



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

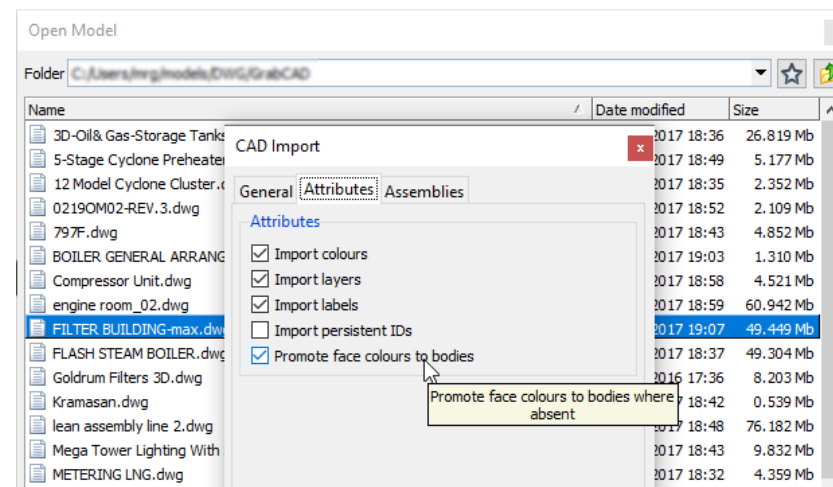
CADfix PPS 3 Summary

- Import

- Latest CAD versions supported:

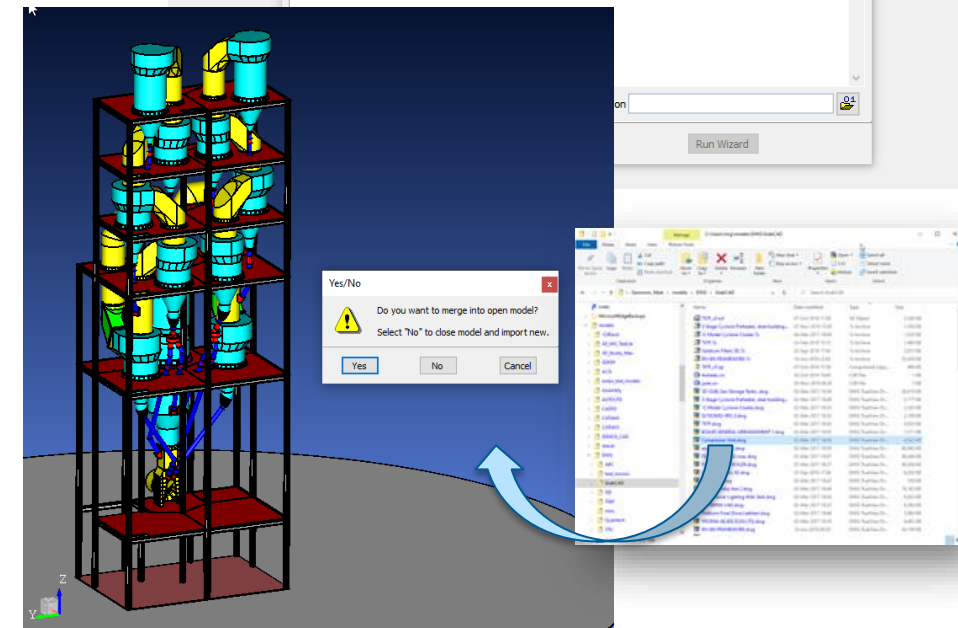
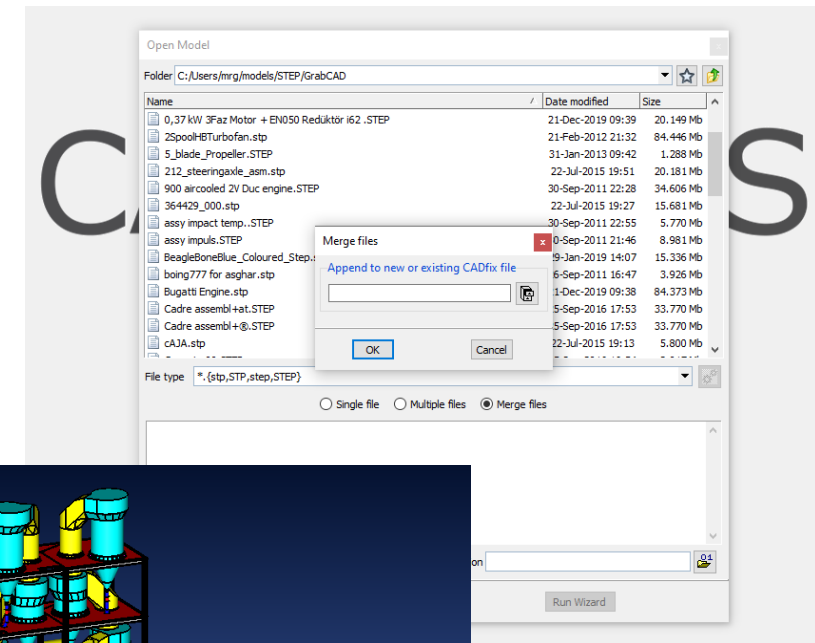
- DXF/DWG 2019
- SolidWorks 2020
- SolidEdge 2020
- CATIA V5 R2020
- NX 1847
- Creo 6.0
- ACIS 2020 1.0
- Parasolid 32.0
- JTOpen 10.5

