

## Introduction to Statistical Tolerance Stacks Course Agenda

Lesson	Description	Exercises
1	Statistical stack terminology <ul style="list-style-type: none"> <li>• Mean</li> <li>• Normal distribution</li> <li>• Standard deviation</li> <li>• Central limit theorem</li> </ul> Assumptions used in statistical stacks	1
2	Introduction to common statistical tolerance methods <ul style="list-style-type: none"> <li>• Root sum square method (RSS)</li> <li>• Realistic predicted limits method (RPL)</li> <li>• Bender method</li> <li>• Monte Carlo method</li> </ul> What a statistical stack is Benefits of statistical stacks	2
3	RSS method <ul style="list-style-type: none"> <li>• How the root sum square method works</li> <li>• Calculating statistical stacks</li> <li>• Expanded stack form for statistical stack methods</li> <li>• Bonus/ shift adjustments in statistical stacks</li> </ul>	3,4,5,6,7,8
Lunch		
4	Applying the realistic method to RSS statistical stacks	9
5	RPL method <ul style="list-style-type: none"> <li>• Explanation of RPL method</li> <li>• Calculating statistical stacks using the realistic predicted limit method</li> </ul>	10
6	Monte Carlo method <ul style="list-style-type: none"> <li>• Explanation of Monte Carlo method</li> <li>• Demonstration of using the Monte Carlo method for statistical stack analysis</li> </ul>	11
7	Precautions when using statistical tolerance stacks <ul style="list-style-type: none"> <li>• When statistical stacks should be considered</li> <li>• Assumptions used in statistical stacks</li> <li>• Ways to reduce risk when using statistical stacks</li> </ul>	12
8	Statistical tolerance analysis	13