Highlights of ZW3D2018 SP

ZW3D Support Team@Apr,2018

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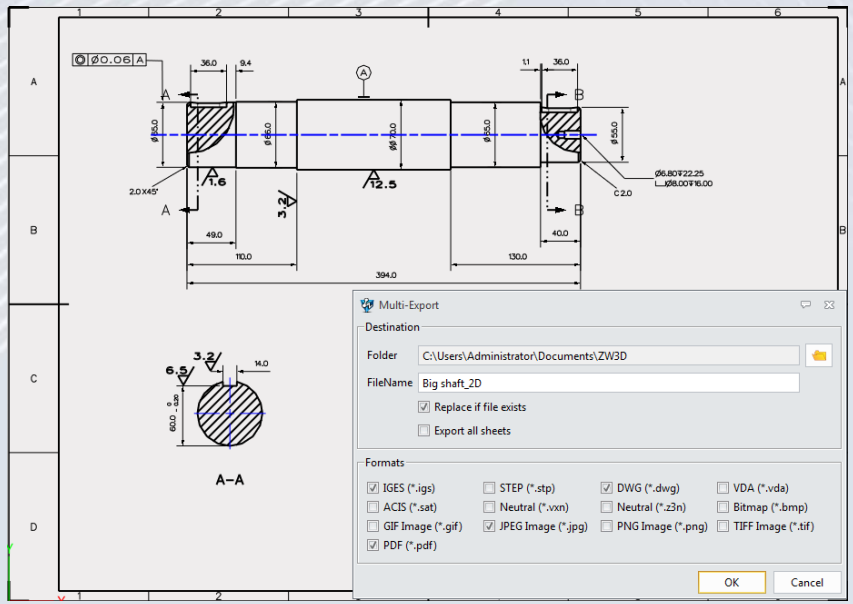
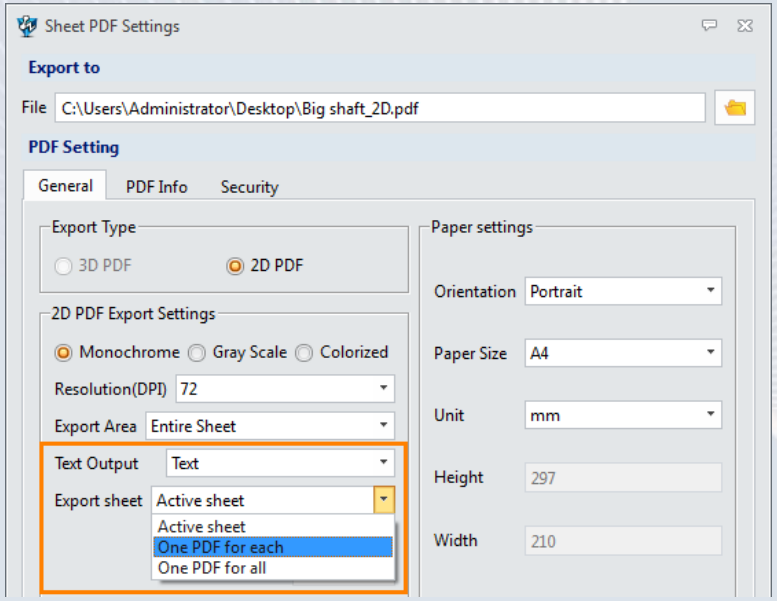
Highlights of ZW3D 2018 SP

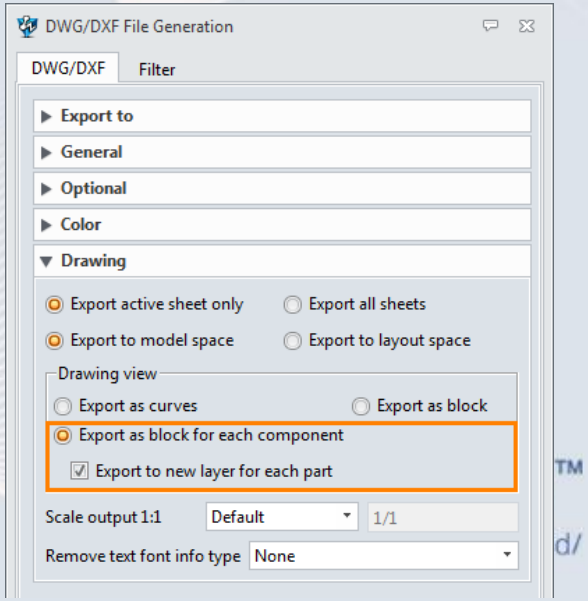
- Some New Features
  - ✓ Updated Translator
  - ✓ New Options for System Configuration and Equation Manager
  - ✓ Improvements in Sketch/Assembly/Drawing/KeyShot
  - ✓ Some CAM Improvements
- More than 270+ bug fixed

Updated Translator-2D Drawing Export

- Batch export drawing sheets by new “Multi-Export”.
- New Text output and Multi-sheet export options are added in PDF export
- New “Export as block for each component” option in DWG export
- New “Exclude sheet format & table” option to remove text font setting for DWG export







Updated Translator

- Export OBJ format
- Import/export layer & object name of IGS/STEP file
- Imported graphic data (Such as *.3DXML file from Catia, *.cgr, *.xcgm) can be exported as STL file.