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



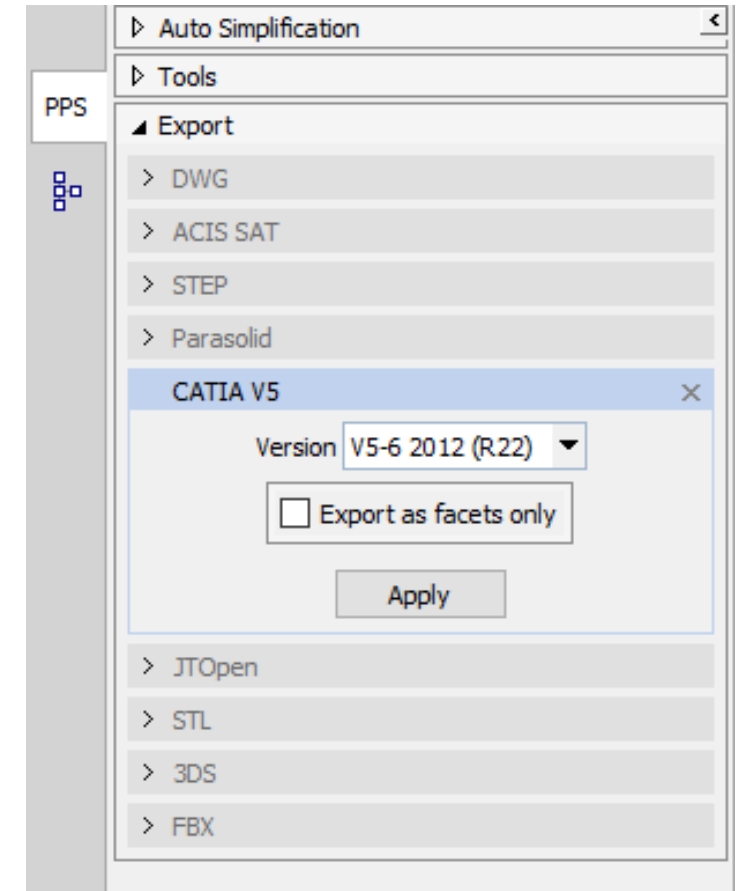
CADfix PPS 3 Summary

- 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

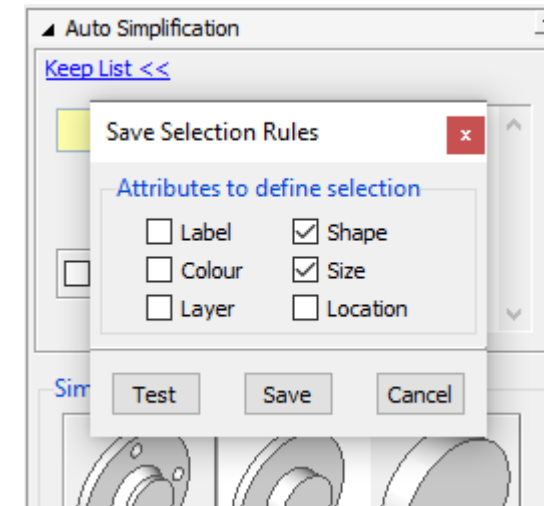
- Export
 - Latest CAD versions supported:
 - DXF/DWG 2019
 - ACIS 2020 1.0
 - Parasolid 32.0
 - Export of transparency attributes
 - New export to CATIA V5
 - Export geometry or facets



