing the Excel or Word file into your CAT tool. Save the translation as a new document and paste its first column into the second column of the original translation table.

Options

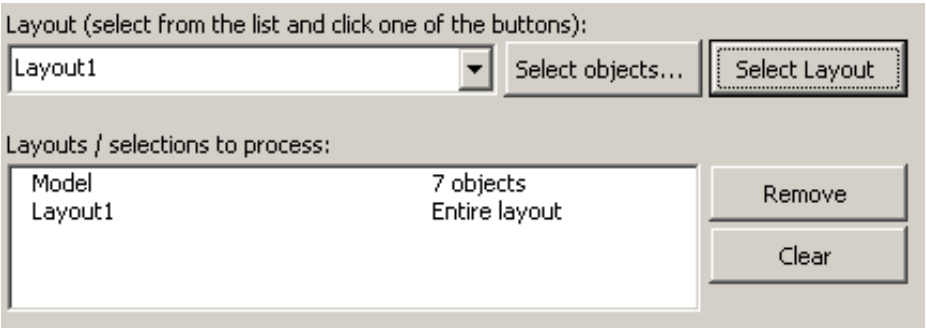


1. Select one of the options depending on where the text is located:
    1. **Option 1 - Full Layout(s)** (default) - choose this option if you want to extract all text from specific layouts of the current drawing.



Check (tick off) the appropriate layouts. Use All and None buttons to check or uncheck all layouts at once.

2. **Option 2 - Selection(s)** - choose this option if you would like to process multiple selections or layouts in the current drawing. This should be useful if your drawing has viewports and only portions of text need to be translated.



Select the appropriate layout from the drop-down list and click Select Objects... to select specific objects on this layout (see below for more information) or Select Layout to select everything on this layout. Each selection will be added to the list below, so you will be able to select as many layouts or selections as you want.

Selecting objects:

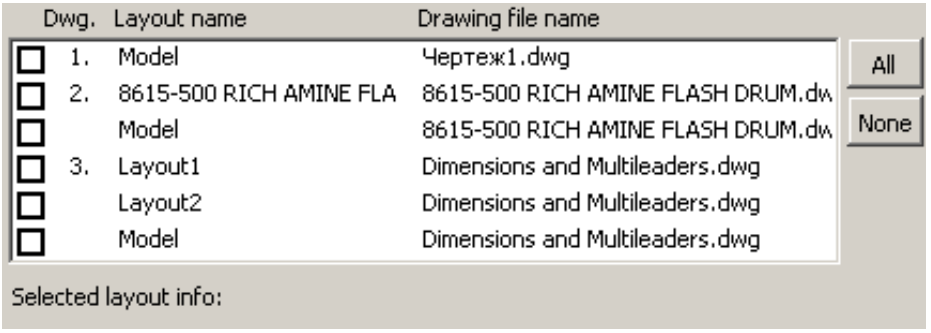
When you click Select Objects..., the dialogue will temporarily disappear and you will be able to select the desired text.

- Left-click at the top-left corner of the area you want to select, a small distance away from the very top-left object that you want to include in the selection. Then, move the mouse down and to the right until the selection fully covers the text objects, and then release click the left mouse button again. You may use the mouse wheel while dragging the mouse in order to zoom in/out on a specific area of the drawing.
- Left-click at the bottom-right corner of the area you want to select, move the mouse up and to the left until the selection at least partially overlaps all text objects you want to select, and then click the left mouse button again. With this selection method, unlike the one above, you only need to select a part of a text object and it will be included in the selection.
- Rotate the mouse wheel up or down to zoom in/out. While you do this, try to move the mouse closer to the objects you want to center the view on.
- Left-click individual objects to add them to the selection set.
- Hold down the Shift key and left-click individual objects to remove them from the selection set.
- Hold down the mouse wheel and move the mouse cursor in any direction to scroll (pan) up/down/left/right.
- Double-click the mouse wheel to zoom the drawing to its extents (i.e. zoom the screen to include the entire drawing).

Press Escape if you have selected wrong objects and would like to start again (this will return you to the Options dialogue). Press Enter when you have fully selected all objects to process (this will return you to the Options dialogue).

To remove a specific selection you made, select the item from the list and click Remove. Click Clear to remove all items if you would like to start from scratch.

