



Generic Catia Tools

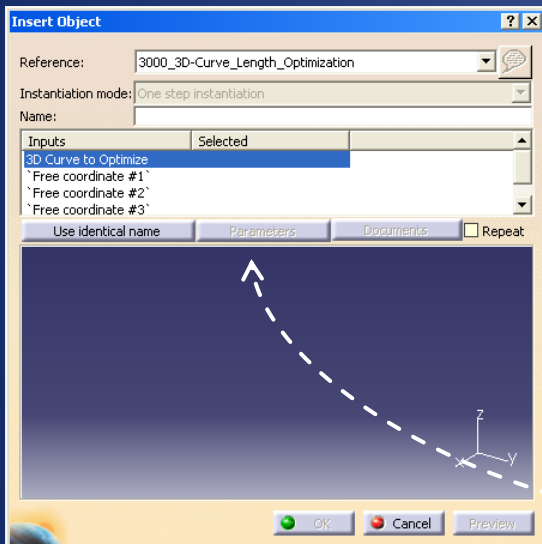
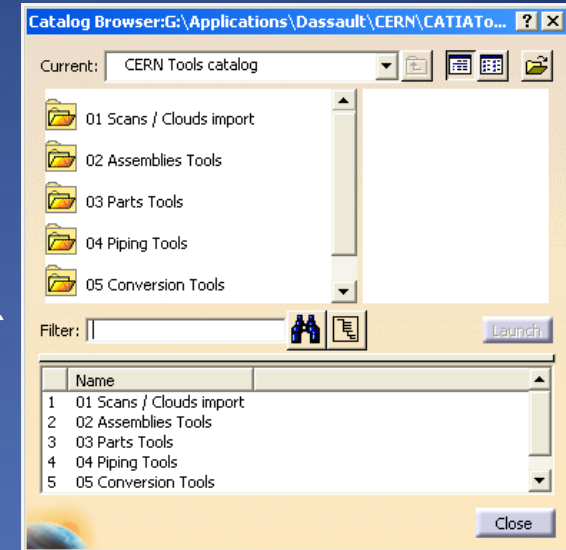
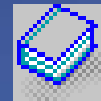
(Parametric Constructions
& Templates)

Summary

- What is a generic tool?
- What are the advantages?
- Live presentation
- What are the tools already available?
- What are the future developments / improvements

What is a generic tool?

A generic tool is a Catia component* that can be called from a catalog and instantiated in your Catia structure.



Before instantiation, a window appears that may ask you to select some inputs (geometric features or parameters).

