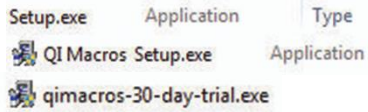


## Installation Made Easy!

## Data Mining Wizard

### PC



Double Click on Installer & Use the Default Prompts



Open Excel – See the Menu

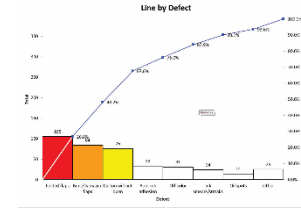
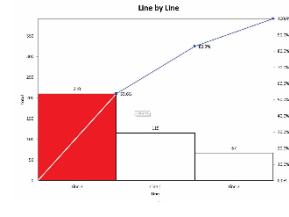
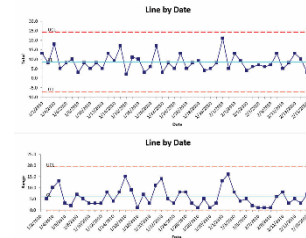
	A	B	C
1	Date	Line	Defect
2	1/2/2010	Line 2	Bent/Damaged flaps
3	1/2/2010	Line 2	Carton will not open
4	1/2/2010	Line 3	Folded flaps
5	1/2/2010	Line 3	Folded flaps
6	1/2/2010	Line 3	Off color

Select Data with Mouse

Documents/QI Macros Test Data/pivottable.xls



Click Menu

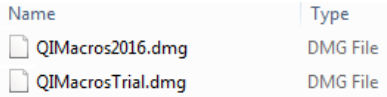


Results and Analysis

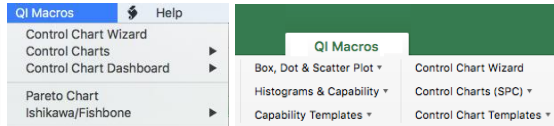
### Mac

#### Excel 2011

#### Excel 2016



Double Click on Installer & Use the Default Prompts



Open Excel – See the Menu

Once installed, menu will appear in Excel as such:



## Control Chart Wizard

## Stat Wizard

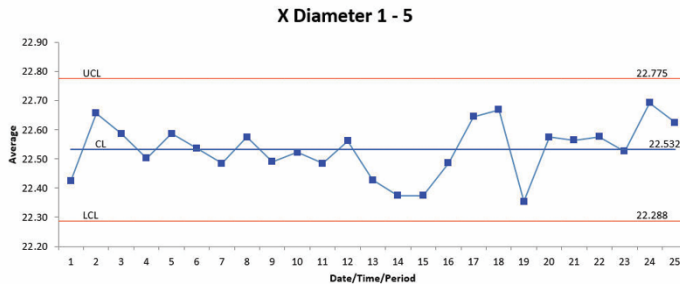
	A	B	C	D
8	22.30	22.54	22.01	22.62
9	22.86	22.68	22.43	22.58
10	22.88	22.68	22.46	22.30
11	22.44	22.66	22.48	22.37
12	22.59	22.65	22.78	22.58

Select Data with Mouse

Documents/QI Macros Test Data/AIAG SPC.xls



Click Menu

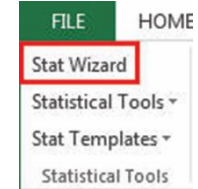


Chart

	A	B	C	D	E
	Hardwood Concentration				
1	%	5%	10%	15%	20%
2	Obs1	7	12	14	19
3	Obs2	8	17	18	25
4	Obs3	15	13	19	22
5	Obs4	11	18	17	23
6	Obs5	9	19	16	18
7	Obs6	10	15	18	20

Select Data with Mouse

Documents/QI Macros Test Data/anova.xls



Click Menu

ANOVA		Reject Null Hypothesis because $p < 0.05$ (Means are Different)				
Source of Variation	SS	df	MS	F	P-Value	F crit
Between Groups	382.7917	3	127.5972	19.60521	0.000	3.098391
Within Groups	130.1667	20	6.508333			
Total	512.9583	23				

Results and Analysis

## Capability Analysis

	A	B	C	D
1	Sample	Obs 1	Obs 2	Obs 3
2	S1	265	205	263
3	S2	268	260	234
4	S3	197	286	274
5	S4	267	281	265
6	S5	346	317	242

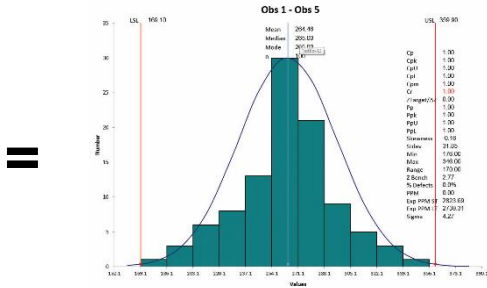
+

QI Macros

- Box, Dot & Scatter Plot
- Control Chart Wizard
- Pareto Chart
- Histograms & Capability
- Control Charts (SPC)
- Fishbone
- Capability Suite
- Templates
- Chart Templates
- Histogram Cp Cpk (Normal)
- Parts
- Histogram Cp Cpk (Between/Within)
- Improve Charts
- Histogram Weibull (Non-Normal)
- Frequency Histogram
- Descriptive Statistics

