



Global Experts in GD&T
and Mechanical Variation

EZtol for Creo Technology Preview

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Sigmatix Product Portfolio



Variation Analysis Software for Robust Assembly Design

- 3-D tolerance analysis tool
- Works with Creo, SOLIDWORKS, CATIA, and NX
- Evaluate worst-case and statistical results with Six Sigma metrics



Tolerance Analysis Made Easy

- 1-D Tolerance stack-up tools:
EZtol works with CATIA, Creo, Inventor, NX, & SOLIDWORKS files
TAE add-in for Creo
- Shows worst-case, RSS, and statistical results with Six Sigma metrics



Global Experts for Training, Consulting, & Outsourcing

Consulting Services

- Tolerance Analysis
- GD&T
- Integration & Best Practices

Training

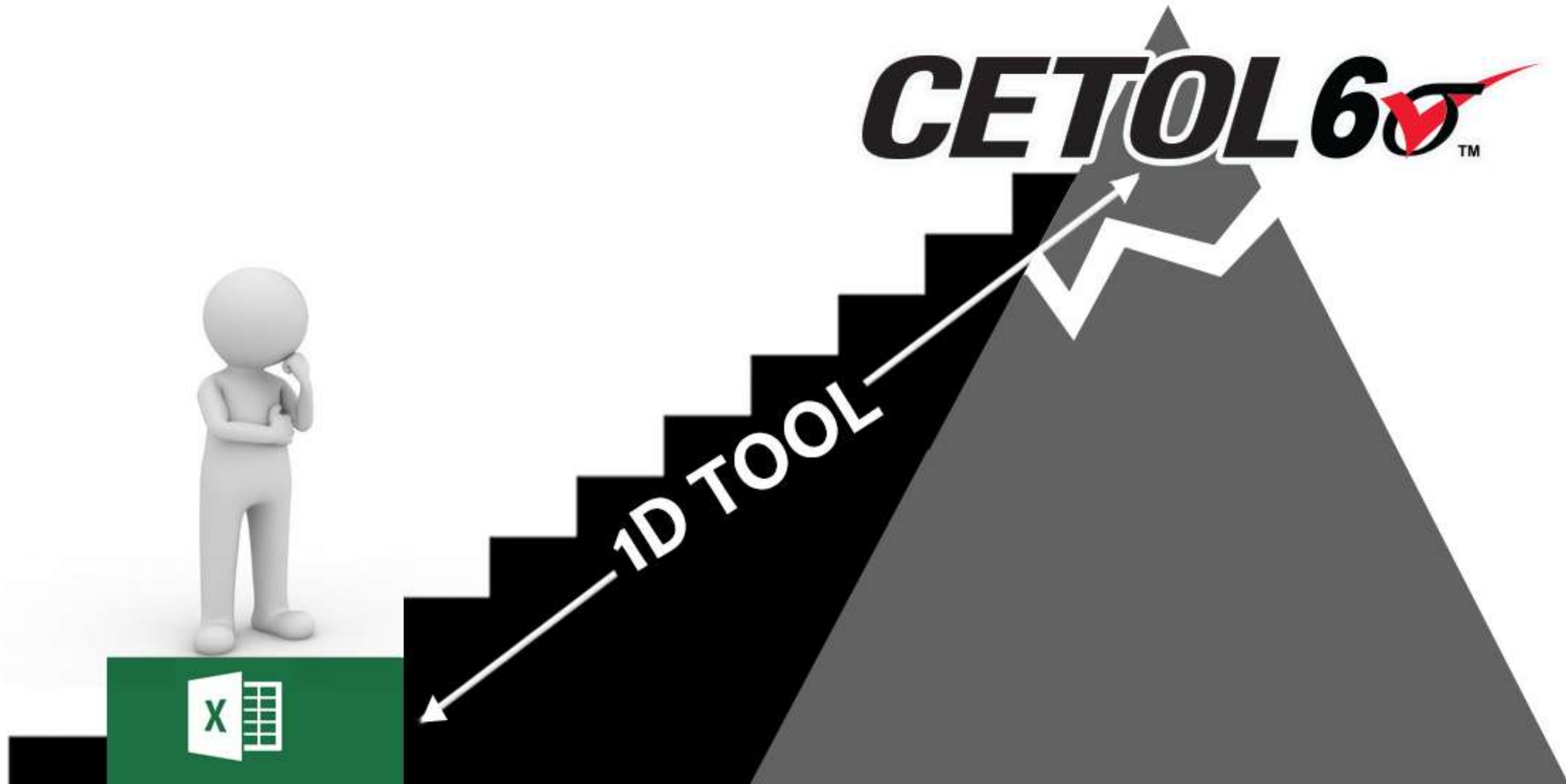
- GD&T
- Sigmetrix Software
- Tolerance Analysis



Fast, Easy, Accurate, GD&T Creation

- Available for Creo and embedded within Inventor 2018
- Easily apply GD&T annotations
- Ensures GD&T is correct and complete
- Help content to easily answer GD&T questions

EZtol– Bridging the Gap From Excel to CETOL 6 σ



Challenges with spreadsheet-based 1D Analyses

- Spreadsheets are not associative to design – as the design changes the spreadsheets must be manually updated.
- Each analysis is typically treated independently from the others. The user must ensure to update tolerance changes when a dimension appears in multiple stackups.
- It's not easy to change assembly assumptions (shift/bias across features of size).
- Math for true statistical treatment (as opposed to just RSS) and GD&T becomes complex.
- Only provide results, usually WC and RSS
 - Contributions not identified
- The report is typically limited to just the spreadsheet(s), with embedded descriptions, along with some form of graphical view with a manually created dimension loop.
- Unless the organization has standardized each engineer creates a unique format.

Available today - EZtol Standalone

- Opens multiple formats including Creo 2.0 and 3.0 Files.
- 7-day trial available for download at www.eztol.com

The screenshot displays the EZtol software interface. The main window shows a 3D model of a mechanical assembly with various dimensions and tolerances. The left sidebar contains a tree view of the assembly structure, including components like 'top plate:1', 'support arm:1', and 'HEX_FLANGE_SCREW-imp'. The right sidebar shows the 'axial gap details' table, which lists various features and their tolerance analysis results.

Name	Sens	Nominal	Tolerance	Datum	Cp
Major Ø	-1%	(09.866)	± 9.972 ± 9.760		
Major Ø-clearance hole Shifted to Maximize support arm:2 (mm)		(0.350)			
clearance hole	+1%	Ø10.50	+ 0.15 - 0.02		
holes to C	-1	27.5	± 0.2	C	
bushing:2 (mm)					
flange width	-1	5.0	± 0.5	B	
inner face					
axial gap		(1.699)	± 0.358		
Objectives (mm)		(1.699)	± 0.000		▼ Worst Case

Worst Case Results for axial gap:

0.000 mm 0.358 mm 1.699 mm 3.040 mm

Calculated results are ignoring potentially significant 3D effects.



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Questions?

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