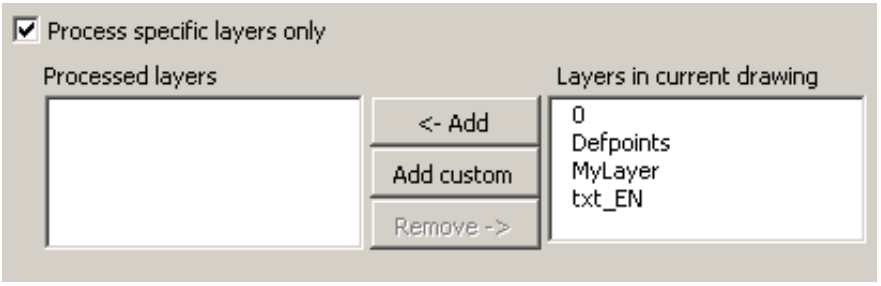
3. **Option 3 - Many drawings** - this option allows batch processing of several drawings opened in Autocad.



In the list you will see layouts of every drawing currently opened in the same AutoCAD application window (i.e. all drawings you can see under AutoCAD Window menu).

Check the appropriate layouts manually or click All / None buttons to check or uncheck all layouts at once.

2. **Extract all text (including repetitions) for calculating statistics**: By default, only unique text is extracted from the drawings. However, if you need to calculate the amount of text for charging your clients, you need to see all the translatable text, including repetitions. To do this, check this option. **Note:** when you use Translate using Translation Table command to translate the drawing based on such translation table, only the first occurrence of each repeating entry will be used for translation, all others will be ignored.
3. **Export basic formatting only**: By default, meaningful text is extracted along with format codes that control the formatting of Autocad objects. This allows to restore the original Autocad formatting during the Translation operation. However, sometimes you may need to put text back in the drawing manually, i.e., without using Translate using Translation Table command (for example, your company has a large drafting department with people who are responsible for this). In such cases, click this option.
4. **Extract text only**: If this option is checked (default), the program exports only text containing alphabetic letters. If it encounters text that contains only numbers, punctuation characters or special symbols, it skips such text. If you want to process all text, including fully numerical text, etc., uncheck this option.
5. **Process specific layers only**: Use this option if you need to translate text that is located in specific layer(s).



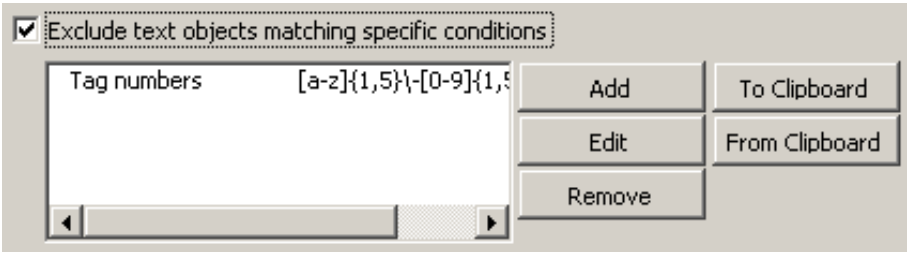
When you select this option, you will see two lists.

The left-hand list is the list of layers that need to be processed. If this list is empty, all layers will be processed.

The right-hand list contains all layers within the current drawing.

Click <-Add to add a specific layer to the list of layers you want to process (left-hand list). In batch-processing mode, you can also use Add custom button to add a layer that is not present in the current drawing. Click Remove-> to remove a layer from the list of processed layers.

6. **Exclude text objects matching specific conditions**: Use this option if you would like to skip objects whose text satisfies certain conditions (specified by a regular expression). E.g., you do not want to translate equipment numbers like 'PT-289' or line numbers like '067-DDD-056-D28', etc.

