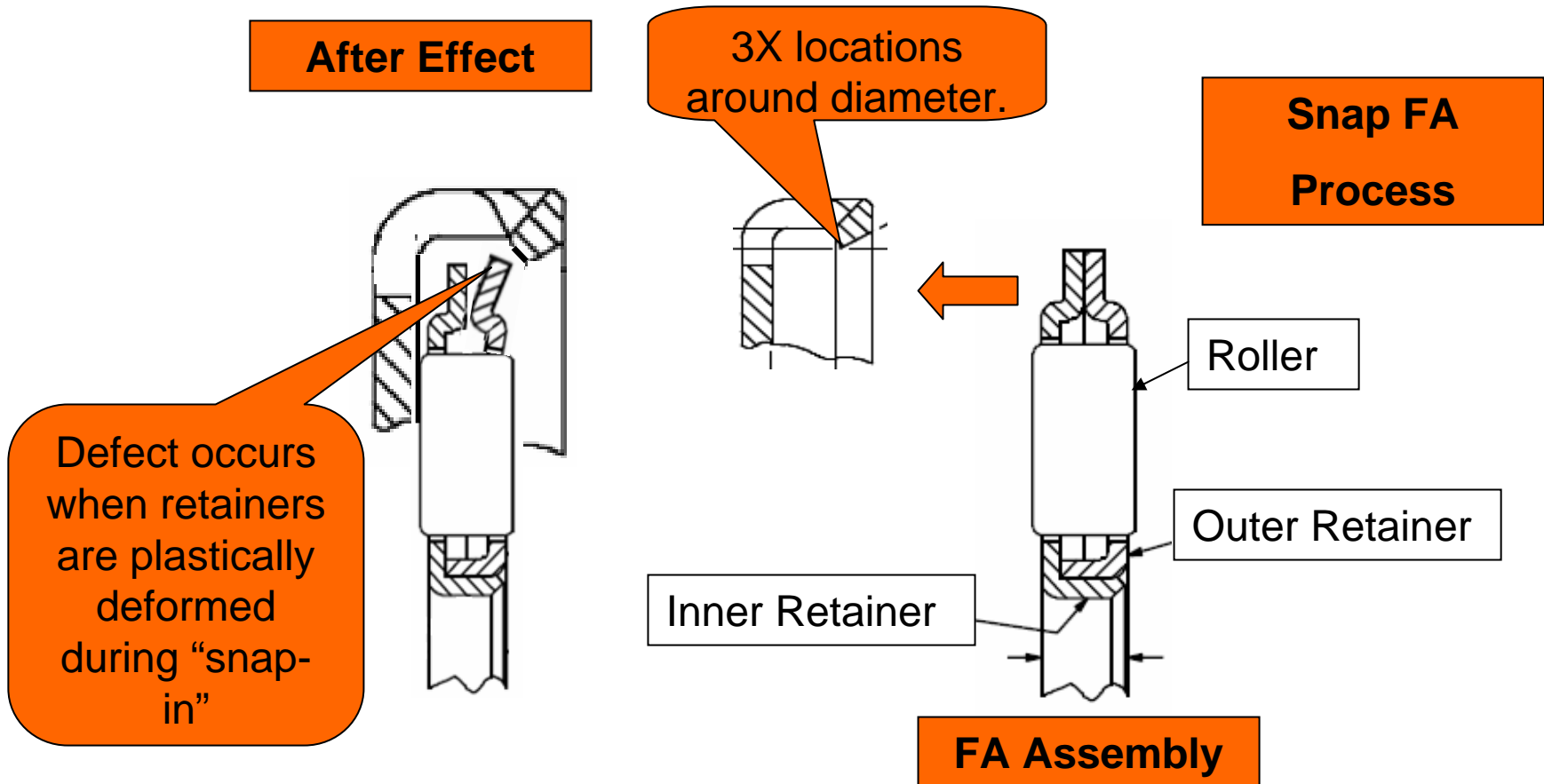
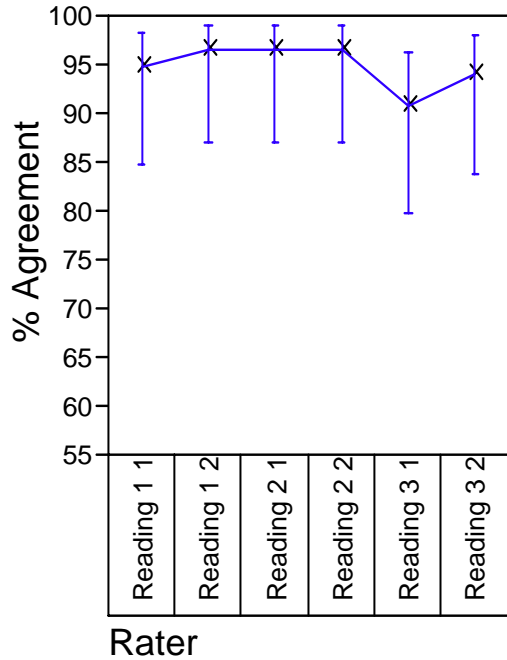