CADfix PPS 3 Summary

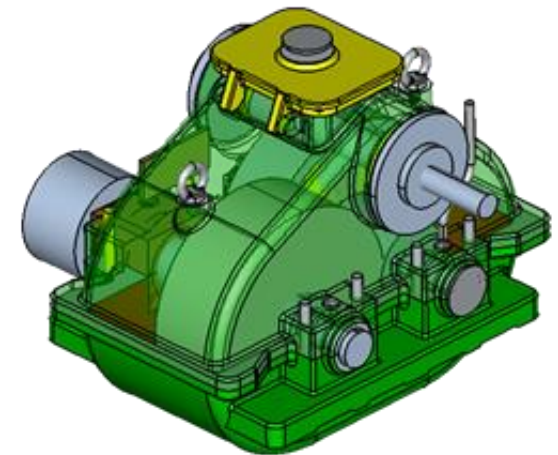
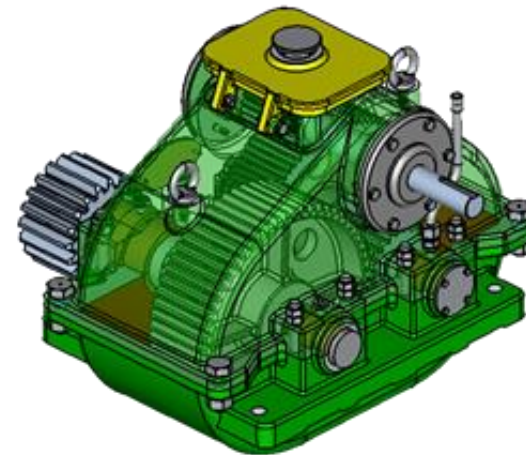
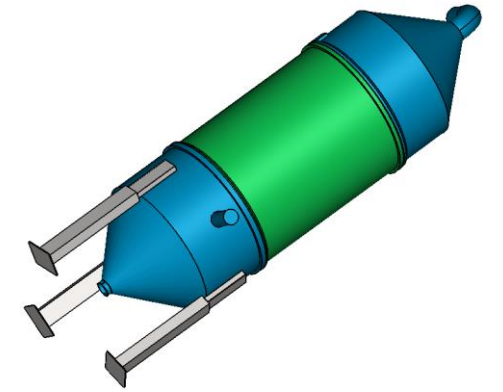
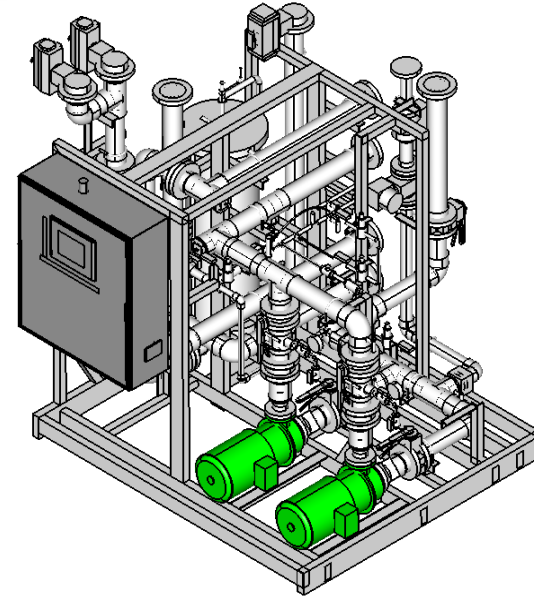
- Batch
 - New option to define a keep list for use in a batch run
 - Keep list file generated from new PPS GUI Tool

```
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
```