Import Format	Extension	Version
Catia V4	.model, .exp, .session	4.1.9 – 4.2.4
Catia V5/V6	.CATPart, .CATProduct, .CGR, .3DXML	V5R8---V5/V6**R2017**
NX(UG)	.prt	11– NX 11
Creo(Pro/E)	.prt, .prt*, .asm, .asm.*	16 – **Creo 4.0**
SolidWorks	.sldprt, .sldasm	98– **2018**(Only 64)
SolidEdge	.par, .asm, .psm	V18 – **ST10**
Inventor	.ipt, .iam	Up to **V2018**
ACIS	.sat, .sab, .asat, .asab	R1 – **2018 1.0**
DWG/DXF	.dwg	R11 - 2013
STEP	.stp, .step	203, 214
Parasolid	.x_t, .x_b, .xmt_txt, .xmt_bin	Up to 29.0
3DXML	.3dxml	V4.3
XCGM	.x cgm	R2012-2016 1.1
JT	.jt	JT 8.x/9.x/**10.0-10.2**

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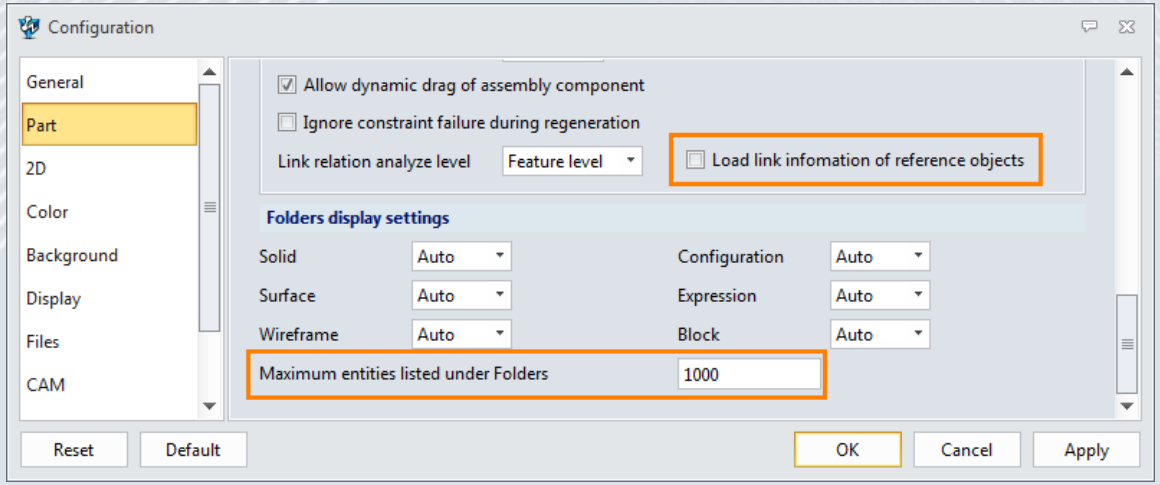
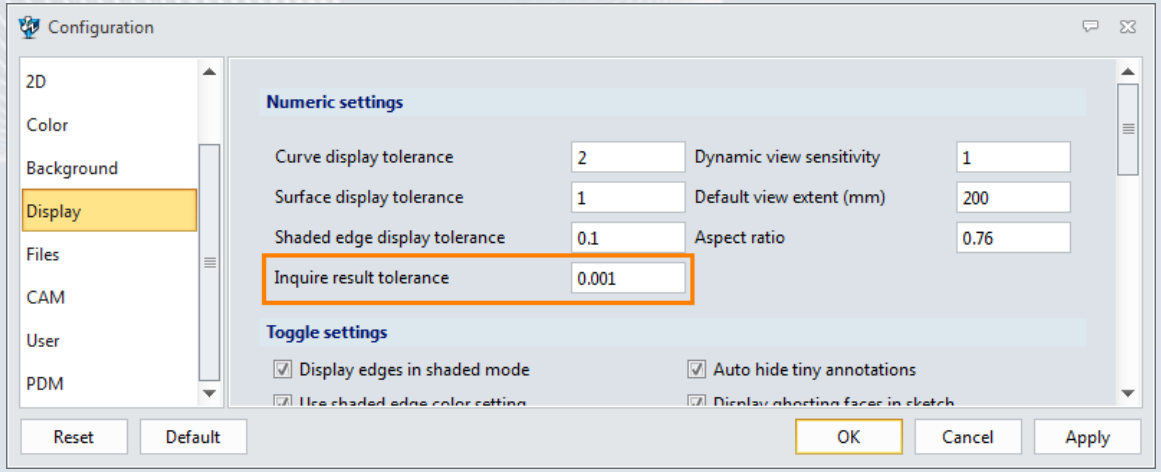
New Options for System Configuration