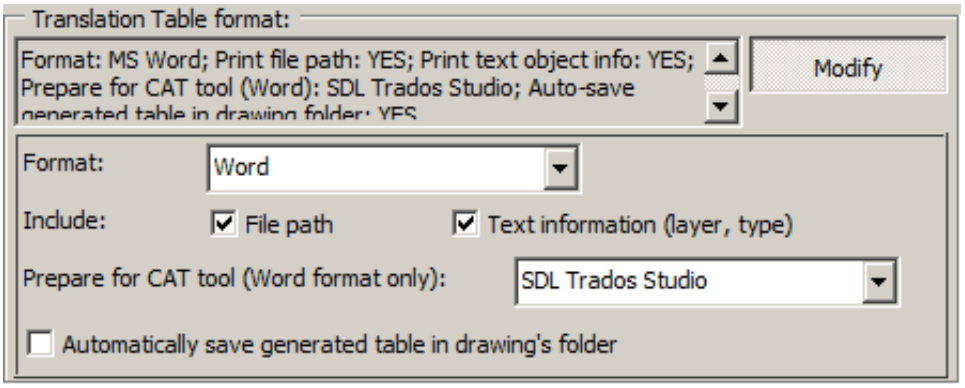


When you select this option, you will see a list of 'masks', or conditions. There is one default condition that excludes equipment tag numbers like 'PT-255', 'L-2455', etc from the Translation Table.

Click Add to add a new condition; Edit to modify a condition from the list; Remove to remove a condition; To Clipboard to save all conditions to the clipboard for use later; From Clipboard to import conditions that were created earlier.

For more information on creating such conditions, refer to the conditional filter section at the bottom of this page.

7. **Translation Table format**: the format of the translation table generated by this command can be configured.

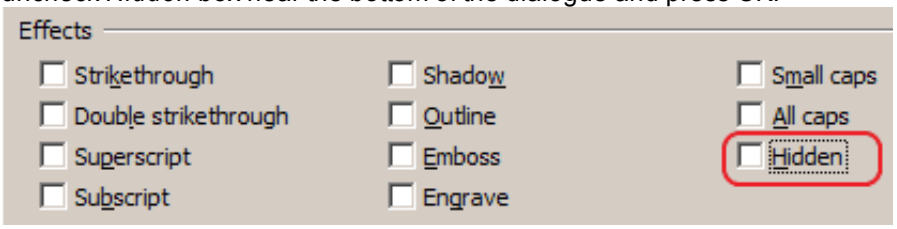


Click Modify to change the translation table format settings.

You have the following options:

1. **Format:** Word or Excel.
2. **Include file path:** this prints the full path to the processed drawing inside the translation table for easy reference.
3. **Include text information:** this exports additional information on extracted text (layer and type of object, i.e. TEXT, TABLE CELL, DIMENSION, etc.).
4. **Prepare for CAT tool (Word format only):** use this setting to prepare the translation table for importing into a CAT tool. You have several options:
   - **Do not prepare (No CAT tool)** – Use this option if the translation table does not need to be prepared for a CAT tool. If you use a CAT tool, the best way to translate the table is to copy the Translation column into a new document, translate the document, and then paste the translated cells over the cells in the Translation table so that you have source and translation side by side.
     This is the default option.
   - **SDL Trados Studio, memoQ, Wordfast Pro, Wordfast Classic** – If you use one of these options, TransTools will use *tw4winExternal* style to hide non-translatable parts of the table (i.e., instructions, heading row, original column and columns with extra information) and *tw4winInternal* style to mark formatting codes as non-translatable text. These options are recommended if you use one of these CAT tools. The translation table can be used inside your CAT tool without any extra preparation. After the translation table is translated and exported from your CAT tool, you can use it to merge translations into the drawing without any extra steps.
   - **Memsource Cloud, Déjà Vu X3, Cafetran Espresso, CAT tool with hidden text filtering support** – If one of these options is used, TransTools will use *hidden font formatting* to hide non-translatable parts of the table and *hidden font formatting* to mark formatting codes as non-translatable text. The translation table can be imported into your CAT tool without any extra preparation. When you import it into your CAT tool, make sure that hidden formatting is ignored in the file import settings. After it is translated and exported from your CAT tool, you must

unhide hidden text before you can copy the source and translation columns into the clipboard. To do this, select everything in the document (Ctrl+A), open the Font dialogue (Ctrl+D), uncheck *Hidden* box near the bottom of the dialogue and press OK.



- **Other CAT tool** – When this option is selected, no extra formatting is applied to the translation table (besides special formatting of the formatting markers), so it is recommended to copy the Translation column into a new Word document, translate this document in your CAT tool, and then paste the translated cells over the cells in the Translation column before copying source and translation columns to the clipboard.