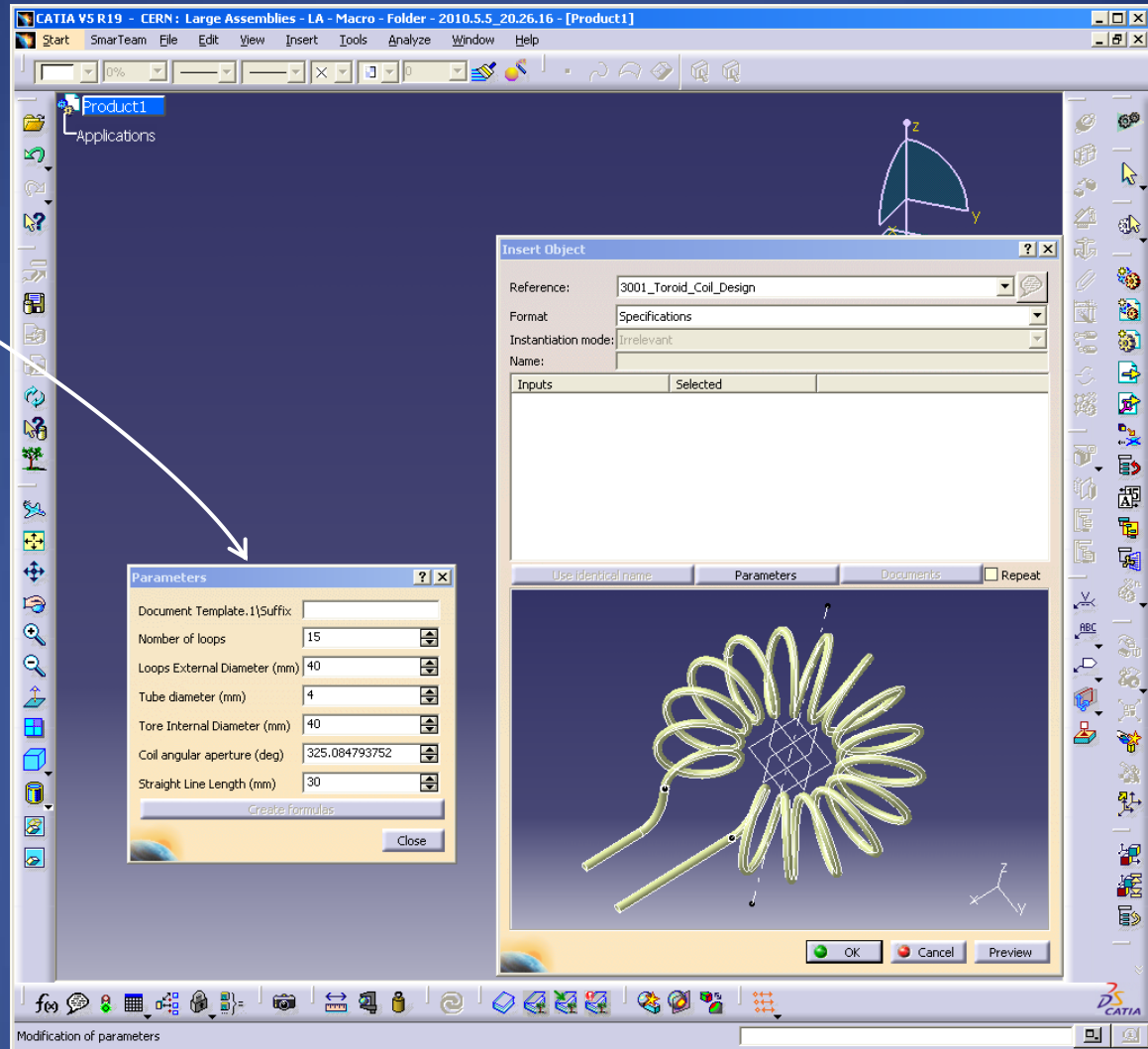
You may also set some driving parameters with specific values.

* product / part / body

What is a generic tool?

Driving parameters

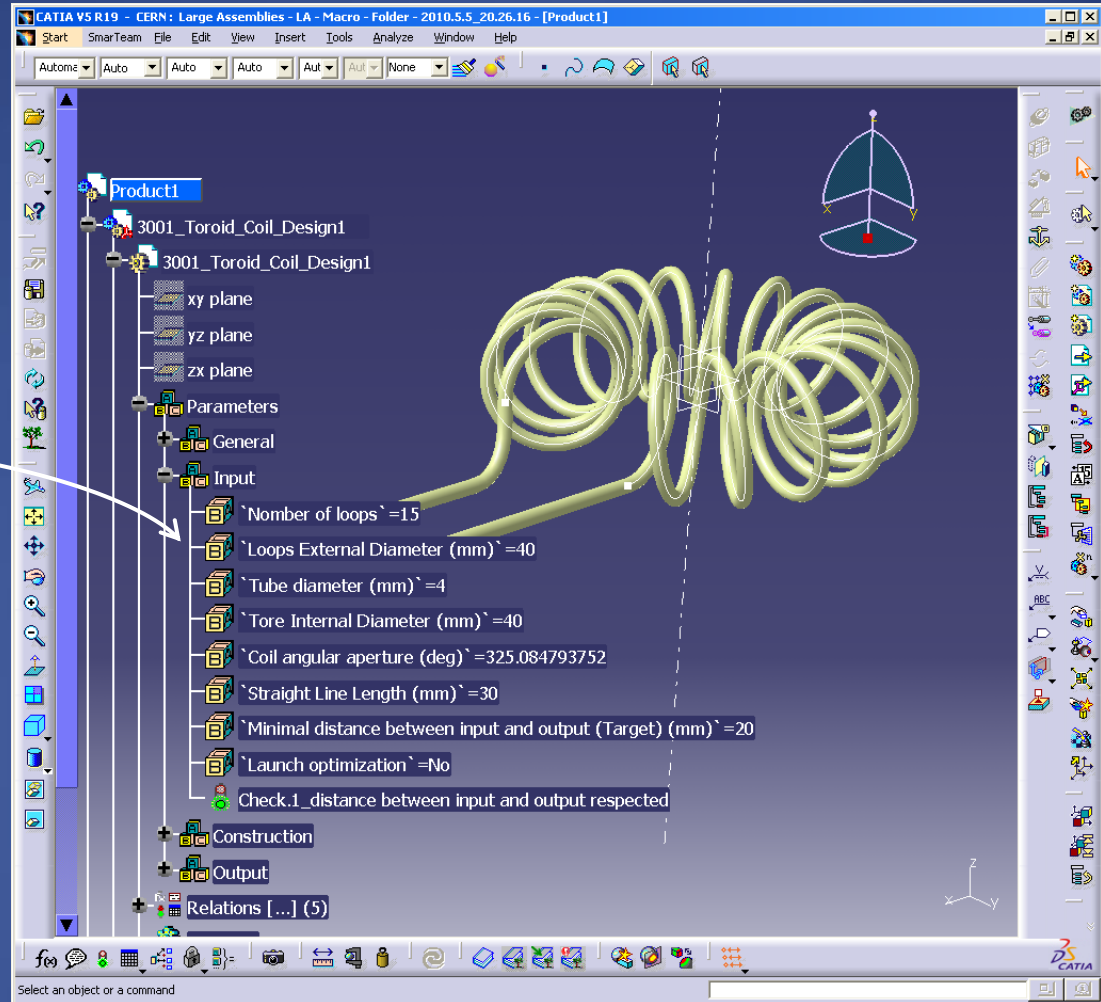
If you forget to set the driving parameters values, you will be able to change them after the tool is instantiated.