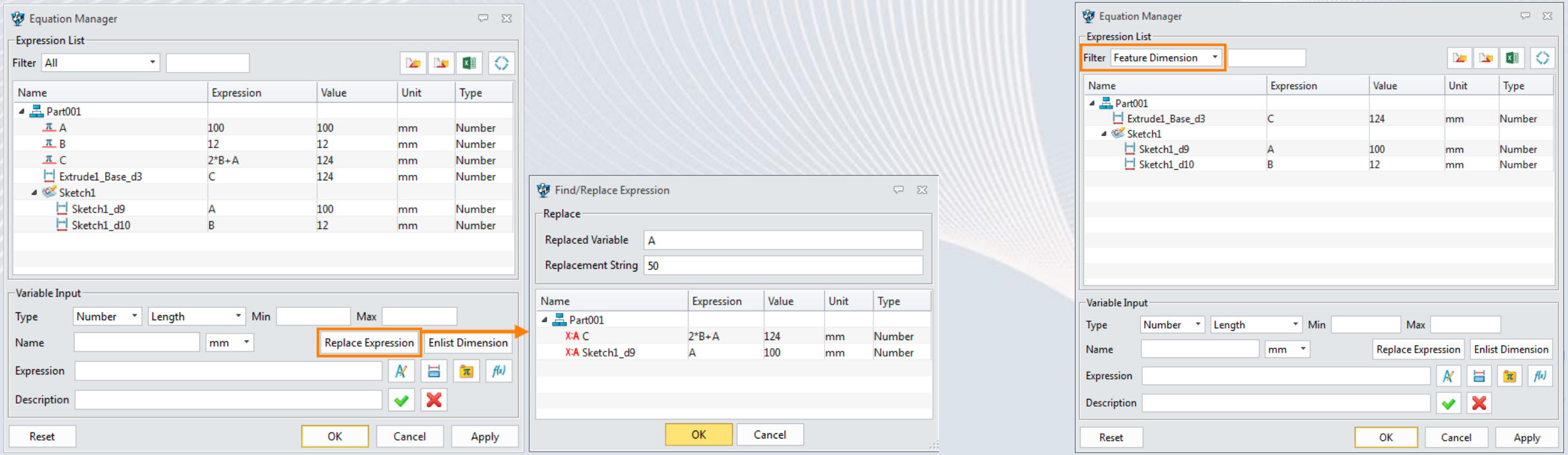
- New “Maximum entities listed under folder” option
- New “Load link info of reference objects” option
  - ✓ Link information will be automatically loaded when this option is checked.
  - ✓ File opening speed will slow down, especially for big assembly.
- New “Inquire result tolerance” setting





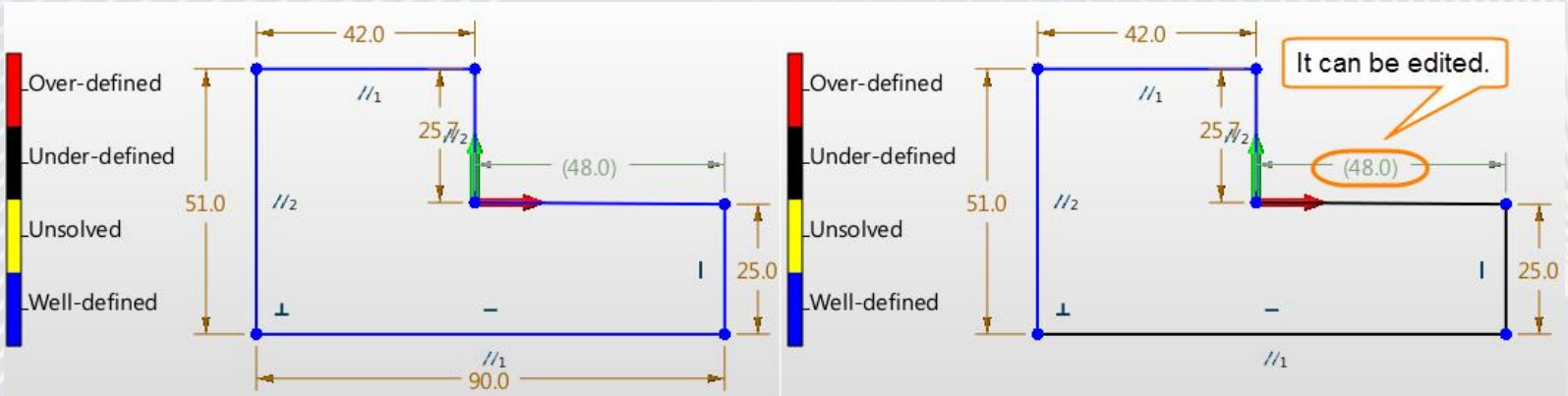
New Options for Equation Manager

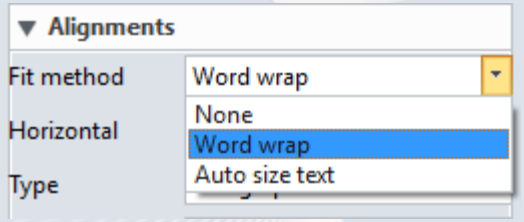
- New “Replace Expression” Function
  - ✓ More convenient to replace the variable with a new string, such as other variable/constant
- New filter type “Feature Dimension”



Improvements on Sketch

- Reference dimension can be edited directly when the sketch is not well-defined.
- Sketch symmetric constraint provides direction control.
- “Text” command provides new “Fit Method” option.





