



International TechneGroup

CADfix PPS 3

“What’s new”

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CADfix PPS 3 Summary

- Import
 - Support for latest CAD versions
 - New ability to merge models
 - New auto clean-up during import
- Export
 - New CATIA V5 (BREP+CGR)
 - Support for latest CAD versions
- Attributes
 - Support for transparency
- Batch
 - New option to use a saved keep list
- Auto-simplification
 - Improved results and performance
 - New save/load of a keep list
- Manual tools
 - New extrude face tool
 - New facet decimation tool
- GUI
 - New layout
 - New model progress tool
 - Faster display and selection
- Documentation
 - New html help manual

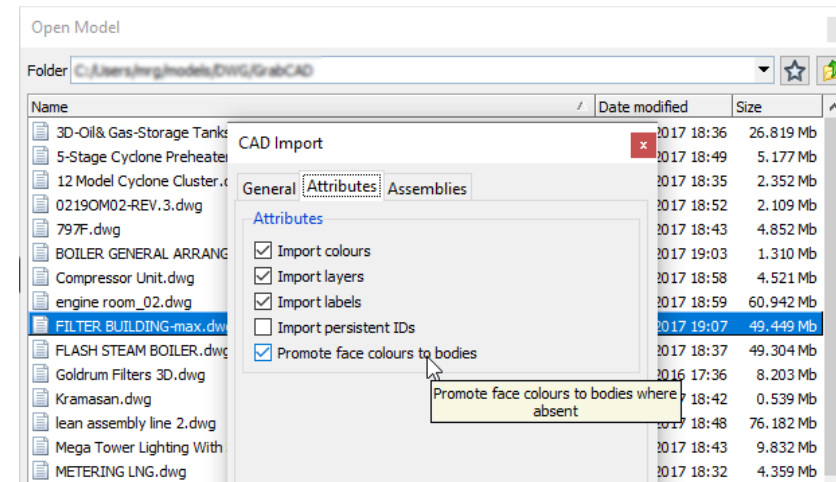
CADfix PPS 3 Summary

- Import

- Latest CAD versions supported:

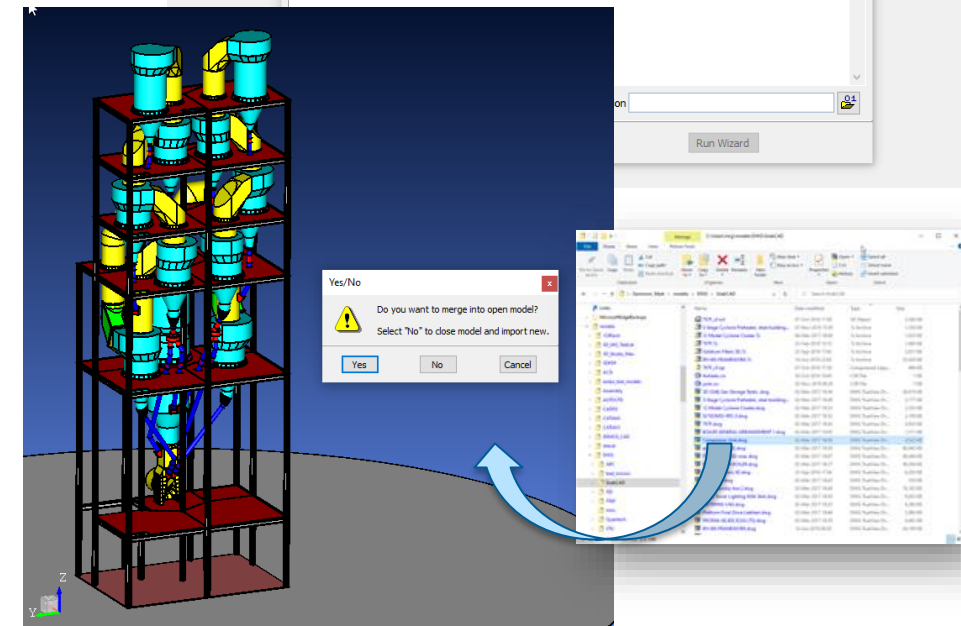
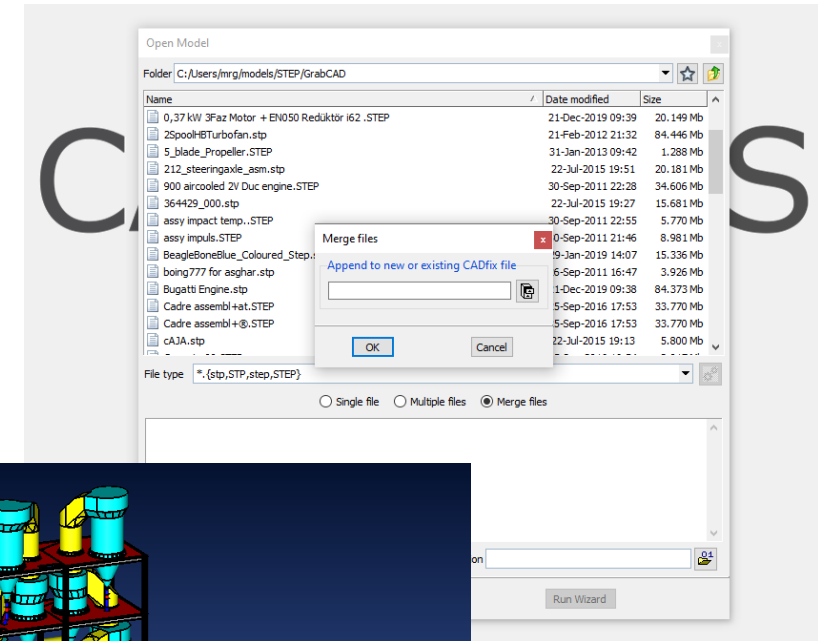
- DXF/DWG 2019
- SolidWorks 2020
- SolidEdge 2020
- CATIA V5 R2020
- NX 1847
- Creo 6.0
- ACIS 2020 1.0
- Parasolid 32.0
- JTOpen 10.5