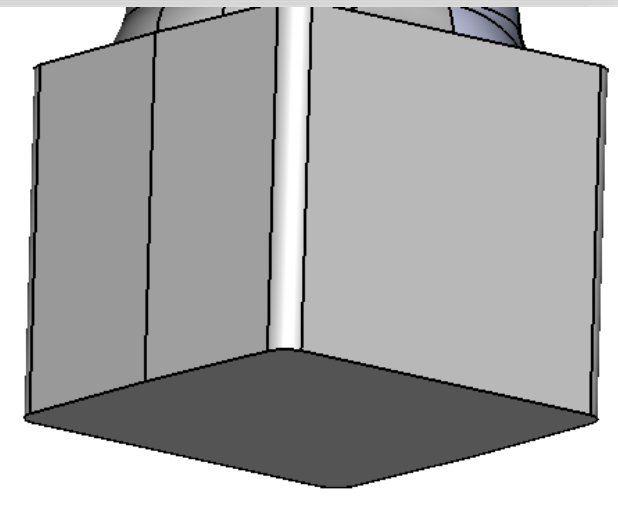
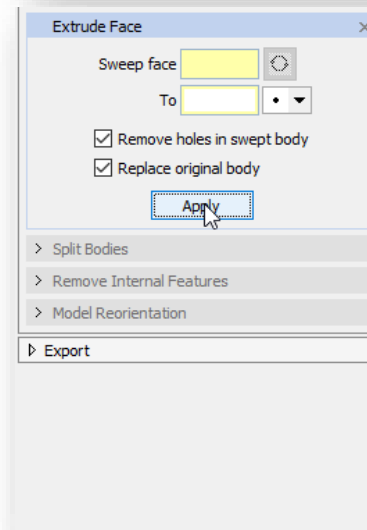
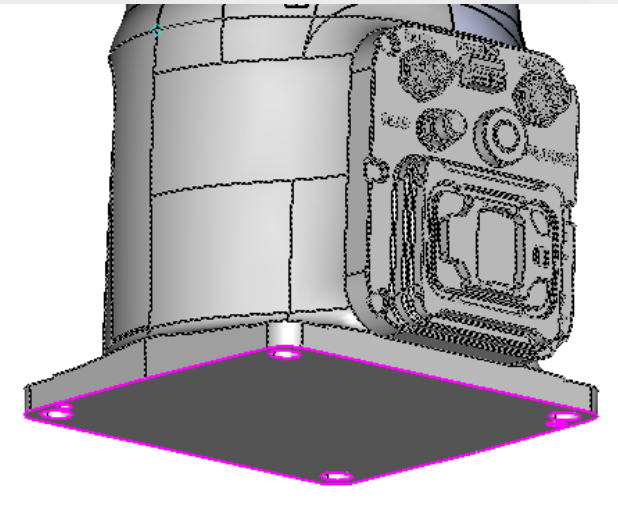
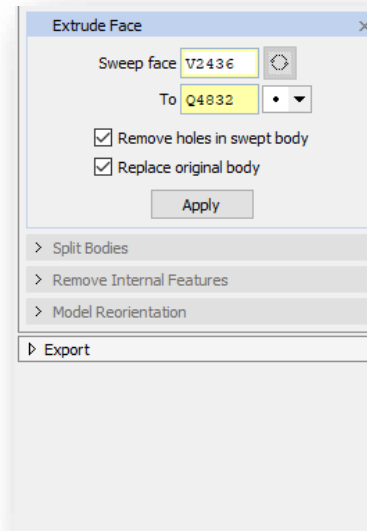
CADfix PPS 3 Summary