Select Data with Mouse

Documents/QI Macros Test Data/pivottable.xls



Click Menu

Cp 0.95  
Cpk 0.95  
CpU 0.95  
CpL 0.95

Histogram with Cp and Cpk

## Lean Six Sigma Templates

QI Macros

- Improvement Tools
- Data Mining Wizard
- Box, Dot & Scatter Plot
- Control Chart Wizard
- Ishikawa Fishbone Diagram
- Mining
- Histograms & Capability
- Control Charts (SPC)
- Cause Effect Matrix
- Capability Templates
- Control Chart Templates
- 3 Legged 5 Whys
- Capability Charts
- Control Charts

Click Menu

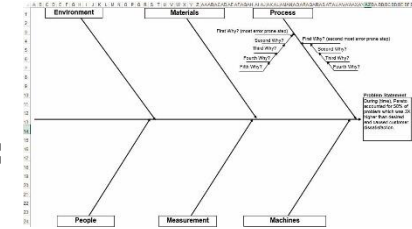
Problem Statement: During (time), Pareto accounted for 50% of problem which was 3X higher than desired and caused customer dissatisfaction.

Process: First Why? (most error prone step), Second Why?, Third Why?, Fourth Why?, Fifth Why?

First Why? (second most error prone step), Second Why?, Fishbone Style -> Healthcare

Buttons: Clear, Create Fishbone, Sample, Copy, Reset

Enter Text and Select "Create Fishbone"



Ishikawa/Fishbone Template

## Gage R&R Template

QI Macros

- Improvement Tools
- Data Mining Wizard
- DOE GageR&R FMEA
- Data & Text Mining
- 8D Report
- A3 Report
- APQP Checklists
- Control Plan
- Design of Experiments
- Error Modes Effects Analysis
- Failure Modes Effects Analysis
- Failure Prevention Analysis
- Gage R & R

+

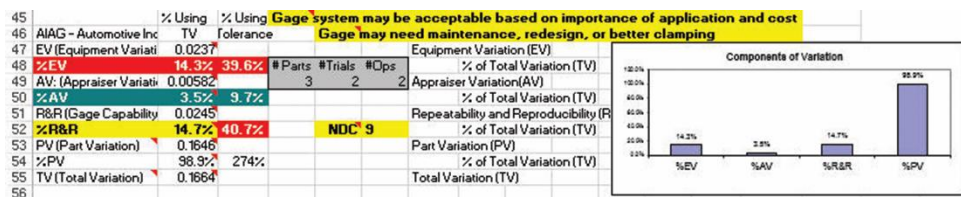
QI Macros

http://www.aiag.org

		P1	P2	P3
1	Gage R&R			
2	Average & Range Method			
3	Appraiser 1	Trial 1	3.6396	3.936
4	Enter your data here->	Trial 2	3.5753	3.33
5		Trial 3		
6		Trial 4		
7		Trial 5		
8		Total	7.2143	7.866
9		Average	3.6074	3.933
10		Range1	0.0643	0.005
11	Appraiser 2	Trial 1	3.5983	3.918
12	Enter your data here->	Trial 2	3.8287	3.907
13		Trial 3		
14		Trial 4		
15		Trial 5		
16		Total	7.2163	7.825
17		Average	3.6085	3.913
18		Range2	0.0404	0.012
19	Appraiser 3	Trial 1		
20	Enter your data here->	Trial 2		
21		Trial 3		
22		Trial 4		
23		Trial 5		
24		Total		
25		Average	#N/A	#N/A
26		Range3	#N/A	#N/A

Click Menu

Measurements



Gage R&R

## Text Analysis

	A	B	C
1	Date	Line	Defect
2	1/2/2010	Line 2	Bent/Damaged flaps
3	1/2/2010	Line 2	Carton will not open
4	1/2/2010	Line 3	Folded flaps
5	1/2/2010	Line 3	Folded flaps
6	1/2/2010	Line 3	Off color

Select Data with Mouse

Documents/QI Macros Test Data/Histogram.xls

QI Macros

- Data Mining Wizard
- Box, Dot & Scatter Plot
- Control Chart Wizard
- Pareto Chart
- Data & Text Mining
- Histograms & Capability
- Control Charts (SPC)
- Fishbone
- PivotTable Wizard
- Capability Templates
- Control Chart Templates
- Chart Templates
- Word Count
- Capability Charts
- Control Charts
- Improve Charts

Click Menu

	A	B	C	D	E
1	Count of Defect	Line			
2	Date	Line 1	Line 2	Line 3	Grand Total
3	1/2/2010	3	2	8	13
4	1/3/2010	2	3	3	8
5	1/4/2010	6	3	9	18
6	1/5/2010	2	1	2	5
7	1/6/2010	4	2	2	8
8	1/7/2010	4	2	4	10

	A	B	C	D	E
1	Count of Word	Total		Count of Two-Word Phrases	Total
2	Word			Two-Word Phrases	
3	flaps	189		folded flaps	105
4	folded	105		bentdamaged flaps	84
5	bentdamaged	84		carton open	76
6	open	76		flaps folded	46
7	carton	76		flaps bentdamaged	43

Chart Output