- Closed surfaces split during import - improved model shading
- Import of transparency attribute
- Faster Creo import
- New import option to promote face colours to bodies



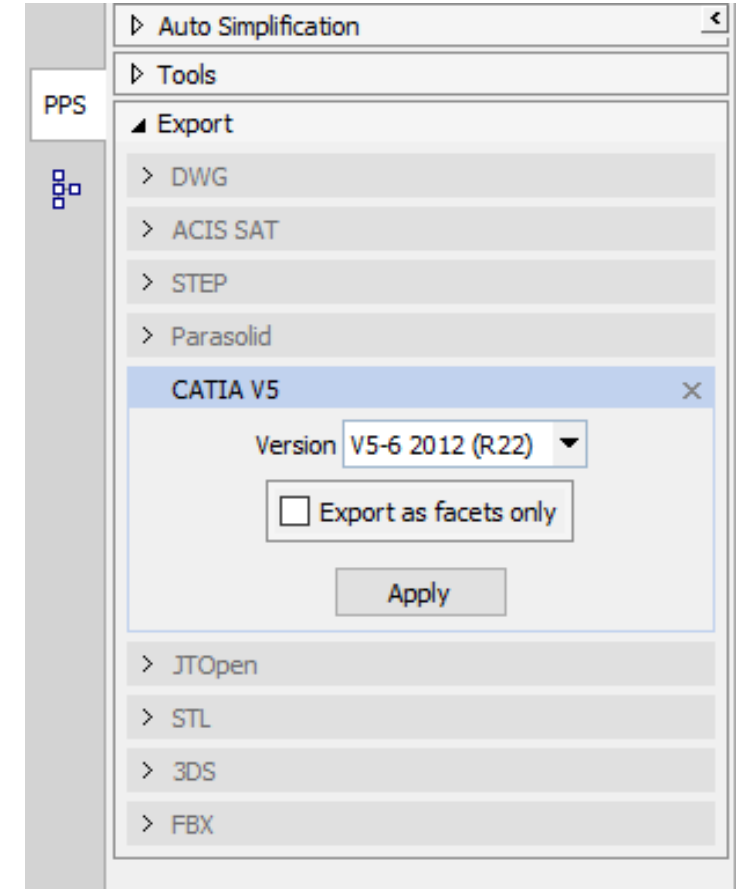
CADfix PPS 3 Summary

- Import
 - New support for merging models
 - Merge multiple files during import
 - Merge files into open session
 - Drag-n-drop support
 - Enables re-use of pre-simplified parts – avoid repeating work