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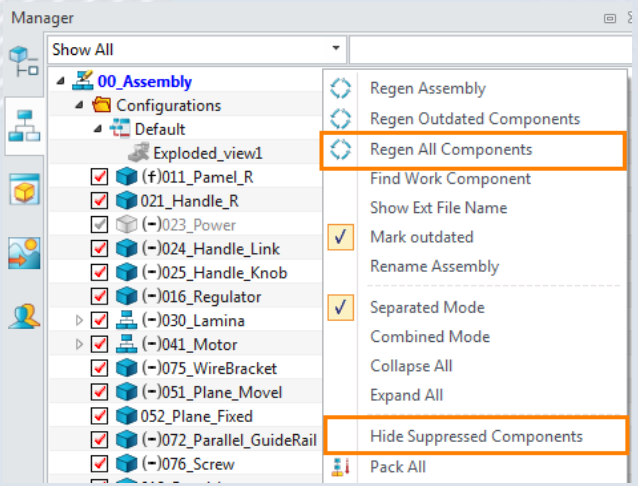
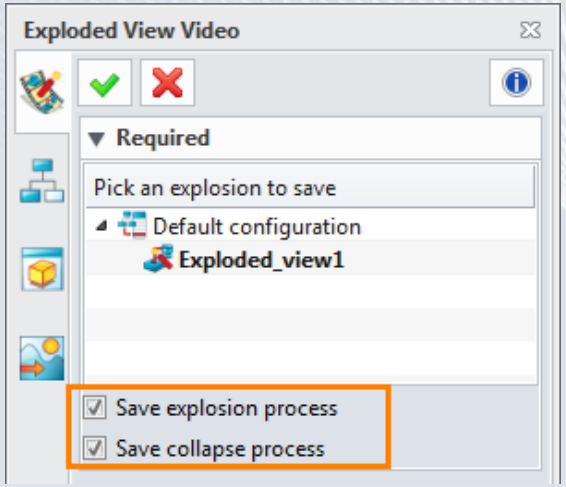
New Features of Assembly

- New options are added to the right menu of assembly tree
  - ✓ “Regen All Components” and “Hide Suppressed Components”
- Remove the “Position” node from assembly tree of Config Table
  - ✓ Components position is stored in assembly config as default
- “Assembly Hole” auto select intersected components as the target objects
- “Exploded View Video” provides options to save explosion or collapse process or both.





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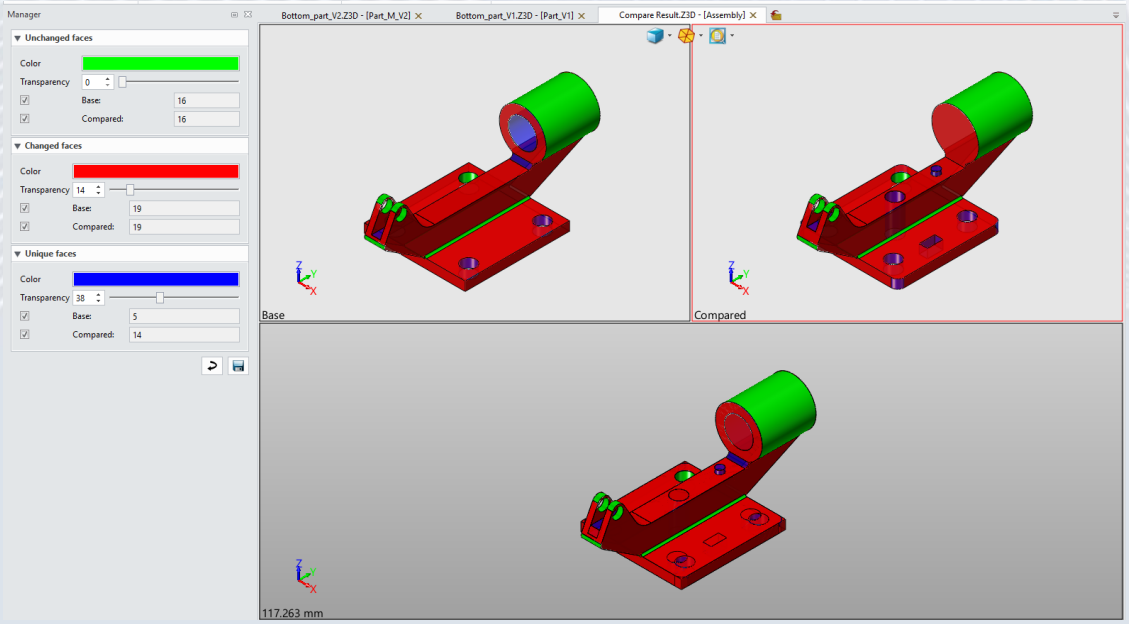
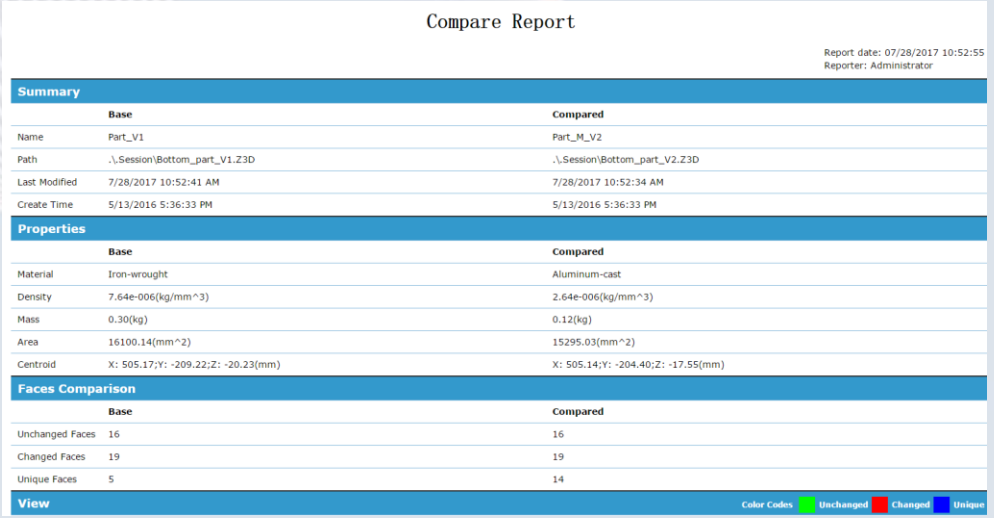
Upgraded Compare Part

