



Complete Text capabilities (included in « Graphic» and « Graphic & Wrap » Package)

TYPE3 CAAV5 Based (also called CATIATYPE) is developed by GRAVOTECH MARKING S.A.S., the worldwide leader in Engraving solutions. The TEXT module of TYPE3CAA V5 Based is developed from the

TYPE3 expertise, fruit of over 26 years experience and over 60.000 users worldwide. Users can then benefit, directly inside CATIA V5 from this extensive and unique professional experience in creation of TEXT. It offers in 1 unique window all required functionalities users would need for their creation of TEXTS inside CATIA V5, and benefit from full associativity.

1. Is it possible to work with True Type and Single Line Fonts?

Type3 CAAV5 Based allows the use of all True Type and Single Line Fonts installed on the PC as well as all VN fonts (single/stroke line fonts).

2. Can we work with Asian and Arabic True Type fonts?

You can work with Asian, Russian or Arabic TTF as long as you install CATIA on any non US or European Windows Environments. All you need to do is retrieve the Foreign Windows Fonts and work with them directly from your keyboard.

3. How to retrieve CATIA's default Fonts in Type3 CAA V5?

By installing the Fonts under the OS Fonts Directory.

4. When we create Text and Logo with Type3 CAA V5, what kind of entities do we build in CATIA V5?

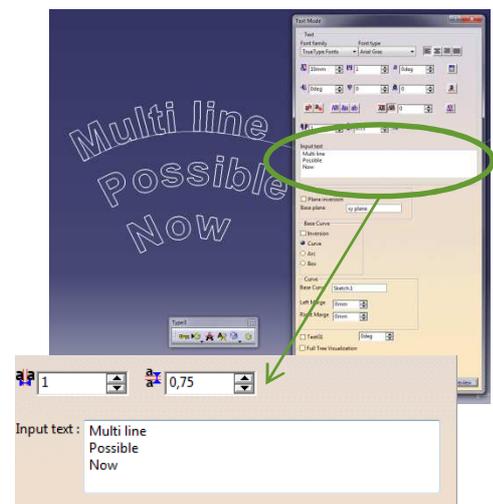
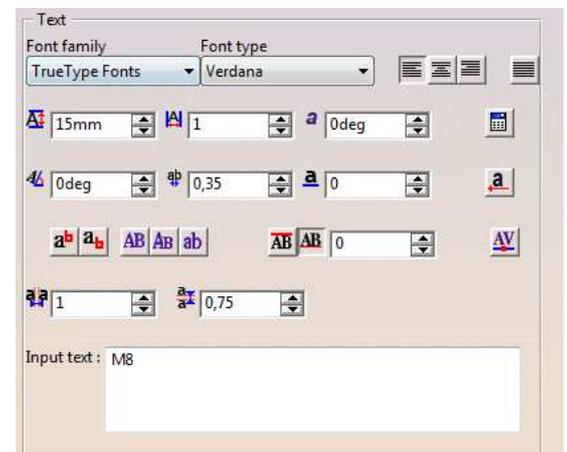
A feature text within CATIA's tree is created. It can be modified by accessing all parameters individually without having to edit the feature text.

5. Why using single/stroke line fonts (VNF for instance)?

Single line fonts are usually used to save time during the machining phase (following the profile) offering an alternative to pocketing.

6. Are all Fonts G1 type?

By default standard TTF fonts are not G1, but with Type3 CAAV5 Based it is possible to convert fonts into G1 type with a single click.



7. What will be the benefit between using the associative text features from TYPE3CAAV5 Based, compared to DXF importations for example?