CADfix PPS 3 Summary

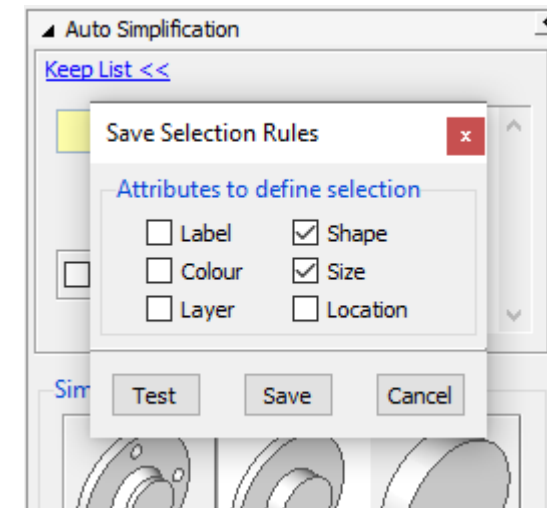
- Export
 - Latest CAD versions supported:
 - DXF/DWG 2019
 - ACIS 2020 1.0
 - Parasolid 32.0
 - Export of transparency attributes
 - New export to CATIA V5
 - Export geometry or facets



CADfix PPS 3 Summary

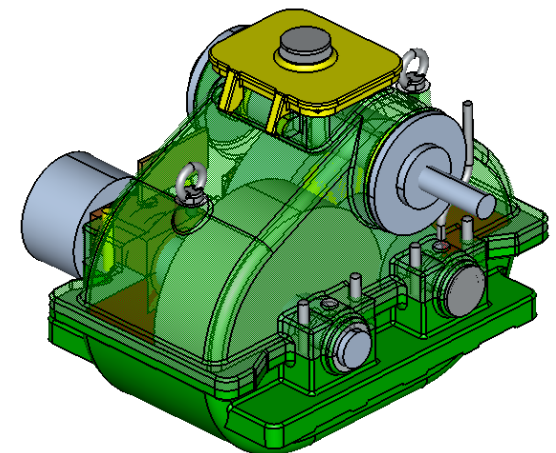
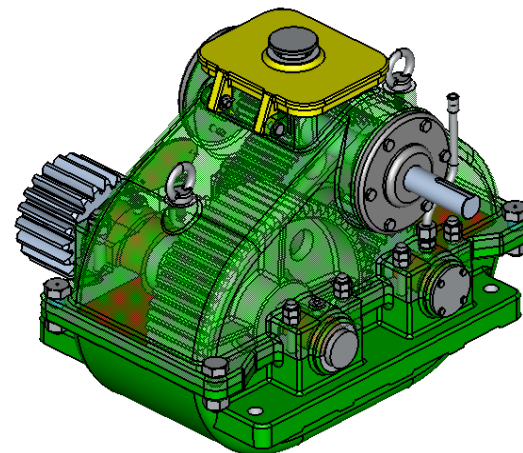
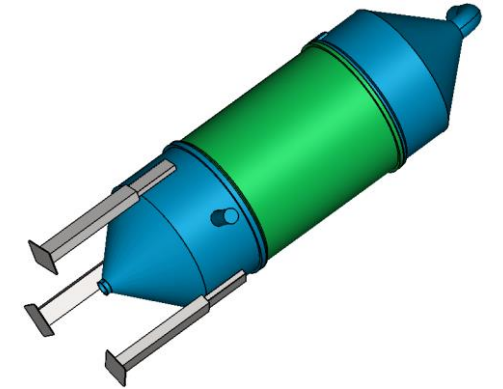
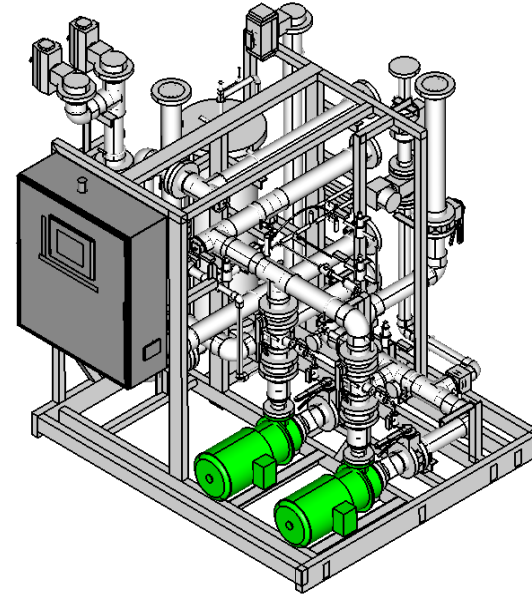
- Batch
 - New option to define a keep list for use in a batch run
 - Keep list file generated from new PPS GUI Tool

```
transform [0, 1] : 1
pps,keepList [NULL, value] : C:\keep\motor.csr
pps,simpLevel [1, 2, 3] : 2
pps,cylSimplification [0, 1] : 1
pps,boxSimplification [0, 1] : 1
pps,removeSmallBodies [0, 1] : 1
pps,smallBodySize [DEFAULT, value] : DEFAULT
```