- Direct select the part from external Z3D files (No need opened first)
- Multiple windows show the base part, compared part and the combined result.
- Define the color and transparence
- Generate the compare report





Compare Report

Report date: 07/28/2017 10:52:55
Reporter: Administrator

Summary

	Base	Compared
Name	Part_V1	Part_M_V2
Path	.\.Session\Bottom_part_V1.Z3D	.\.Session\Bottom_part_V2.Z3D
Last Modified	7/28/2017 10:52:41 AM	7/28/2017 10:52:34 AM
Create Time	5/13/2016 5:36:33 PM	5/13/2016 5:36:33 PM

Properties

	Base	Compared
Material	Iron-wrought	Aluminum-cast
Density	7.64e-006(kg/mm^3)	2.64e-006(kg/mm^3)
Mass	0.30(kg)	0.12(kg)
Area	16100.14(mm^2)	15295.03(mm^2)
Centroid	X: 505.17;Y: -209.22;Z: -20.23(mm)	X: 505.14;Y: -204.40;Z: -17.55(mm)

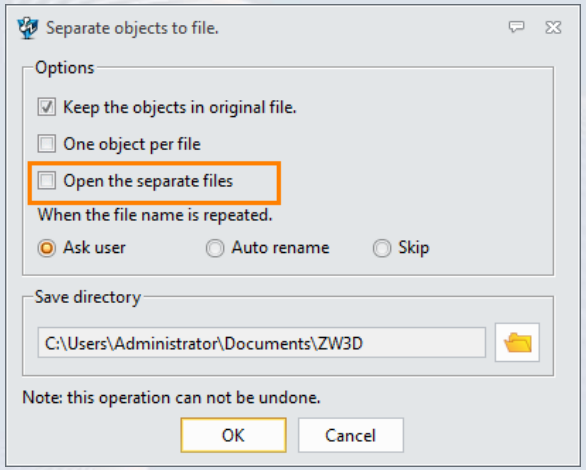
Faces Comparison

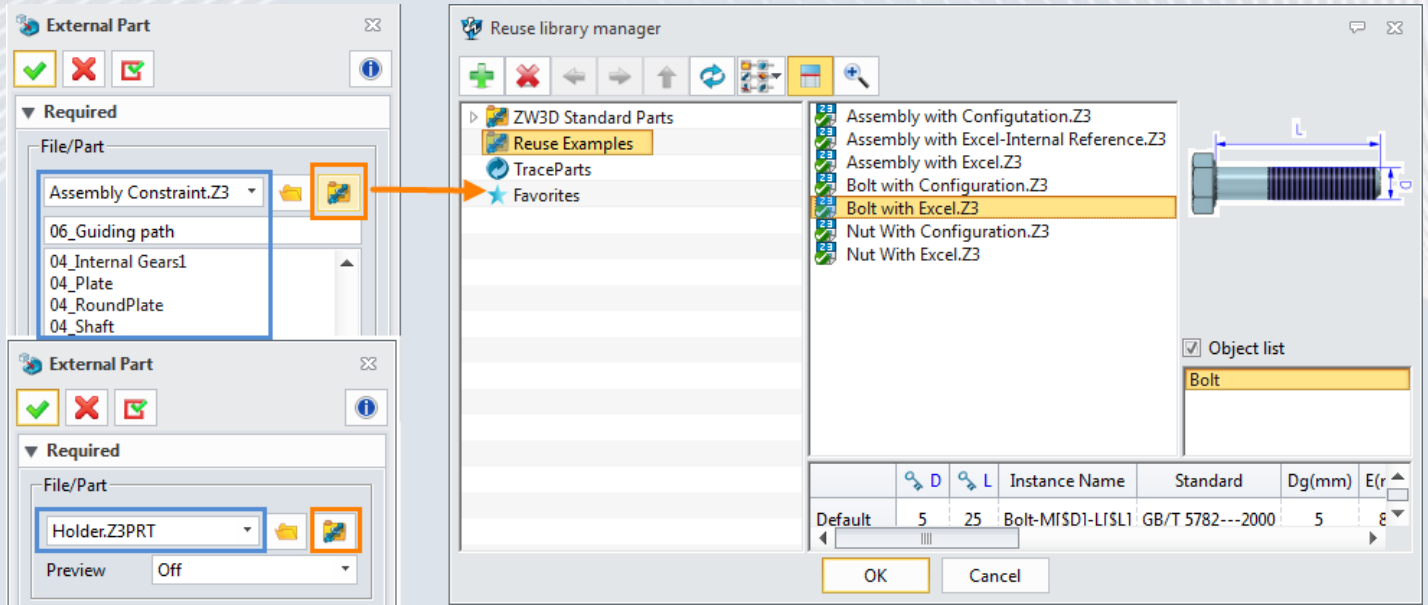
	Base	Compared
Unchanged Faces	16	16
Changed Faces	19	19
Unique Faces	5	14