The benefits are significant while dealing with text. Some examples are mentioned below:

- Any changes to the characteristic TEXT is directly shown in your CATPART,
- CATPART size can be downsized to 40% or more depending on text length.
- Text is fully parametric and associative with all other features of CATIA V5.
- Type3 CAA V5 features can be used inside CATIA macros.
- No loss of precision due to the quality of DXF import/exports.
- Saving archives with all design components is completely associative.
- Q-checker and Powercopy compatible

8. Can I use DESIGN TABLES / FORMULAS?

Yes, since all text's parameters are published the design formulas can be created. This is beneficial while working with models with multiple languages from excel files that need to be applied to one single CATPART.

9. Can I use MACROS with Feature Text?

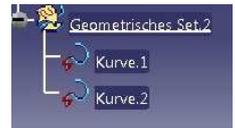
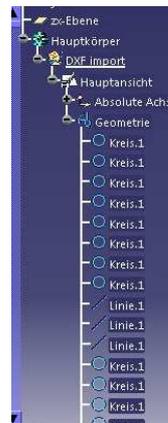
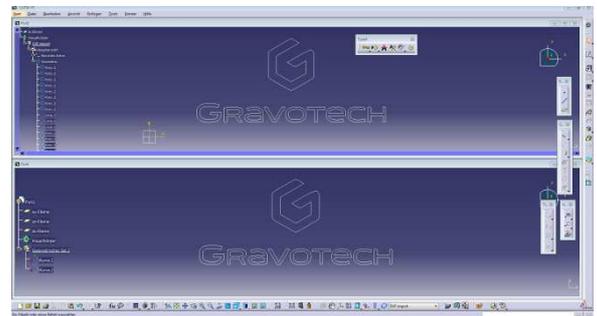
Yes. Type3 CAA V5 Based allows Users managing texts via the Macro interface of CATIA V5. Users can record / edit / modify a macro with the feature text. In the current editor (for example Microsoft Visual Basic) we can find all parameters of the text within the macro, then modify the macro according to the applications. This approach gives a real opportunity to Users targeting an automation process. The benefits can be applied to front panels, labels ...

10. Can I use SYMBOLS , pictograms, special characters?

Yes. Any symbol you use from the included "Special Character" list can be manipulated like a font. It can also be extended using your own symbols (conversion service available within our Gravotech group)

11. I have my own company font, how can I use it in TYPE3 CAAV5 Based ?

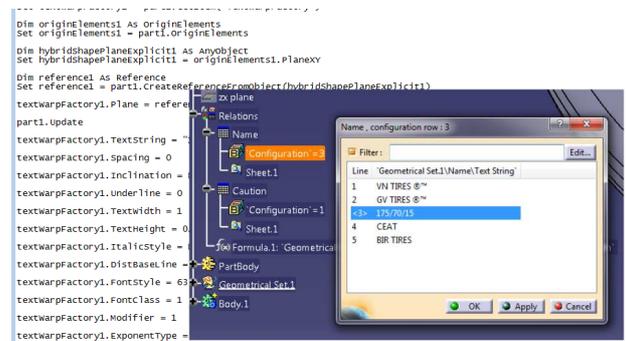
Specific services such as converting a special company font to a VNF Font can be provided to you. This can then be used in TYPE3 CAAV5 Based. Please contact sales@type3.com



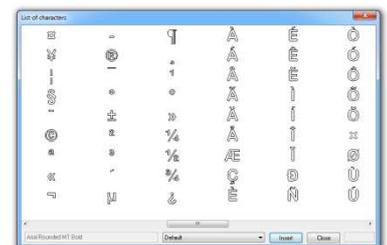
For same artwork :

Left DXF import, showing dozens of lines.

Above : creation with Type3 CAA V5 : just the 2 required curves !



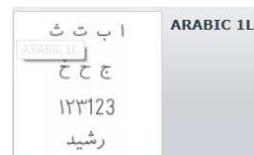
Working with Macros



12. How can I get more Single Line fonts ?

As an option you have the possibility to purchase extra sets of fonts, such as Single Line fonts developed by our Gravotech group.

2 different packages are available amounting to 20 fonts.