What is a generic tool?

When all the inputs are filled, the tool is instantiated in the structure tree.

You can change the driving parameters here.



What is a generic tool?

All the informations needed to use these tools will be available from the CERN CAD Service web site.
Go to FAQs >> Generic Tools

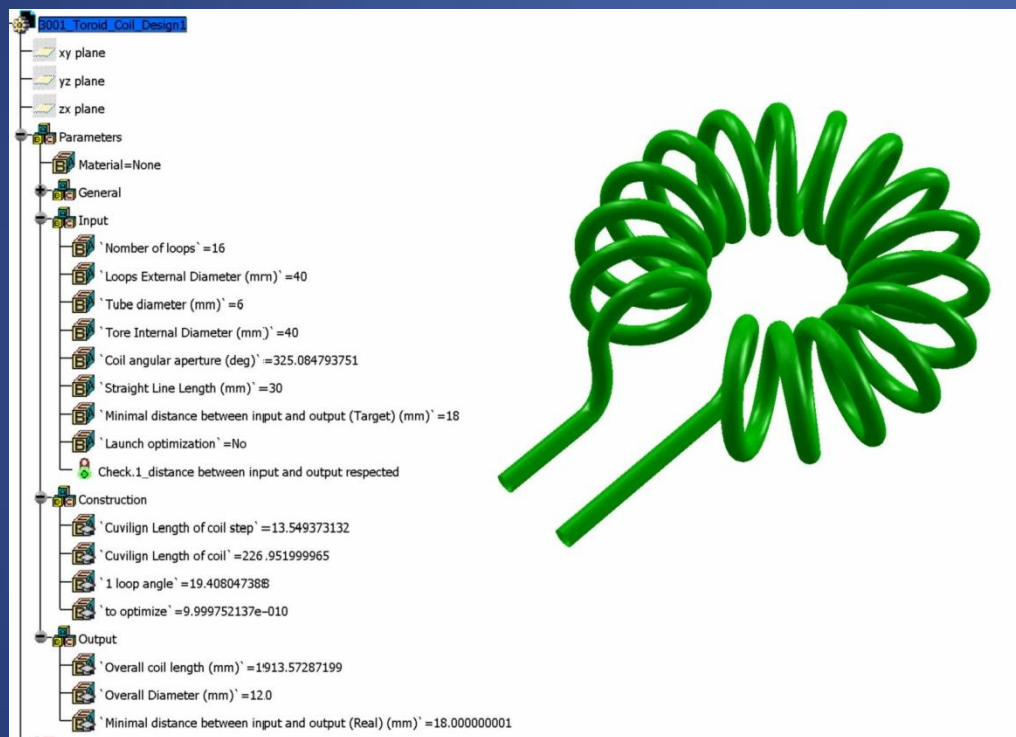
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CERN CAD Service > FAQ > Generic Tools
Generic Tools
View All Site Content
Documents
CATIA
General
Actions
Subject Name Question
1000_Import_Pts_From_Excel NEW How to create some points whose coordinates are in an Excel Table ?