5. **Automatically save generated table in drawing's folder:** if you check this box, TransTools will save the generated Word document automatically under the same location as the current drawing (with the same file name but with DOCX/DOC extension). This is possible if you use Option 1 (Full Layouts) or Option 2 (Selections).

When the appropriate options have been selected, click Start. To exit, click Close.

When the translation table is created, you will see a notification. If any text was excluded using the conditional filter (item 5 above), you will see View Exclusions... button. When you press it, you will see all text that was skipped due to the conditional filter. Review this list to make sure your conditional filters work as intended.

Formatting

When the drawing is output into Microsoft Word or Excel, you will see specially formatted codes inside the text. These are Autocad formatting codes and special codes used by TransTools for Autocad. Show example

Original text:
This is standard text
This is bold text
This is italics
This is pink text

Extracted text:
\A1;\pxsm1,qj,t62;This is standard text**\P**\ps*,q*,tz;{\fVerdana|b1|i0|c0|p34;This is bold text**\P**\fVerdana|b0|i1|c0|p34;This is italics**\P**\fVerdana|b0|i0|c0|p34;\H1.4x;\C6;This is pink text}

These codes are very important, since they are used to restore the original formatting when the translated text is merged back into the drawing (with Translate using Translation Table command). When you translate the translation table, do not touch these codes unless you know how to remove them and you find them unnecessary (e.g. you can remove **\P** and **
** which mean a paragraph break and a line break, respectively).

Here is a list of codes you can remove or add depending on context:

- **\P** – paragraph break
- **
** – line break
- **<tab>** – tab character
- **%%D** – degree symbol

Update for version 1.5 and higher: Starting with version 1.5, TransTools can prepare the translation table (in Word format only) for translation inside a CAT tool. For SDL Trados Studio, memoQ and Wordfast Pro / Classic, it uses *tw4winInternal* for AutoCAD formatting markers. For CAT tools that can skip hidden formatting (Memsource Cloud, Déjà Vu X, CafeTran Espresso, among others), it uses*hidden font formatting* instead. This way, formatting markers are converted into tags inside your CAT tool, making them easier to handle during translation and enabling tag verification inside your CAT tool or an external QA tool.

For memoQ users:
If you use memoQ, I have prepared a special import filter for you which will make it easier to translate the generated

translation tables in Word format. In addition to handling AutoCAD formatting markers, it also converts additional codes (**\P**, **
, **<tab> and **%%D**) into blue memoQ tags. Follow these instructions to obtain and use the import filter:

1. Download the filter.
2. In memoQ, open the *Resource Console* and switch to *Filter Configurations* section.
3. Click *Import New*.
4. Choose the downloaded "*autocad-tables-cascading-filter.mqres*", optionally rename the filter in the next window and click *OK*. In the future, steps 1–4 will not need to be performed because the filter will now reside in your memoQ configuration.
5. In your project, load the translation table document using *Import With Options* command. You will see Document Import Options dialogue. For the document, choose *Cascading Filter* in the *Filter* column, and "AutoCAD Translation Tables (cascading)" from the *Configuration* column. Click *OK* to import the document.
6. Now **\P**, **
, **<tab> and **%%D** codes will be shown as blue tags, while formatting codes will be shown as pink tags ({0}).