- 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



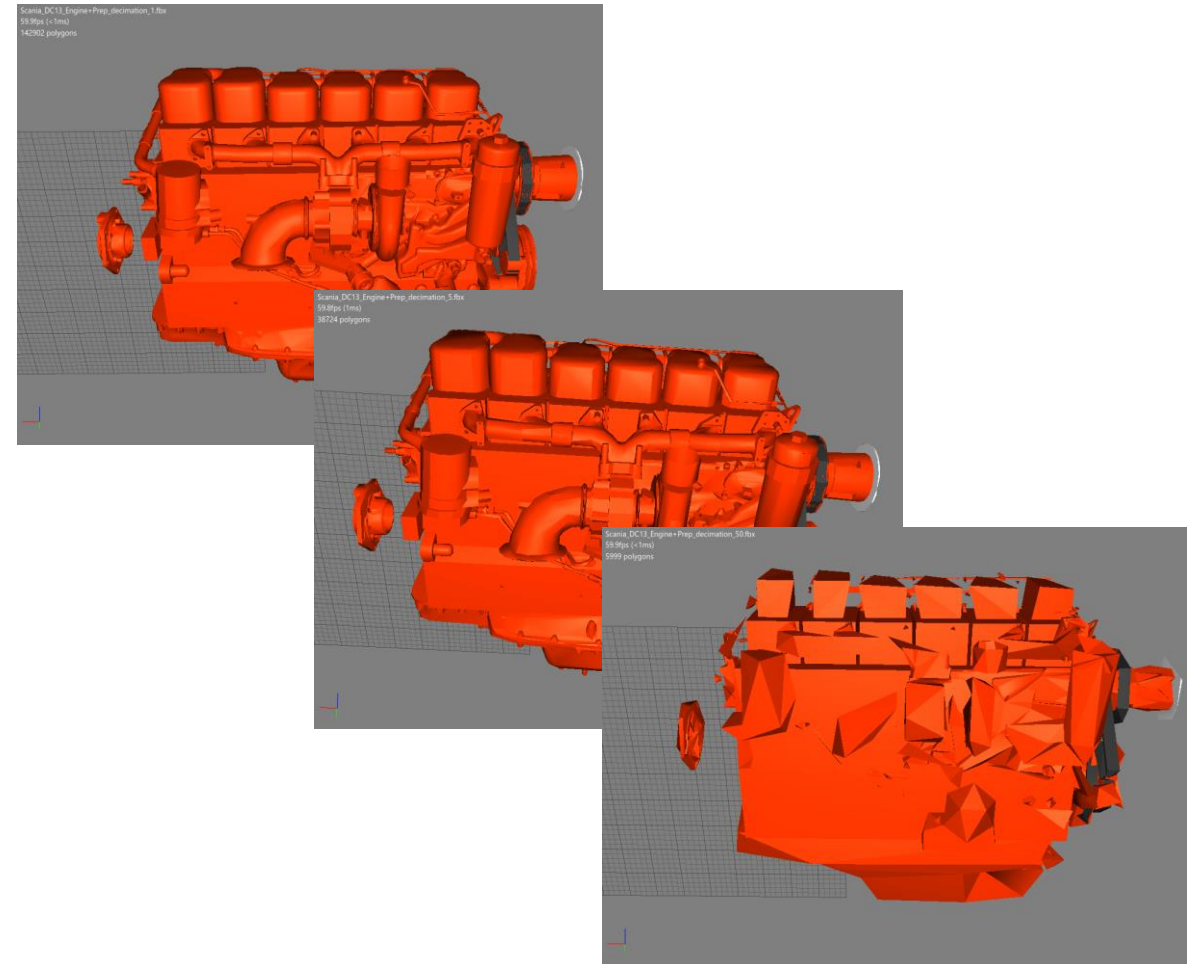
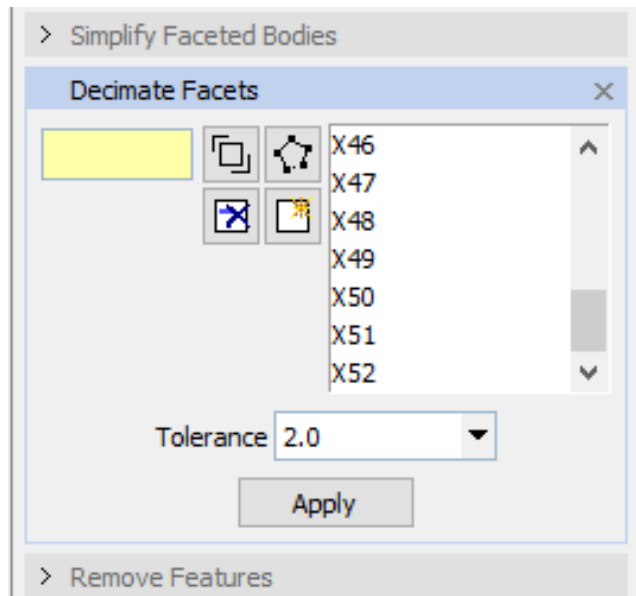
CADfix PPS 3 Summary