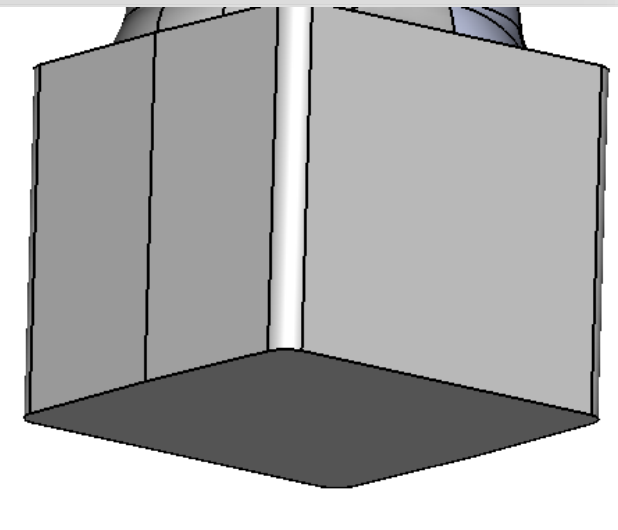
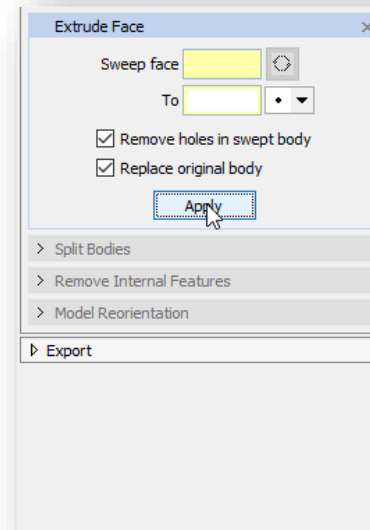
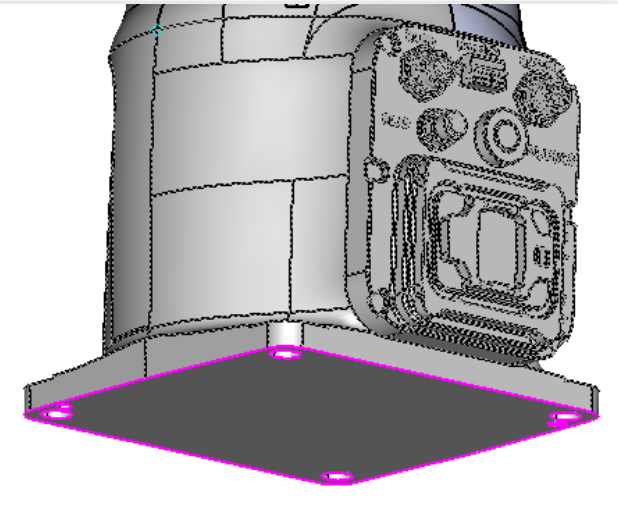
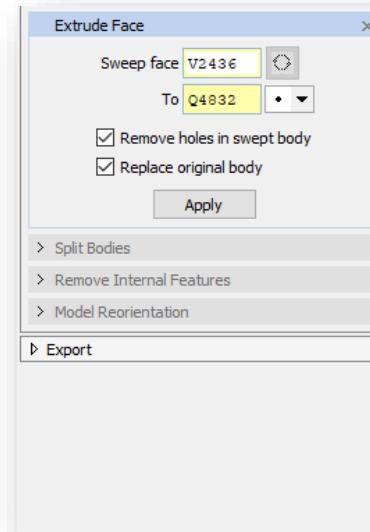
CADfix PPS 3 Summary