13. Can we control the position of the text on the support curve?

There are several possibilities for accurate positioning. Users can set text according to the Align left / Centre/ Right / Justify options. It is also possible to define an extra distance from the beginning or end of the curve.



14. Can we use edges from surfaces for text support?

Absolutely, edges or vertices can be used as a text support.

	Applies the auto-kerning. By default it is the most readable.	WAVE
	Suppresses the auto-kerning and keeps the left and right spaces	WAVE
	Applies the auto-kerning and suppresses the left and right spaces	WAVE
	Suppresses the auto-kerning and the left and right spaces of the	WAVE
	Each character and its spaces fit a box, which has the dimension of the M (this character is the reference). This function aligns vertically the characters in comparison to those of the second	8 9 Me WAVE I I I I

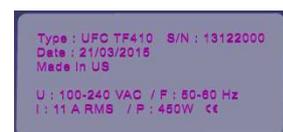
15. What about KERNING for character spacing ?

Having the possibility to adjust KERNING is essential. This allow to meet graphic rules or to adjust designs to the shapes of the surface. TYPE3 CAAV5 Based offers all Kerning possibilities from a specific menu.



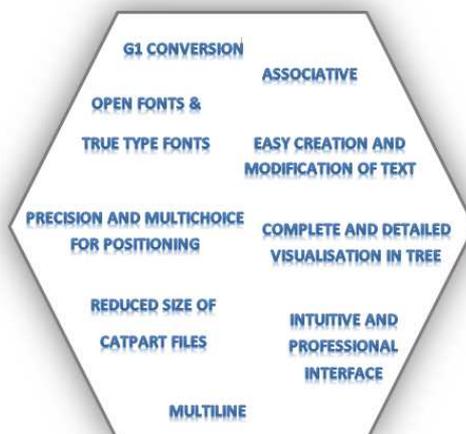
16. Is it possible to write a multiline text ?

As of version 5.5 this possibility exists. A single point can be used as a reference to type your text.



17. Is it possible to use multi-support for separate text fields ?

As of version 5.5 this functionality is available.





Scan / Vectorization Features

(included in « Graphic » and « Graphic & Wrap » Packages)

TYPE3 CAAV5 Based is developed by GRAVOTECH MARKING S.A.S., the worldwide leader in Engraving solutions with over 26 years of industrial experience.

Along with the TEXT module of TYPE3 CAAV5 we also recommend the SCANNING / VECTORIZATION feature. The complete menu contains all required functionalities to scan and [vectorize](#) raster pictures inside CATIA V5. The vectorization (also referred to as “image tracing”) is the creation of vectors from raster graphics. It is used on a regular basis for logos. For example, when the operator only has an image as artwork and no DXF or EPS file.

3. What are the possibilities to retrieve picture files ?

There are 2 possibilities:

Directly connect a 2D scanner to your PC, then scan your paper artwork.

Alternatively import any picture file with extensions: BMP, PNG, JPG, TIFF or GIF (color or black & white) directly into CATIA V5.

4. What about the quality of the original artwork ?

The higher the resolution in DPI (above 64*64), the better the result.

In the case of multicolour artworks there should be a good color transition.

6. What are the “vectorization parameters” ?

There is an intensive menu available allowing you to control the precision of vectorization, smoothness, automatic cleaning of “noise” pixels, as well as the possibility to do “centerline” vectorization.

“Allowance”: controls how accurate your vector will remain to the original image.

“Noise”: approximately follows the main positions of the pixels located on the edges of the vectorised area.

“Smoothing”: generate a rounded or jagged vector spline.