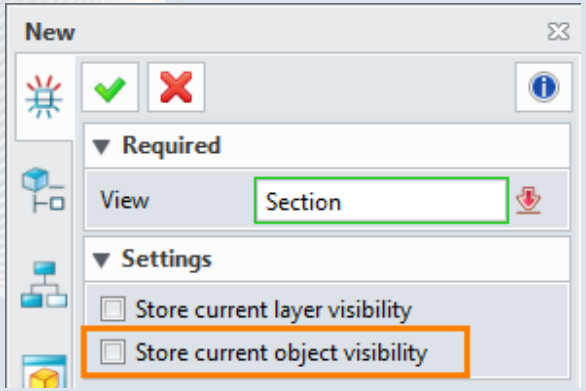
View Color Codes Unchanged Changed Unique

Other Improvements on Modeling

- Hidden sketch feature and hidden component can be pre-highlighted
- “External Part” can directly call Reuse Library
- Auto hide the object list when reading object from Single-object-per-file
- New option on “Separate” to control whether separated filed open or not
- Object visibility can be stored in a custom view.

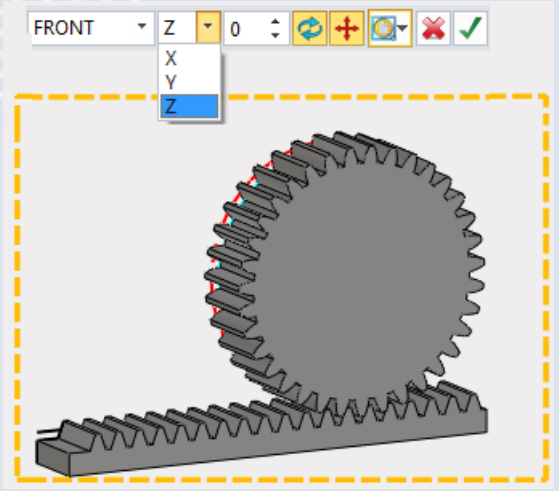


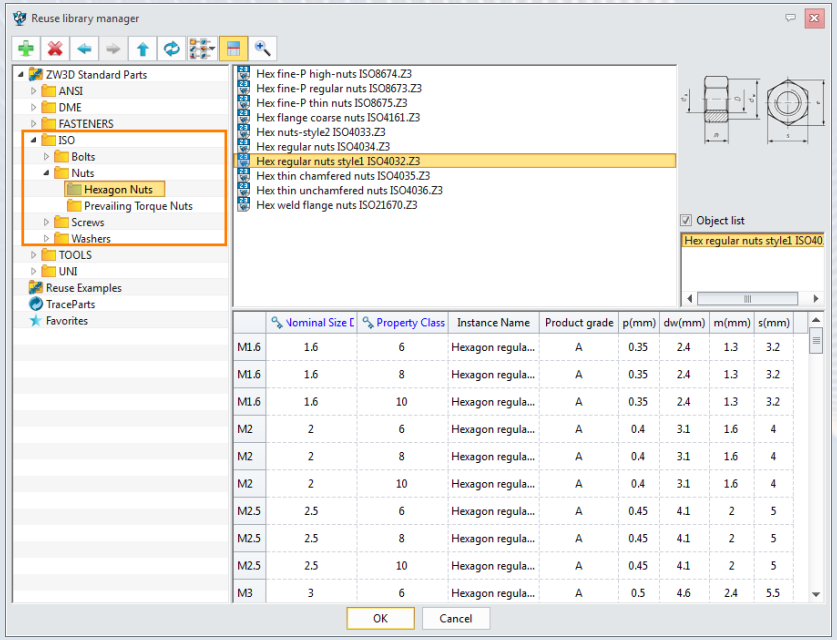


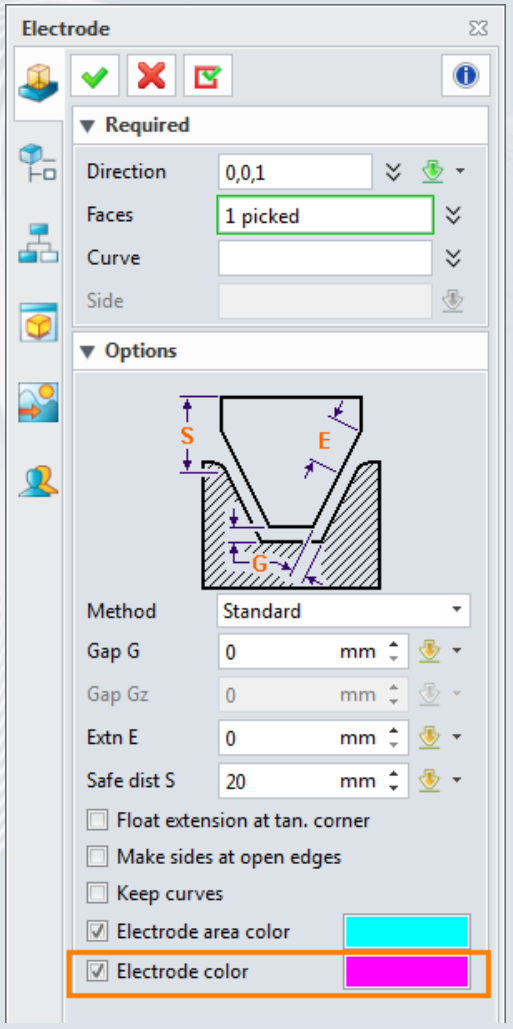


Other Improvements on Modeling