- 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



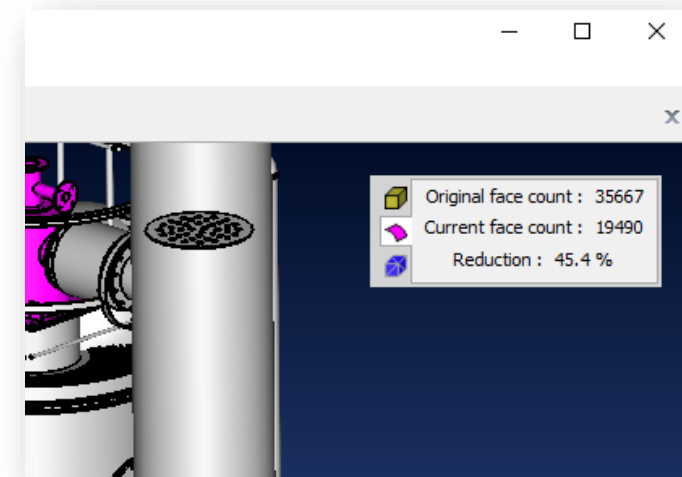
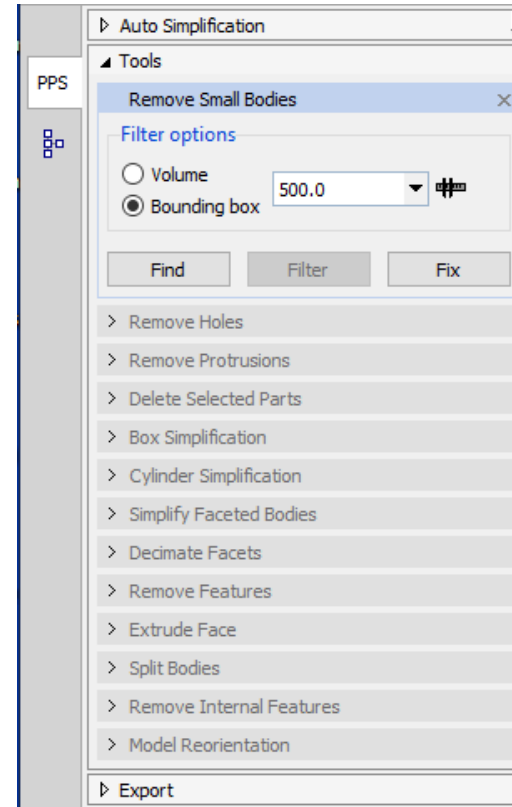
CADfix PPS 3 Summary

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



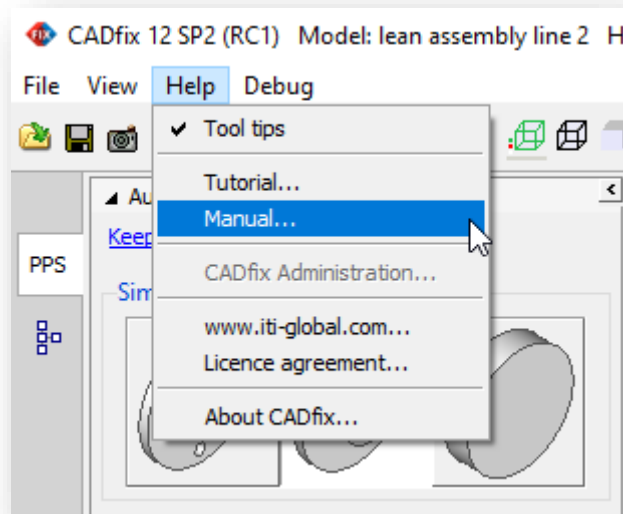
CADfix PPS 3 Summary

- 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 page is titled 'Simplification levels' and features the ITI logo (a wipro company). The text explains that auto-simplification level buttons quickly apply pre-set values for simplification of a model. Below this, three 3D models of a mechanical part are shown, representing different simplification levels. A table below the models lists the settings for each level. The table has three columns: Level 1, Level 2, and Level 3. Each column contains a 'Simplification Options' dialog box with various settings. The settings include checkboxes for 'Apply cylindrical body simplification', 'Apply bounding-box simplification', 'Remove small bodies', 'Remove holes', 'Remove protrusions', 'Remove fillets', 'Remove chamfers', and 'Remove internal features'. There are also input fields for 'Ignore openings <' and 'Decimate facets'. The 'Level' dropdown is set to 3 for Level 1, 5 for Level 2, and 7 for Level 3. The 'Attribute data' section is also visible at the bottom of each dialog box.

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



Thank you!

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