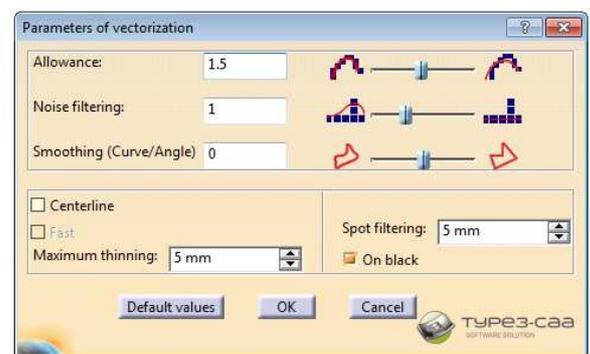


*.BMP

*.PNG

*.JPEG

*.TIFF



7. After the vectorization process, what do I get in CATIAV5 ?

From the outlines of the logo you produce CATIA curves.

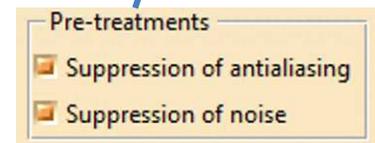
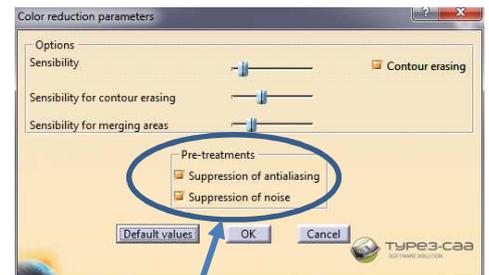
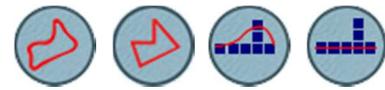
Users can then proceed to use various operations such as: pad, scale, change plane, projection/mapping, ...

8. When handling colour bitmaps, why use a “Color reduction” ?

All colors are automatically detected and listed. Users then have the possibility to merge colours or select the relevant ones to vectorize.

Users are given the option to merge nearby colors thus reducing the original number presented. Sharpness of angles in contours between 2 colors can be defined or ignore through the “noise” option.

NOTE : For additional graphic requirements such as accurate node editing, please visit our full solution list: [Typeedit](#). Combined with our “Gateway” package, it extends the 2D graphic capabilities and allows a copy/paste to/from TYPEEDIT and CATIA V5 function.





Projection / Mapping Tools

(included in « Graphic & Wrap » Package)

TYPE3 CAAV5, developed by GRAVOTECH MARKING S.A.S. the leader in Engraving solutions with over 26 years experience and over 55.000 users worldwide, is more than just a basic TEXT module.

The PROJECTION and MAPPING feature within TYPE3 CAAV5 directly benefits CATIAV5 users by applying text, logos, symbols, numbers etc... on a variety of 3D shapes.

5. Why propose so many different Projection and Mapping possibilities ?

We recommend 5 different strategies which fit any required configuration. Our vast experience in the engraving world has taught us that when it comes to applying 2D artworks on 3D surfaces, all these strategies are required to fit aesthetic, manufacturing or graphic chart constraints. TYPE3 CAAV5 is the only solution on the market to offer such a selection.

6. I create a text, then project or map it on the surfaces. What about if I need to change afterwards the position of the text or any of its parameters ?

TYPE3 CAAV5 which is fully integrated into Catia allows any 2D text created prior to the projection/mapping operation to be edited. It is also possible to adjust:
The support and/or the text
Or select one or more of its features (font, size, kerning, position ...)

Surfaces can be one patch or more complex ones.

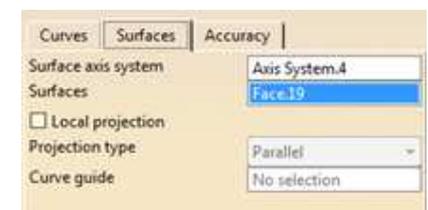
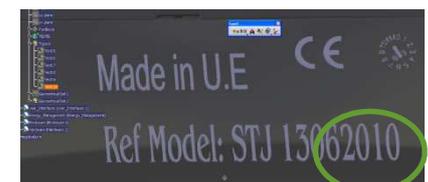
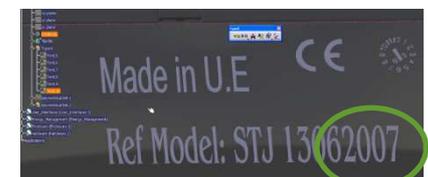
9. What is "PROJECTION"

A projection allows for curves to follow a surface according to an axis direction. For instance a curve can be adjusted on the "Z" direction, while the X and Y coordinates remain untouched.