- Auto-simplification
 - Improved simplification of pipe runs
 - Preservation of small bodies in a pipe run
 - Improved extraction of domed end-caps
 - Preservation of conical end-caps
 - Improved simplification of gear wheels



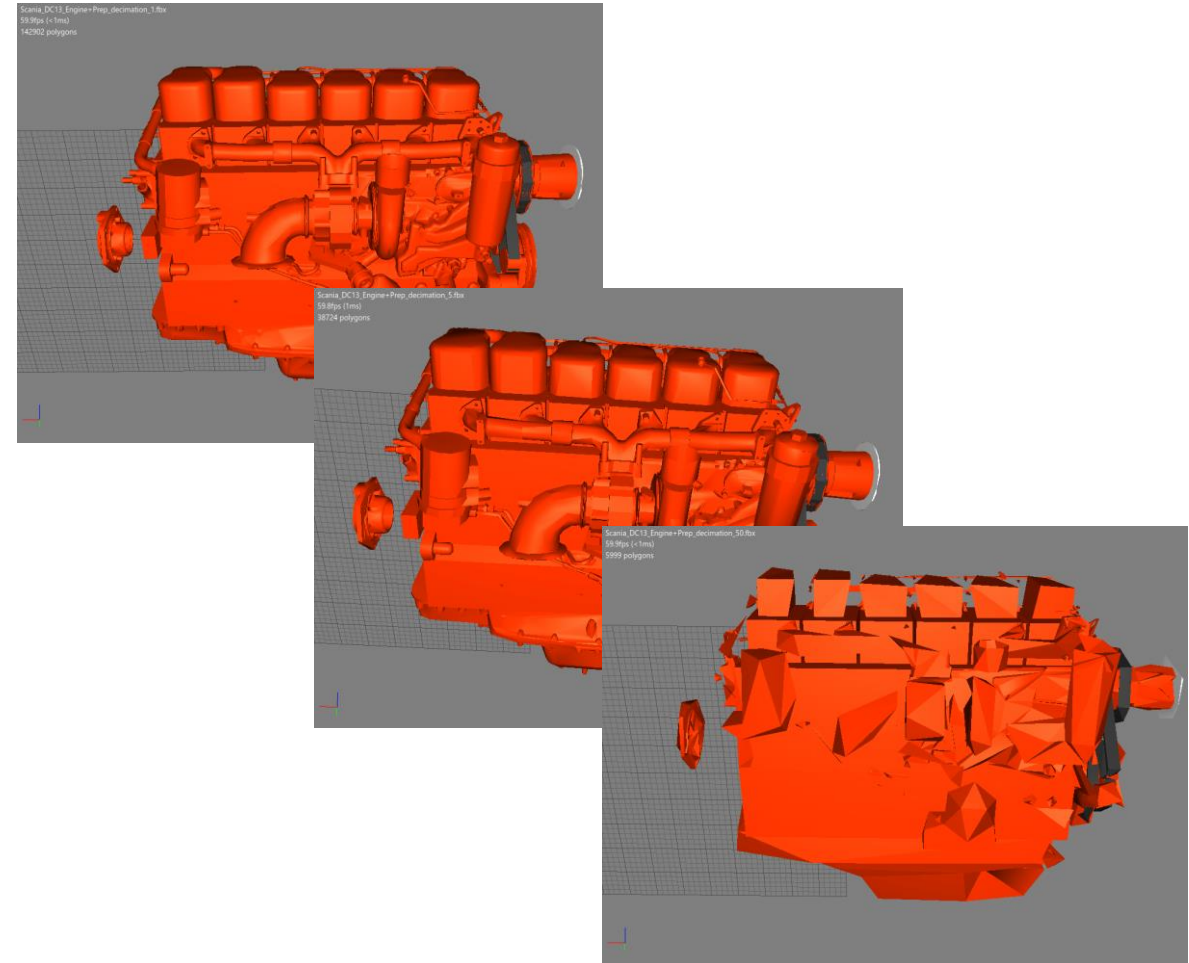
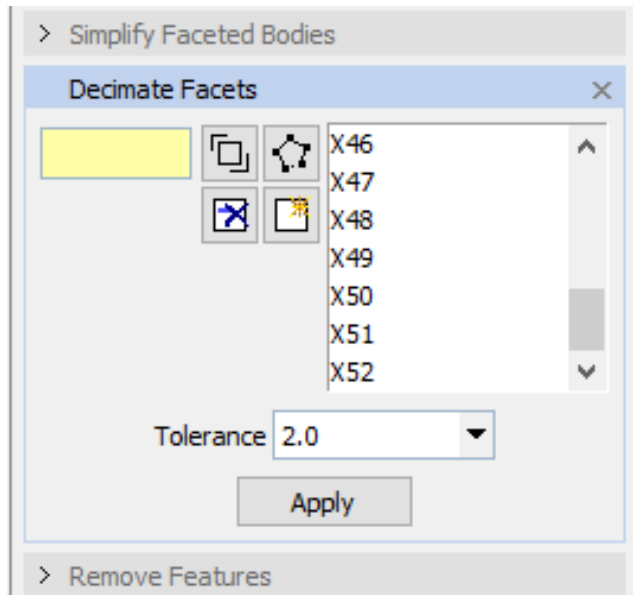
CADfix PPS 3 Summary

