

<u>Test Name</u>	<u>What is tested</u>	<u>Test Statistic</u>	<u>Goal</u>	<u>Distribution Requirement or Test</u>
<u>Parametric Tests (Normal Distribution)</u>				
	Continuous			
Kappa Analysis	Repeatability & Reproducibility	K-Statistic	Test measurement error	None
Anderson-Darling Normality Test	Normal distribution	A-Squared p-Value	Do samples conform to a normal distribution	Tests against normality
		Mean		
ANOVA	Mean	F-Statistic	Measurement variation	Normal
		Variance		
F-Test	Variance	F-Statistic	Valuable when deviating from normality	F Distribution
Gage R&R	Measurement Variation	% of Tolerance	0%	<ul style="list-style-type: none"> ANOVA: ANalysis Of VAriance XR chart Run charts
	Discrete			
Binomial	Probability of discrete events	p-Value	Probabilities of discrete events	Assigns discrete probabilities
		Mean		
One Sample Proportion Test	Mean	Z-Statistic	Statistics of discrete events	Z Distribution
<u>Non-Parametric Tests (Non Normal Distribution)</u>				
	Continuous			
		Mean		
Mann-Whitney Test	Medians	W-Statistic Z-Statistic	Non-parametric test. Mean of n_j samples are the same	Not Normal Distribution
		Variance		
Levene's Test	Variances are equal	L-Statistic	Non-parametric test. Variances are the same.	F Distribution
		Medians		
Mood's Test	Median	Chi^2 -Statistic	Non-parametric test. Medians are equal.	Chi^2 Distribution
		Treatments		
Friedman's Test	Treatments	F-Statistic	Non-Parametric Treatments are equal	Chi^2 Distribution