TYPE3 CAAV5 has 2 types of projections available:

- Parallel : according to the Z direction
- Local : contour elements are projected one by one onto the surface.

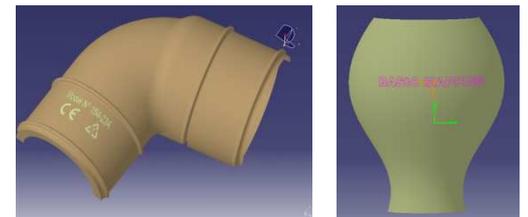
The "local projection" is often used when the 3D shape contains intense variations, such as sphere. The curves in this instance will be projected one by one onto the surface.



10. What is “MAPPING” ?

You have 3 strategies available : Basic, Cylindrical or Conical.

- **Basic** : used on a single patch surface. It will follow the U/V direction.
- **Cylindrical** : used when the surface shape is close to a cylinder-like form. Surfaces can be multi-patch surfaces.
- **Conical** : used when the surface shape is similar to a cone-like form. Surfaces can be multi-patch surfaces.

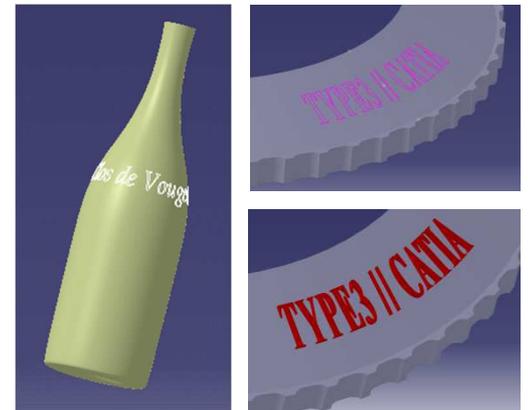


11. When we create Text and Logo with Type3 CAA V5, and once projected or mapped on the surface, what kind of entities do we build in CATIA V5?

A feature text is created in CATIA's tree. It can be modified by accessing all parameters individually without having to edit the feature text.

A logo which has been vectorised is by default converted into CATIA curve.

The end result of a projection or mapping are curves. Users can then proceed to use various operations such as: split, extrude, thick surface, projection/mapping, ...

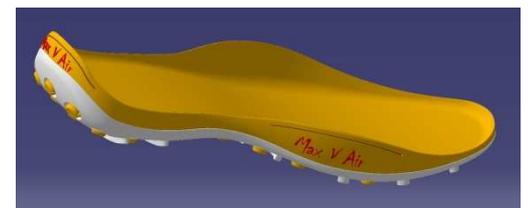


12. How to adjust and control positions of my curves to be projected or mapped on my surface?

You can define the curve and surface axis system by defining a reference point on an axis or on the surface itself.

The significant benefits are:

- Precision in controlling the positioning.
- Any changes made to the 3D model are automatically applied to the machining.



Other important topics about TYPE3-CAA

Since 1988 TYPE3 CAAV5 Based developed by GRAVOTECH MARKING S.A.S., is the worldwide leader in Engraving solutions with over 55 000 users worldwide.

It allows for easy and seamless creation and integration of texts and graphics in the PLM process.

This is the only CAAV5 fully integrated product able to handle “engraving”, not just VB or macros. Our partnership has been growing strong since 2003.

Users benefit from native CATIA commands that are full associativity during the design and manufacturing process.

7. What are the CATIA and OS prerequisites ?

Windows OS : 32 / 64 bit.