- Manual Tools
 - New extrude face tool
 - Redefine a complex body by sweeping a face
 - Option to sketch the sweep face from a loop of edges
 - Option to remove holes in sweep face
 - Option to retain existing body and make new body



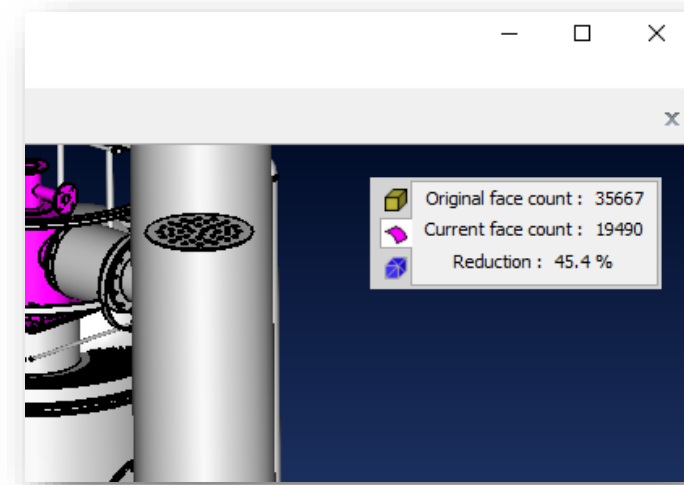
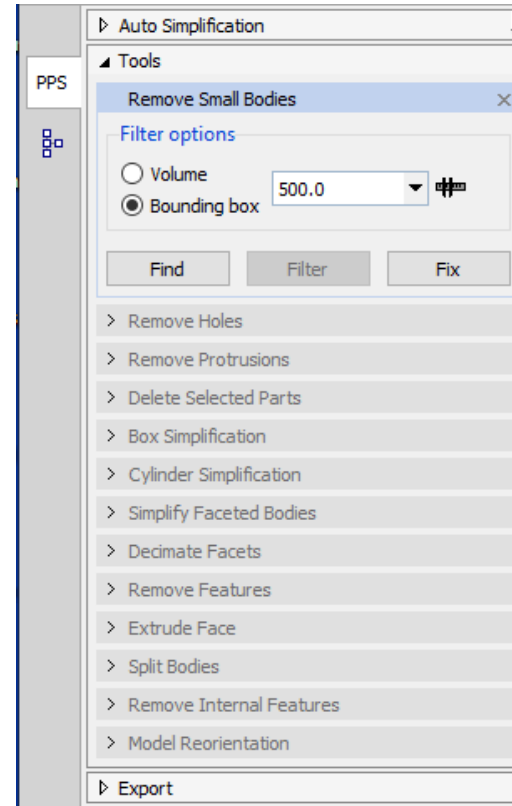
CADfix PPS 3 Summary