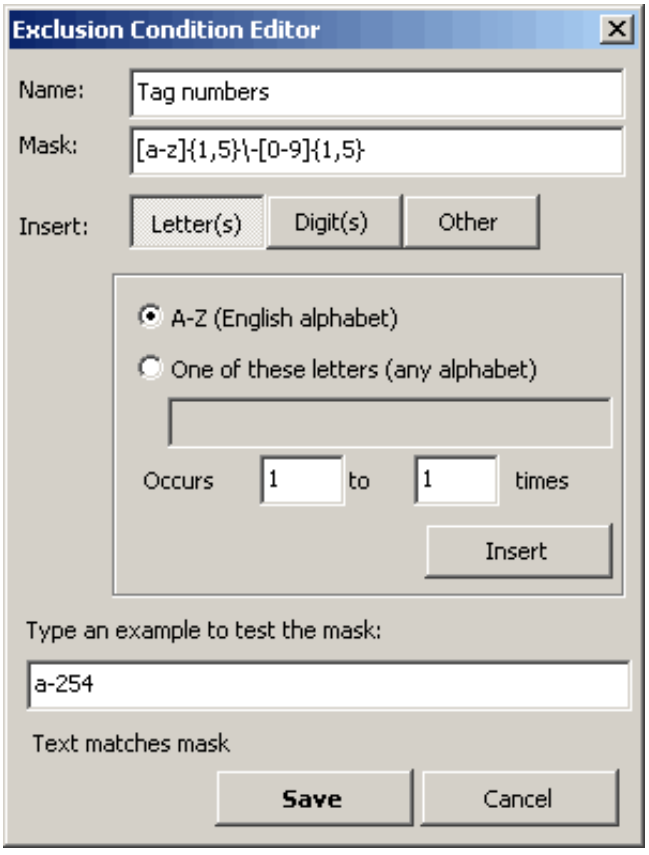
Conditional filter

Conditional filters (under 'Exclude text objects matching specific conditions') provides you with a lot of control over what text is extracted from a drawing.

When a condition matches the entire text of an AutoCAD object (like MTEXT, table cell, DIMENSION, etc.), such text will not be added to the generated translation table.

Conditions (masks) are defined using VBScript Regular Expressions syntax. For more information on how to create custom conditions, click here.

When you click Add or Edit buttons in the conditional filter (item 5 above), you will be presented with the following dialogue:



Enter the name of the condition in the *Name* field.

The condition itself must be entered in the *Mask* field. A condition is composed of segments that match a number of characters in the text. For example, 'C' matches letter 'C', and C{2,3} matches 2 or 3 letters 'C' in a given position within the text. If all segments sequentially match parts of the complete text, the condition matches the text and this text will be excluded from the Translation Table.

The Exclusion Condition Editor provides a rather basic interface for constructing conditions, but it should be

adequate for most users:

- **Letter(s)**: click this button to insert a letter, either an English letter or any letter from any alphabet. Specify how many times this letter can occur in the position within the complete text. Click Insert to insert the segment in the condition at the position of the caret;
- **Digit(s)**: click this button to insert any digit (0-9) or one of specific digits;
- **Character(s)**: click this button to insert any character or one of specific characters (including punctuation, special symbols, etc.).

Here are some examples of conditions that may come in handy:
[0-9]{3}\-[a-z]\-[0-9ABC/]{3,9} - this condition matches equipment numbers like '040-H-001A/B/C';
40(\-[A-Z0-9]{1,5})+ - this condition matches line numbers like '40-AM-50-50012-J10A';
(AG|UG) - this conditions matches 'AG' (aboveground) or 'UG' (underground)
[a-z]{2} - this conditions matches 2-letter tag numbers like 'LG' (level gauge), 'PT' (pressure transmitter), etc.

Be careful, it is better to remove unwanted rows from the generated translation table manually than to create 'loose' conditions that can prevent some translatable text from being added to the translation table.

To test the expression you created, type the text you want to skip. If you see 'Text matches mask', your condition should be complete. However, make sure your condition works correctly by clicking View Exclusions button at the bottom of Extract Translatable Text dialogue after you generate the translation table.

Click Save to save the condition, or Cancel to exit without saving changes.

For more information on Microsoft Regular Expression syntax used to construct conditions, refer to this page.

Translate Using Translation Table

This command is designed to 'translate' drawings using a translation table created with Extract Translatable Text command. It will dramatically improve your translation speed and quality when dealing with Autocad drawings.

To start translating Autocad drawings, please refer to the overview of Extract Translatable Text command. Otherwise, read on.

How it works?

This command searches drawing(s) for text objects. If it finds a text object whose text matches an entry in the translation table, it replaces its text with the relevant translation from the translation table.