CERN CAD Service
1078802
June 06, 2010
Catia Methodology /
Méthodologie Catia
1000_IMPORT_POINTS_FROM_
EXCEL_COORDINATES
Abstract
This tool can create some 3d points in Catia V5 from their coordinates stored in one Excel file. The created points can be automatically renamed if the name information is available in the Excel file. An optional feature allows building straight lines between every point.
Cet outil peut créer des points à partir de coordonnées stockées dans un fichier Excel. Ces points peuvent être automatiquement renommés si cette information est aussi dans le fichier Excel. Il est aussi possible de construire toutes les droites entre chaque point.
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1. ABOUT THIS TOOL / A PROPOS DE CET OUTIL
1.1 WHAT IS A GENERIC TOOL? / QU'EST CE QU'UN OUTIL GÉNÉRIQUE CATIA ?
This tool is a "Part Template". To use it, a Product must be activated. The tool is available with this "Catalog" icon:
You can find some others informations about "Template" and "Catalog" here :
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1.2 WHERE IS THIS TOOL? / OU TROUVER CET OUTIL ?
The catalog is available here:
Then open this file:
Then go to:
Excel
1000_Import_points...
When you double click on the tool, the following window appears:
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Click on OK to validate and close this window. Then close the catalog browser window. The tool is now instantiated in the active product.
Cliquez sur Ok pour valider et fermer cette fenêtre. Fermez ensuite la fenêtre de navigation du catalogue. L'outil est maintenant inséré dans le produit actif.

Live presentation

Instantiate a parametric toroid Coil

Instancier une bobine toroidale paramétrée



What are the advantages?

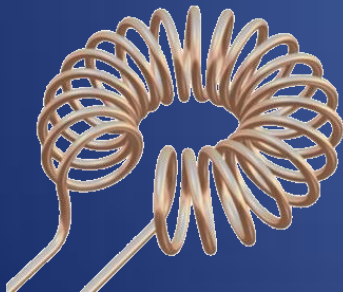
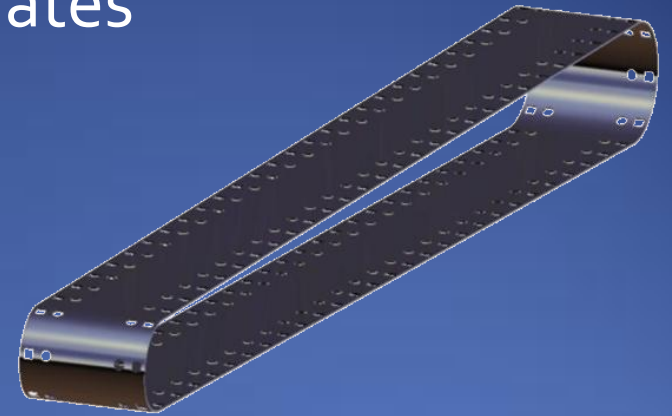
- The inputs are automatically replaced in the tool ;
- The construction is updated with your own inputs ;
- A new component is added in your structure and you can save it (or not) ;
- It is possible to keep the associativity for future updates* ;
- The knowlegde can be embedded ;
- All the tools are easily available for everybody ;
- Time savings for users.

* Depending of the settings. If needed, contact CAD Support

What are the tools already available?

- Import points from excel coordinates
- 3D-curve length optimization
- Toroid coil
- Holed band design
- Manekin for illustration

(Women / Men –
Standing / Sitting)



What are the future developments / improvements?

- Import points from excel coordinates
 - > possibility to build the straight lines between each point...
- Holed band design
 - > creating an axis system for each hole to make easier the constraints creation
- ...



Thank you / Merci