

MxD 15-11-01	Category: Quoting Process, Engineering Change
Title:	Tolerance Analysis Tools & Techniques
Completion Date:	2018-06-12
Project Team:	Advanced Engineering Solutions USA Inc., Weasler Engineering Inc., Sigmetrix
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For Additional Information:	If you are a member of MxD (formerly DMDII), go to https://portal.dmdii.org/ . If you are not a member of MxD, contact Tyler Vizek (Tyler.Vizek@mxdusa.org).

Project Overview:

- Project goals and objectives
 - To predict deformation and tolerance behavior of flexible parts, Advanced Engineering Solutions developed and validated an approach that generates and executes a series of design of experiments and performs tolerance analyses of flexible assemblies within the CAD environment.
- Key benefits of project solution
 - Having a easy-to-use process that works directly within the CAD environment enables immediate feedback to the designer. The ability to simulate flexible components improves the quality of assemblies that deform due to loading, contact forces, welding distortion, temperature variations, etc.
- Technology Transition
 - The step-by-step workflows for performing Tolerance Analysis of flexible assemblies as well as video demonstrations, are available to MxD members.