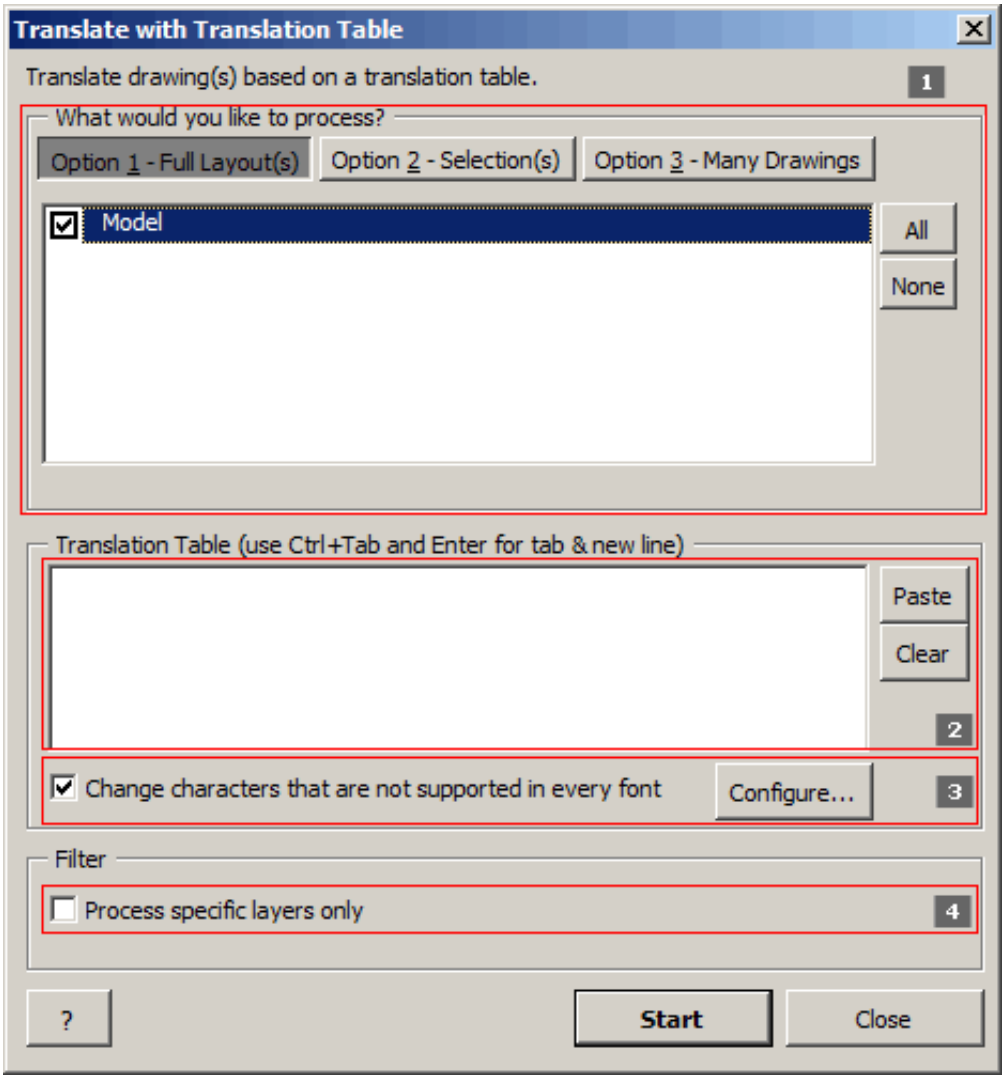
Features

- Process multiple layouts in the current drawing and/or multiple selections within the current drawing;
- Batch-process multiple drawings opened in AutoCAD;
- Support for TEXT, MTEXT, TABLE, DIMENSION, MULTILEADER and EXTERNAL REFERENCE objects;
- Text formatting is preserved;
- Option to process specific layers only (e.g. if the text you need to translate is in 'TXT_EN' layer).

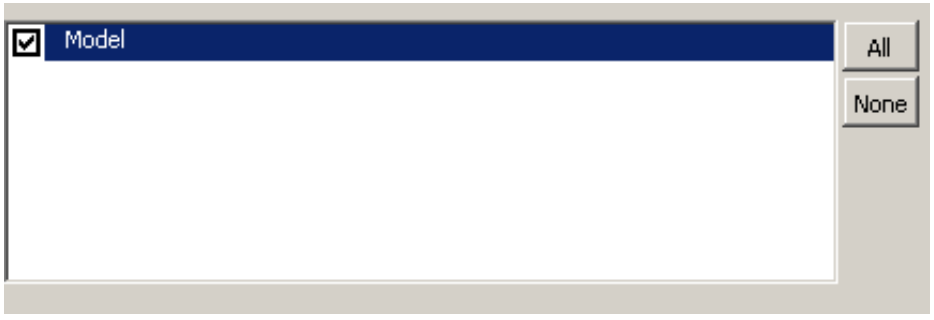
Running the command

Translate using Translation Table is launched from Autocad's Macros dialogue. Click here for more information on how to do it.