Defect Definition

Assembly below (right) is forced past part on left to “snap” in place for retention



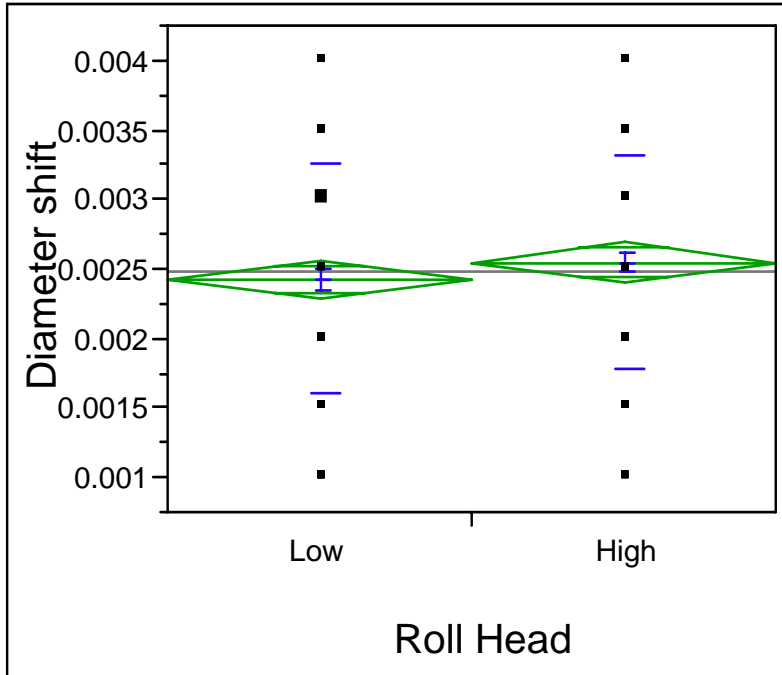
Measurement System – Spin Test Acceptable



Agreement Comparisons

Rater	Compared with Rater	Kappa	.2	.4	.6	.8
Reading 1 1	Reading 1 2	0.9600	[Bar]			
Reading 1 1	Reading 2 1	0.9600	[Bar]			
Reading 1 1	Reading 2 2	0.9600	[Bar]			
Reading 1 1	Reading 3 1	0.7600	[Bar]			
Reading 1 1	Reading 3 2	0.8400	[Bar]			
Reading 1 2	Reading 2 1	1.0000	[Bar]			
Reading 1 2	Reading 2 2	1.0000	[Bar]			
Reading 1 2	Reading 3 1	0.7994	[Bar]			
Reading 1 2	Reading 3 2	0.8796	[Bar]			
Reading 2 1	Reading 2 2	1.0000	[Bar]			
Reading 2 1	Reading 3 1	0.7994	[Bar]			
Reading 2 1	Reading 3 2	0.8796	[Bar]			
Reading 2 2	Reading 3 1	0.7994	[Bar]			
Reading 2 2	Reading 3 2	0.8796	[Bar]			
Reading 3 1	Reading 3 2	0.9195	[Bar]			