- A base view can be rotated along with XYZ axes by “Rotate View”
- “Format Printer” supports symbols,such as surface finish and weldment symbol
- Electrode colour can be set on “Electrode” form
- Added fastener lib for built-in Library (ISO, GB)
- 250+ bugs fixed

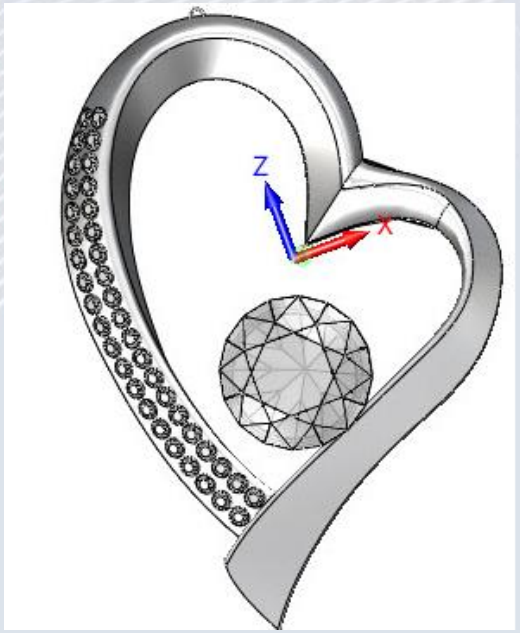






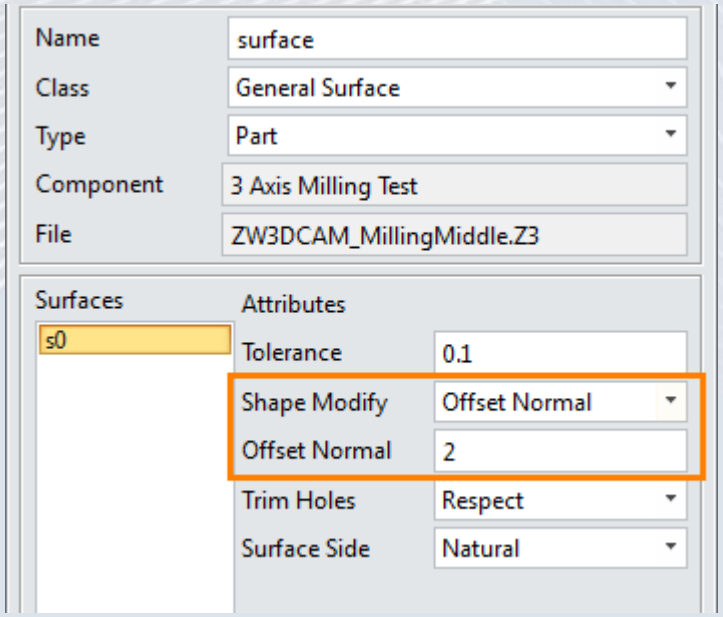
KeyShot

- ZW3D 2018 SP supports the latest version of KeyShot.
- Only Keyshot7 64 bit is supported, since keyshot7 only provides 64 bit version.
- Click KeyShot icon in ZW3D to update the model from ZW3D to KeyShot.