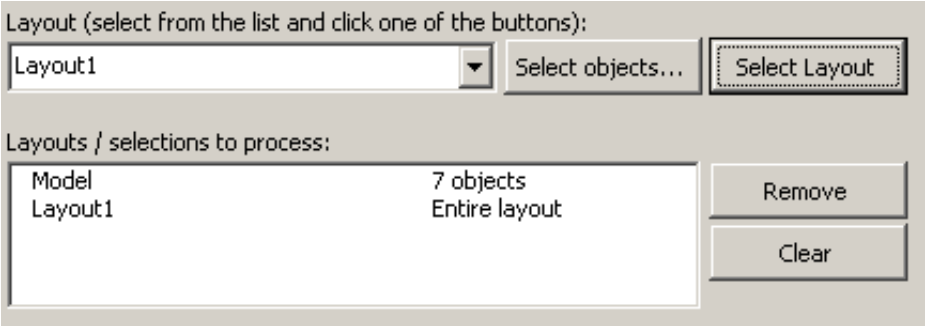
Options



1. Select one of the options depending on where the text is located:
    1. **Option 1 - Full Layout(s)** (default) - choose this option if you want to extract all text from specific layouts of the current drawing.



    Check (tick off) the appropriate layouts. Use All and None buttons to check or uncheck all layouts at once.
    2. **Option 2 - Selection(s)** - choose this option if you would like to process multiple selections or layouts in the current drawing. This should be useful if your drawing has viewports and only portions of text need to be translated.



Select the appropriate layout from the drop-down list and click Select Objects... to select specific objects on this layout (see below for more information) or Select Layout to select everything on this layout. Each selection will be added to the list below, so you will be able to select as many layouts or selections as you want.

Selecting objects:

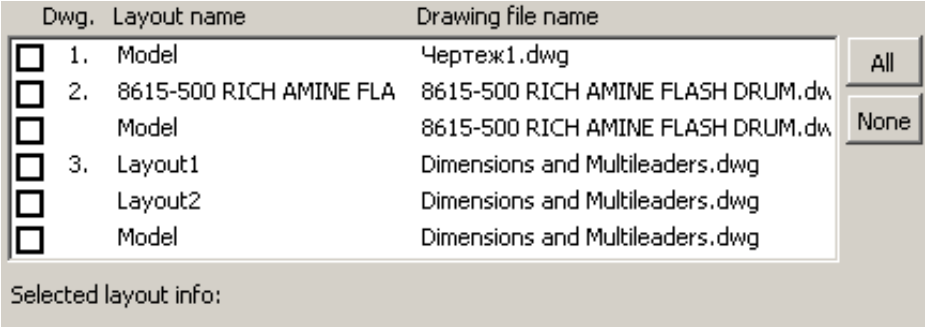
When you click Select Objects..., the dialogue will temporarily disappear and you will be able to select the desired text.

- Left-click at the top-left corner of the area you want to select, a small distance away from the very top-left object that you want to include in the selection. Then, move the mouse down and to the right until the selection fully covers the text objects, and then release click the left mouse button again. You may use the mouse wheel while dragging the mouse in order to zoom in/out on a specific area of the drawing.
- Left-click at the bottom-right corner of the area you want to select, move the mouse up and to the left until the selection at least partially overlaps all text objects you want to select, and then click the left mouse button again. With this selection method, unlike the one above, you only need to select a part of a text object and it will be included in the selection.
- Rotate the mouse wheel up or down to zoom in/out. While you do this, try to move the mouse closer to the objects you want to center the view on.
- Left-click individual objects to add them to the selection set.
- Hold down the Shift key and left-click individual objects to remove them from the selection set.
- Hold down the mouse wheel and move the mouse cursor in any direction to scroll (pan) up/down/left/right.
- Double-click the mouse wheel to zoom the drawing to its extents (i.e. zoom the screen to include the entire drawing).

Press Escape if you have selected wrong objects and would like to start again (this will return you to the Options dialogue). Press Enter when you have fully selected all objects to process (this will return you to the Options dialogue).

To remove a specific selection you made, select the item from the list and click Remove. Click Clear to remove all items if you would like to start from scratch.