Windows versions : XP SP3 / VISTA SP1 / W7 SP1

CATIA prereq. : from R19 SP7 and upper. Minimum configuration : MD1 / MD2

8. What are the languages available with TYPE3 CAAV5?

English, French, German, Italian, Chinese and Japanese. (from version 5.50)

13. What are the possible licensing systems ?

With a dongle (USB hardware key) or without dongle (then using FlexLM license management)

Stand alone or Server configurations.

14. What about using three-server redundancy, VIRTUAL MACHINES, Triad's configuration of server ?

Our FlexLM licensing management can set up such configurations. Redundancy also works.

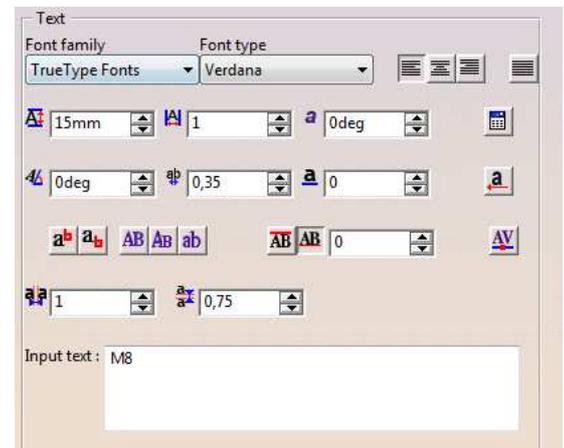
5. Where can I find the latest version of TYPE3 CAAV5 ?

Latest versions can be directly downloaded from :
<http://www.type3.com/download/catiatype/index.php>

For further information contact your nearest reseller or contact us at sales@type3.com

15. How can users be trained ?

VIDEOS are provided or available via our YouTube channel. Webinar training is also an option. Thanks to a very clear user interface the average training duration is approximately 2 hours.



16. Where is the TYPE3 CAAV5 toolbar located?

By default this can be found in the Part Design Workbench. Alternatively it can also be displayed in the Generative Shape Design toolbar.



8. Can I use CATIA and other TYPE3 solutions, like TYPEDIT (2+2.5+3D CAD-CAM for engraving and bas relief / texture creations)?

TYPE3 CAAV5 offers an additional package called "GATEWAY". This package allows you to copy/paste from TYPEDIT or CATIA. 2D artworks from TYPEDIT like Text, drawings, dials, rulers ...are automatically converted into curves and appear within your CATIA environment.

9. What are typical Applications for TYPE3 CAAV5?

The range for usage is extremely wide. TYPE3 CAAV5 based can be used either for Manufacturing, Simulations or for Marketing (product presentation and visualisation)

AUTOMOTIVE: suppliers : moulded parts, casting, ...

AERONAUTIC: Panels, signage, moulded/casted parts...

CONSUMER GOODS: moulded parts, product presentations, panels, ...

ELECTRONIC / ELECTRIC: moulded parts, product visualisation, labels, etc.

TEXT / LOGO / SYMBOLS / NUMBERINGS...: Are needed as part of a seamless Design to the Manufacturing process, including traceability.



10. What about TYPE3 CAAV5 and next CATIA releases?

With our long-time partnership with Dassault Systèmes and as a commitment to our customers, we are certain to support future CATIAV5 releases.



About Gravotech

The Gravotech Group is the worldwide leader in the design, manufacture and distribution of innovative solutions for engraving, marking and artistic modelling.

Its offer is built around four brands: Type 3, Propen, Technifor and Gravograph. These brands cover four key technologies (laser, mechanical engraving, scribing and micropercussion) supplemented by a wide range of consumables and software solutions.

Based in the Lyon region of France, Gravotech has over 900 employees in over 100 countries. The Group boasts a vast international network: 29 subsidiaries and 300 distributors work alongside its 60,000 international customers, assisting them with their local or global issues.

Type 3 

PROPEN 

TECHNIFOR 

GRAVOGRAPH 