Roll Head Effect on Retainer Diameter



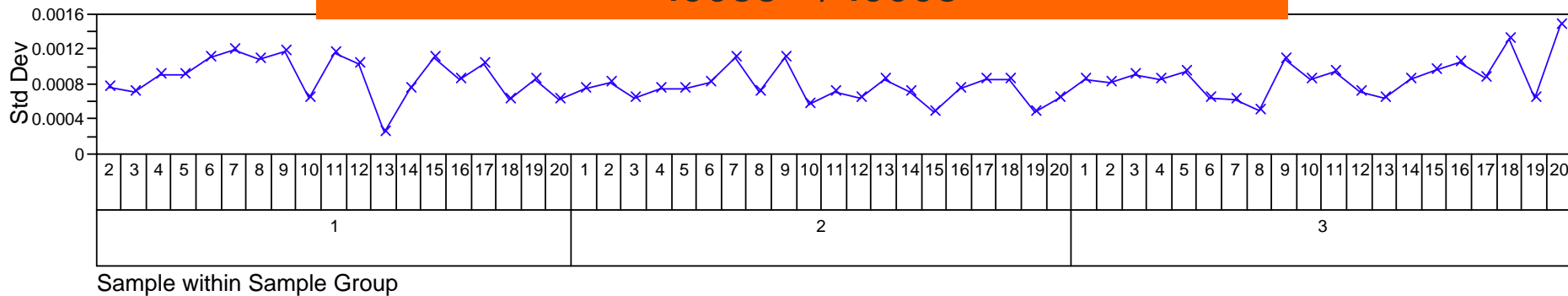
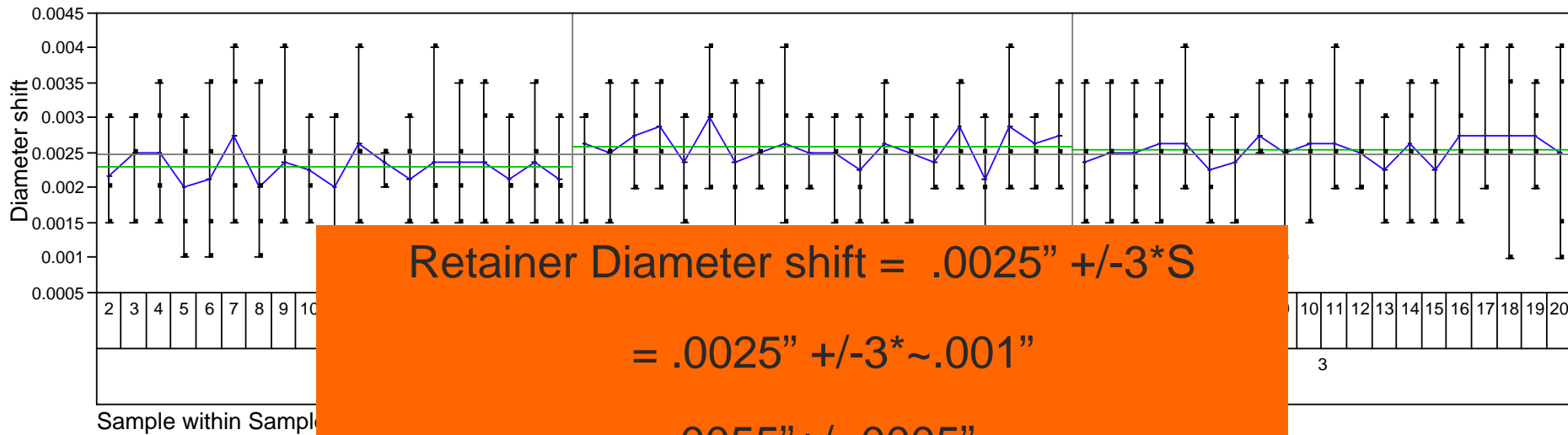
Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Ratio	Prob > F
Roll Head	1	0.00000088	8.7604e-7	1.3870	0.2401
Error	238	0.00015032	6.3161e-7		
C. Total	239	0.00015120			

Negligible or insignificant impact on retainer diameter

Means and Std Deviations						
Level	Number	Mean	Std Dev	Std Err Mean	Lower 95%	Upper 95%
Low	120	0.002425	0.000827	7.55e-5	0.00228	0.00257
High	120	0.002546	0.000761	0.00007	0.00241	0.00268

DOE Design – Establish OD Increase/Decrease

Variability Chart for Diameter shift



KPI Control Chart (for Bent FA) – Post change

Control Chart Part Number= FH-48906

P of Defects