- Manual Tools
 - New facet decimation tool
 - Reduce facet count while maintaining visual resolution



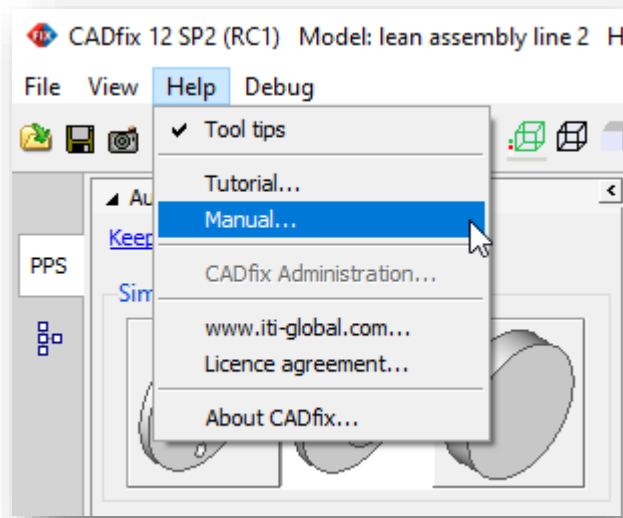
CADfix PPS 3 Summary

- GUI
 - New layout
 - Less mouse movement
 - Cleaner style
 - New progress status tool
 - % reduction indicator
 - Face, body and facet %s
 - Faster display re-paints