3. **Option 3 - Many drawings** - this option allows batch processing of several drawings opened in Autocad.



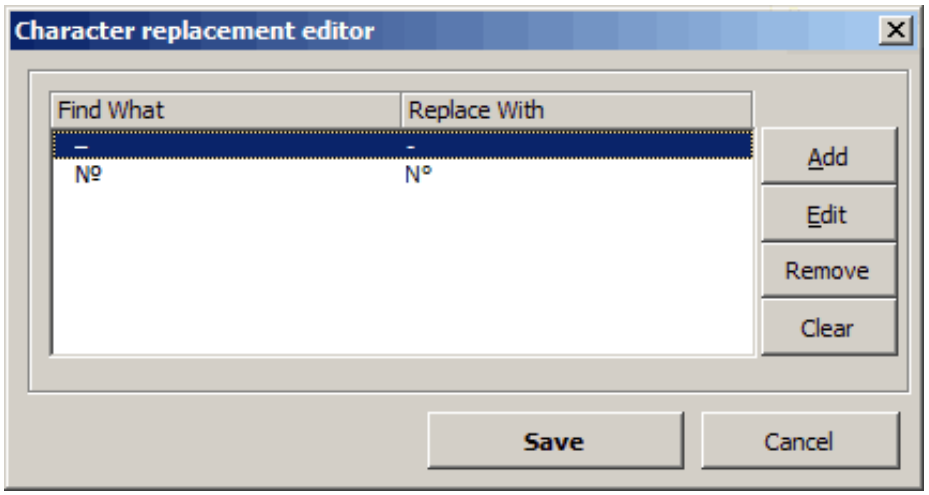
In the list you will see layouts of every drawing currently opened in the same AutoCAD application window (i.e. all drawings you can see under AutoCAD Window menu).

Check the appropriate layouts manually or click All / None buttons to check or uncheck all

layouts at once.

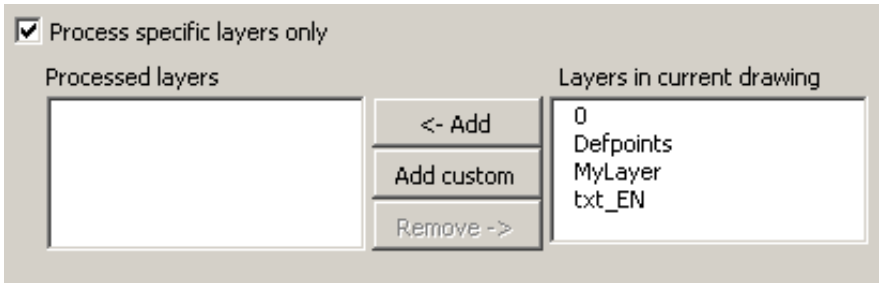
2. **Translation Table**: The translation table should be entered here. After you translate the two-column table generated by Extract Translatable Text, copy it into the clipboard (only the first two columns, without the header) and click Paste or press ***Ctrl+V*** to paste the text from the clipboard.

3. **Change characters that are not supported in every font**:
   Use this option if your drawing uses a font like “romans” which does not include some Unicode characters like EN-dash and №, displaying question marks (?) instead. When this option is checked, TransTools will modify the translation text, replacing the specified characters with alternative text. For example, you can replace EN-dash (–) with a regular hyphen (-).
   To specify replacement characters, press Configure... button. You will see the following dialogue:



   All changes made in this list are automatically saved for future sessions.

4. **Process specific layers only**: Use this option if you need to translate text that is located in specific layer(s).



   When you select this option, you will see two lists.

   The left-hand list is the list of layers that need to be processed. If this list is empty, all layers will be processed.

   The right-hand list contains all layers within the current drawing.

   Click <-Add to add a specific layer to the list of layers you want to process (left-hand list). In batch-processing mode, you can also use Add custom button to add a layer that is not present in the current drawing. Click Remove-> to remove a layer from the list of processed layers.

When the appropriate options have been selected, click Start.

If some text from the drawing was not found within the Translation Table, you will see View Skipped Text button at the bottom of the dialogue. Clicking this button will open a dialogue with a list of all such text.

To exit, click Close.

Tips

- Use CAT software to translate translation tables even faster.
