ENGLISH

ASPAN

VECTORIALIZER

OPTIONAL MODULE

AutoSoftware

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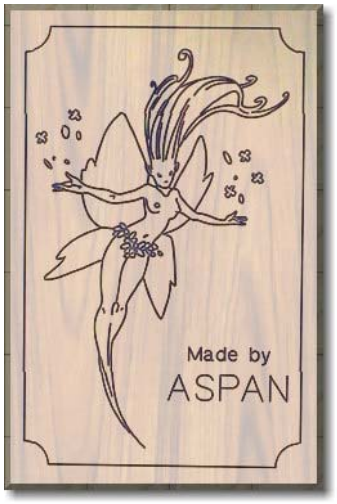
The Vectorializer function will convert any **image** into a **drawing** that can be used by Aspan program.
The image to be vectorized must be in the Windows **bitmap** file format (.bmp).

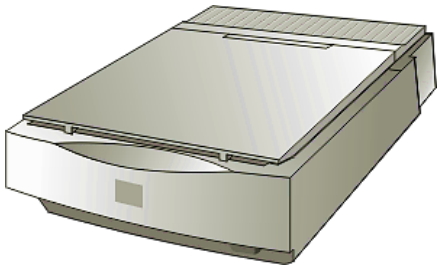
VECTORIALIZER



The image can contain any type of subject matter. For example, it can be an art drawing, a logo, a symbol or a geometric drawing.

The original image can be in color or black and white.

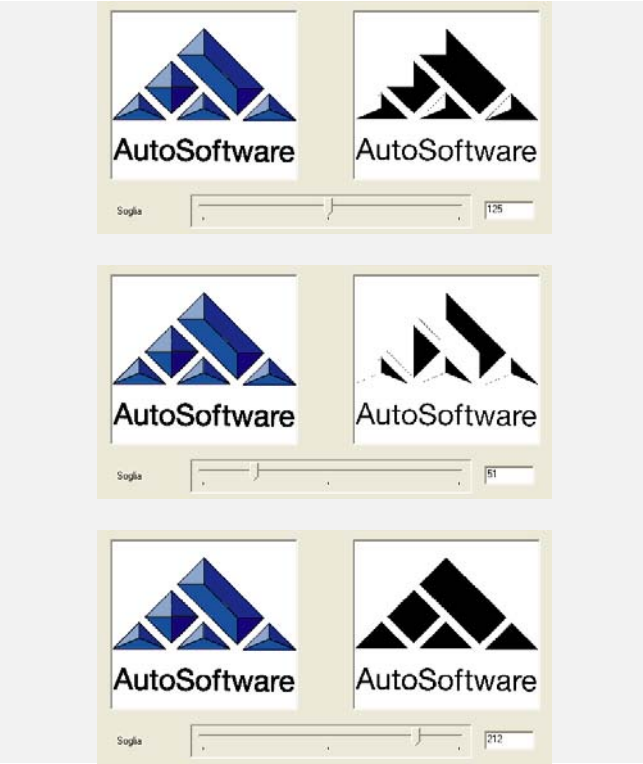
If you want to use printed images, you should first scan these and convert them into the .bmp file format. You can use any **scanner** for this task..



To start the Vectorize function, select the SUPERVISOR command:
utility->vectorialize image.

Vectorizing converts the image pixels into a series of straight lines and curves, groups these together in entities of a drawing, then links the entities found and reduces their number.

The drawing produced by vectorizing depends on the quality, condition and complexity of the original image. In some cases it might be necessary to make modifications to the drawing in order to obtain the result required.
The drawing produced by vectorizing is, for all intents and purposes, a **standard Aspan drawing**. It can be edited, scaled, rotated, assigned tools and processed on the machine just like any conventional drawing.



If you are vectorizing images with **shades of gray or color**, you can select which points of the original image will be vectorized and which points will be left alone. You do this by setting a **threshold** for the grays and colors in black and white and take a look at a preview of the results.
This gives the ability to define which sections of the image will be converted into a drawing (shown in the preview in black) and which sections will be left alone (do not appear in the preview because they are in white).

The figures on the left show which sections of the image will be considered for vectorizing, depending on the threshold setting.

Original image

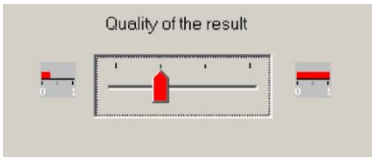
Starting from any image of an average complexity there are two methods for vectorizing it. These are:

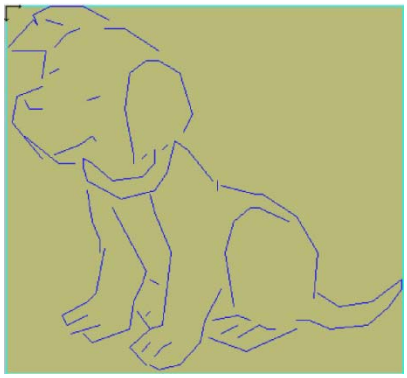
the **Trace Outline** method that creates a drawing by tracing the **outline** of the image

the **Trace Center Line** method that creates a drawing by tracing the **center line** of each closed area.

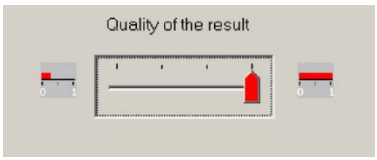
It is also possible to define the **quality of the final result** required.
As the level of quality required increases, the time needed to vectorize the image also increases and the process is therefore slower.

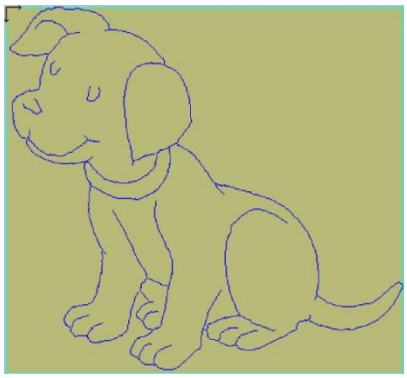
The section below shows the results obtained by vectorizing the original image shown on the left.



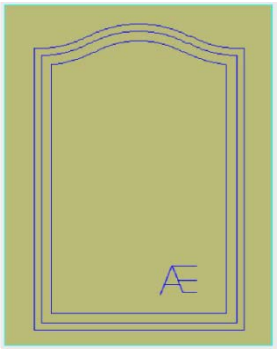


The figure on the left shows the results obtained by selecting the low quality level.





The figure on the left shows the results obtained by selecting the high quality level.



When you vectorize an image you can create a completely new drawing containing the results of processing only or you can add the vectorized image to an existing drawing.

The figure on the left shows the image AE which has been vectorized directly onto the drawing of a door.

Example

The image shown on the left was used to produce the drawing of the panel shown on the right. The process was as follows:

- vectorizing of the file image into a new drawing;
- addition of a frame and the text "Made by ASPAN". This was done using the standard CAD commands in Aspan;
- assignment of tools in CAM;
- creation of a part-program.

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