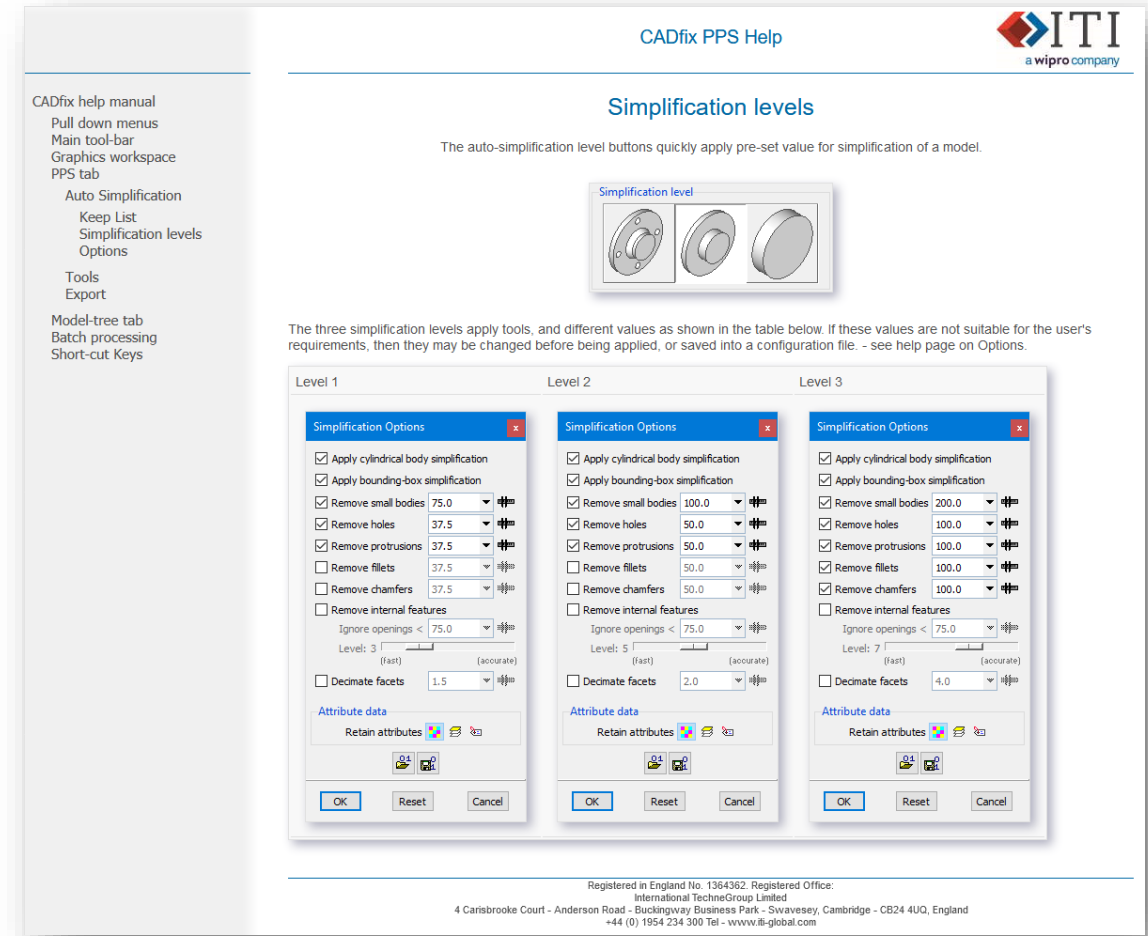


CADfix PPS 3 Summary

- Documentation
 - New HTML help manual



- Updated tutorial

A screenshot of the CADfix PPS Help manual. The title is 'Simplification levels'. It explains that auto-simplification level buttons quickly apply pre-set values for simplification of a model. Below this, there are three images showing a part at different simplification levels. A table below the images lists the settings for Level 1, Level 2, and Level 3. The table includes options for cylindrical body simplification, bounding-box simplification, removing small bodies, holes, protrusions, fillets, chamfers, and internal features, as well as ignore openings and decimate facets. The 'Attribute data' section is also visible at the bottom of each level's settings panel.

CADfix PPS Help

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Simplification levels

The auto-simplification level buttons quickly apply pre-set value for simplification of a model.

The three simplification levels apply tools, and different values as shown in the table below. If these values are not suitable for the user's requirements, then they may be changed before being applied, or saved into a configuration file. - see help page on Options.

Level 1	Level 2	Level 3
<input checked="" type="checkbox"/> Apply cylindrical body simplification	<input checked="" type="checkbox"/> Apply cylindrical body simplification	<input checked="" type="checkbox"/> Apply cylindrical body simplification
<input checked="" type="checkbox"/> Apply bounding-box simplification	<input checked="" type="checkbox"/> Apply bounding-box simplification	<input checked="" type="checkbox"/> Apply bounding-box simplification
<input checked="" type="checkbox"/> Remove small bodies 75.0	<input checked="" type="checkbox"/> Remove small bodies 100.0	<input checked="" type="checkbox"/> Remove small bodies 200.0
<input checked="" type="checkbox"/> Remove holes 37.5	<input checked="" type="checkbox"/> Remove holes 50.0	<input checked="" type="checkbox"/> Remove holes 100.0
<input checked="" type="checkbox"/> Remove protrusions 37.5	<input checked="" type="checkbox"/> Remove protrusions 50.0	<input checked="" type="checkbox"/> Remove protrusions 100.0
<input type="checkbox"/> Remove fillets 37.5	<input type="checkbox"/> Remove fillets 50.0	<input checked="" type="checkbox"/> Remove fillets 100.0
<input type="checkbox"/> Remove chamfers 37.5	<input type="checkbox"/> Remove chamfers 50.0	<input checked="" type="checkbox"/> Remove chamfers 100.0
<input type="checkbox"/> Remove internal features	<input type="checkbox"/> Remove internal features	<input type="checkbox"/> Remove internal features
Ignore openings < 75.0	Ignore openings < 75.0	Ignore openings < 75.0
Level: 3 (fast) (accurate)	Level: 5 (fast) (accurate)	Level: 7 (fast) (accurate)
<input type="checkbox"/> Decimate facets 1.5	<input type="checkbox"/> Decimate facets 2.0	<input type="checkbox"/> Decimate facets 4.0
Attribute data	Attribute data	Attribute data
Retain attributes	Retain attributes	Retain attributes

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