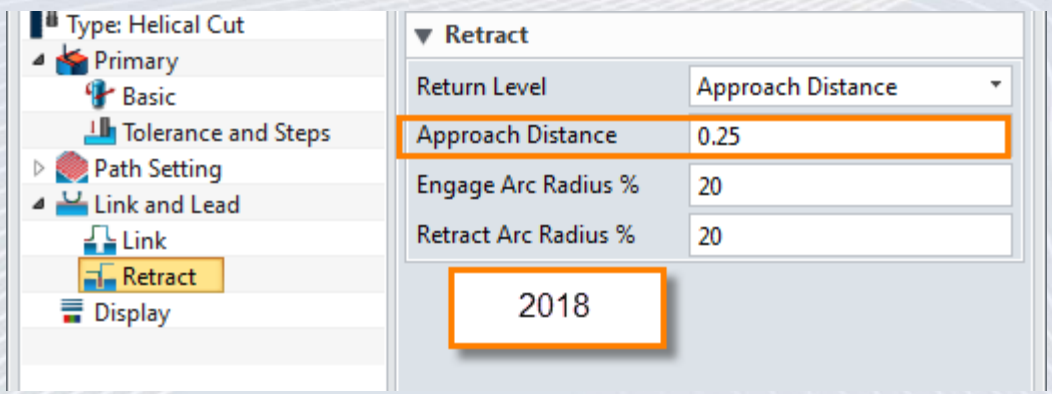
CAM Improvements

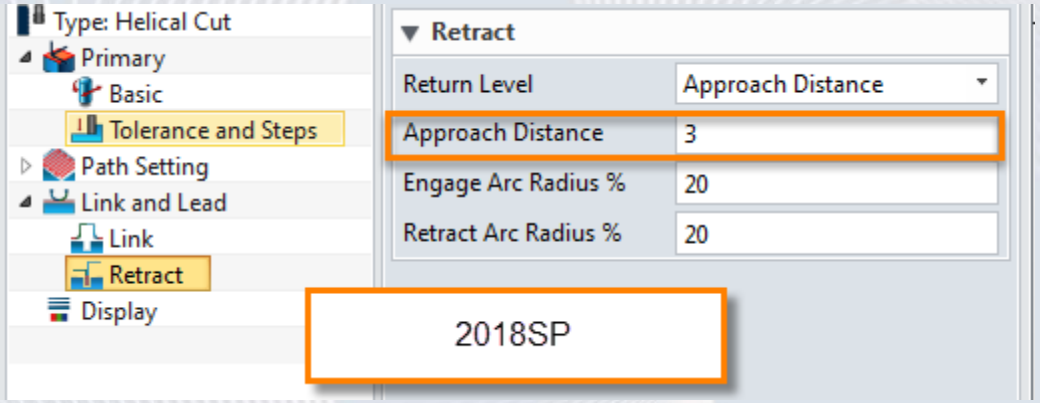
- Surface feature for QM operation supports Offset normal
  - ✓ Specify different thickness to different surface in the same part
  - ✓ Protect some sharp edges from being damaged



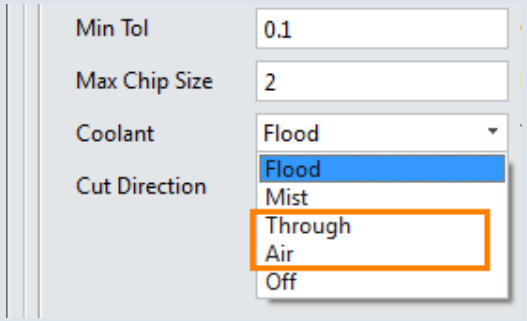
CAM Improvements

- Change default helical cut's approach distance to a reasonable value:





- Add two new coolant types: "Air" and "Through"



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CAM Improvements

- Heidenhain 3X post processor supports tool radius compensation function

```
GOTO/21.50000,0.00000,100.00000
RAPID
GOTO/21.50000,0.00000,72.50000
FEDRAT/MMPM,50.00000
SPINDL/RPM,1000,CLW
GOTO/21.50000,0.00000,70.00000
CUTCOM/LEFT,XYZ,OSETNO,0
GOTO/21.50000,11.50000,70.00000
ARCDAT/21.50000,0.00000,70.00000,0.0000
ARCMOV/CCLW,10.00000,0.00000,70.0000
```

Type	Vertical
Subtype	Rotating Head
Post-Processor	ZWPost
Post Configuration	ZW_Heidenhain530
XY Arcs	Yes

- Output “Total Time” in CL data

```
#DATE / '@CAM_DATE@'
PARTNO / '@PARTNO@'
MACHIN/@MACHINE@,@REF_NUM@
PPRINT / 'Programmed by @PROGRAMMER@'
PPRINT / '@PROG_COMMENT@'
PPRINT / 'Total Time - @TOTAL_HTIME@ HOURS:@TOTAL_MTIME@ MINUTES:@TOTAL_STIME@ SECONDS'
TMARK/1
########################################################
# User could modify the number of SEQNO/No. for start block number.
# If SEQNO/OFF is used, comment off SEQNO/0,INCR,@BLOCKINCR@ please.
########################################################
#SEQNO/OFF
```

```
$$ CAM-ID: ZW3D V15.1
PARTNO / 'Helical Cut 1'
MACHIN/ZWPost,FanucBasic
PPRINT / 'Programmed by win7'
PPRINT / ''
PPRINT / 'Total Time - 0 HOURS:6 MINUTES:36 SECONDS'
TMARK/1
SEQNO/0,INCR,1
FROM/0.00000,0.00000,500.00000
$$ End startup sequence.
```