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CUSTOMTOOLS TIME AND COST CALCULATION

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CUSTOMTOOLS

TIME AND COST CALCULATOR:

To ensure full transparency, you will find additional information regarding how the calculations have been made in order to calculate the time spent with CUSTOMTOOLS.

Please note that the calculations made without CUSTOMTOOLS are made based on estimates. To ease the calculations, default values have been defined for each capability but those can be freely modified by the user.

The costs are calculated based on the time spent by all the designers, hourly rate and total projects.

In order to be able to compare the time spent with or without CUSTOMTOOLS, we have based our calculations on the time needed before the process start.

The CUSTOMTOOLS time and cost calculator analyse potential time and cost savings when purchasing and utilizing CUSTOMTOOLS. The use of the CUSTOMTOOLS time and cost calculator is only intended to provide you with an estimation regarding the time and cost spent with or without CUSTOMTOOLS. Such estimates are not a guarantee of savings. A number of other factors may affect your actual savings and actual savings may differ.

FILE NAMING:

Depending on how you name your files CUSTOMTOOLS is able to automate to a certain level your file naming and storing rules. The level of automation depends on your file naming and storing rules. For example, if you use only a sequence number then the file naming can fully be automated.

In this calculation, we have use the following file naming rules as an example:

File name = Project Number + Sequence + Description

Steps with CUSTOMTOOLS from the top level assembly

1. Open the CUSTOMTOOLS property pane
2. Select a project (Last selected project is always selected by default)
3. Enter a description
4. Click OK

Taken into consideration:

- Load time: Time needed to load the CUSTOMTOOLS property pane (2s)
- Select a project (Last used project selected by default)
- Manually type a description (5s/file)
- Sub-Folder creation (e.g. Design file\Project\SOLIDWORKS File)

Ignored from calculations:

- Time needed to save the file to the hard drive as it is highly affected by the file's size.

Formula:

Property pane load time **X** Time needed to enter a description **X** Number of projects per Year **X** Average amount of files per project

PRINT:

Rather you print 1 or 100 drawings, the same amount of clicks is needed in CUSTOMTOOLS to print SOLIDWORKS' drawings.

Steps with CUSTOMTOOLS from the top level assembly:

1. Click on the Print & Convert
2. Select the Print profile
3. Click OK to start the print process

Taken into consideration in the time estimation:

- Assembly load time: The bigger the assembly the larger the load time.
  - o Printing 1 files with CT: 5s
  - o Printing 100 files with CT: 1m32
- Selection of files to be printed once the print profile is selected

Ignored from calculations:

- Time needed to run the print task

Formula:

(Batch operations load time **X** Number of projects) **+** (Average amount of files per project **X** Load time when files are selected by the profile)

CONVERSION:

As for the paper printing rather you convert 1 or 100 drawings, the same amount of clicks is needed in CUSTOMTOOLS to convert SOLIDWORKS' drawings.

Steps with CUSTOMTOOLS from the top level assembly:

1. Click on the Print & convert
2. If a Print profile is defined, then activate the Batch conversion. If there are no Print profile defined, then the Batch operation dialog opens with the Batch conversion active
3. Select the Conversion profile(s)
4. Click OK to start the print process

Taken into consideration:

- Load time: The bigger the assembly the larger the load time.
  Printing 1 files with CT: 5s
  Printing 100 files with CT: 1m32
- Number of conversion profiles to be selected.
- Existing Print profile so the Conversion profile tab needs to be activated
- Creation of sub-folders (e.g. \Converted documents\PDF)
- Selection of files to be converted once the conversion profile is selected
- Time needed to run the conversion task

Ignored from calculations:

Formula:

((Batch operation load time **+** Activation of the Conversion profile tab) **X** Number of projects) **+** (Average amount of files per project **X** Load time when files are selected by the profile **X** Total file formats)

CREATE DXF

We assume that all the files used in the projects are converted to DXF from a flat pattern view of a drawing or from a part.

Steps with CUSTOMTOOLS from a drawing:

1. Click on CNC Tool to flatten the view and scale it 1:1
2. Click on the Print & convert
3. Activate the Batch conversion tab.
4. Select the Conversion profile to create DXF from drawings
5. Click OK to start the conversion process

Steps with CUSTOMTOOLS from a part:

1. Click on the Print & convert
2. Activate the Batch conversion tab.
3. Select the Conversion profile to create DXF from parts
4. Click OK to start the conversion process

Taken into consideration:

- Time needed to flatten the part, remove all annotations and scale the part to 1:1
- Time needed to do the conversion to DXF:
  - Load time: The bigger the assembly the larger the load time.
    Printing 1 files with CT: 5s
    Printing 100 files with CT: 1m32
- Time needed to run the conversion task

Formula:

(Time needed to flatten a part **X** Average amount of files per project **X** Number of projects) **+** (Batch operation load time **+** Activation of the Conversion profile tab) **X** Number of projects) **+** (Average amount of files per project **X** Load time when files are selected by the profile)

BOM EXPORT:

We assume that all the files used in a SOLDIWORKS project are exported to the ERP as new items and BOMs are created in the ERP for each assembly. The user must fill the item number, description and item category in the ERP.

Steps with CUSTOMTOOLS from the top level assembly:

1. Click on Export
2. Select the Export profile to ERP
3. Click Export to create new items and BOM in the ERP

Taken into consideration:

- Load time: The bigger the assembly the larger the load time.
    o Loading 1 files with CT: 1s
    o Loading 100 files with CT: 3s
- Creation of new items in the ERP (1s)
- Exporting SOLIDWORKS meta-data to ERP (e.g. Description, item category,…)
- Creation of BOM in the ERP (The bigger the assembly the larger the creation time)

Ignored from calculations:

Formula:

((Export load time + Selection of the Export profile) X Number of projects) + (Average amount of files X Time needed to create item in the ERP) + (Number of projects X Time needed to create a BOM in the ERP)