### **Histogram of Defects**

The UNIVARIATE Procedure Variable: Defects

Moments					
N	320	Sum Weights	320		
Mean	10.325	Sum Observations	3304		
Std Deviation	3.17227409	Variance	10.0633229		
Skewness	-0.1850724	Kurtosis	-0.2466066		
Uncorrected SS	37324	Corrected SS	3210.2		
Coeff Variation	30.7242042	Std Error Mean	0.17733551		

	Basic Statistical Measures				
Location Variability					
Mean	10.32500	Std Deviation	3.17227		
Median	11.00000	Variance	10.06332		
<b>Mode</b> 11.00000		Range	17.00000		
		Interquartile Range	4.00000		

Note: The mode displayed is the smallest of 2 modes with a count of 44.

Tests for Location: Mu0=0				
Test	:	Statistic	p Val	ue
Student's t	t 58.22297		Pr >  t	<.0001
Sign	М	160	Pr >=  M	<.0001
Signed Rank	s	25680	Pr >=  S	<.0001

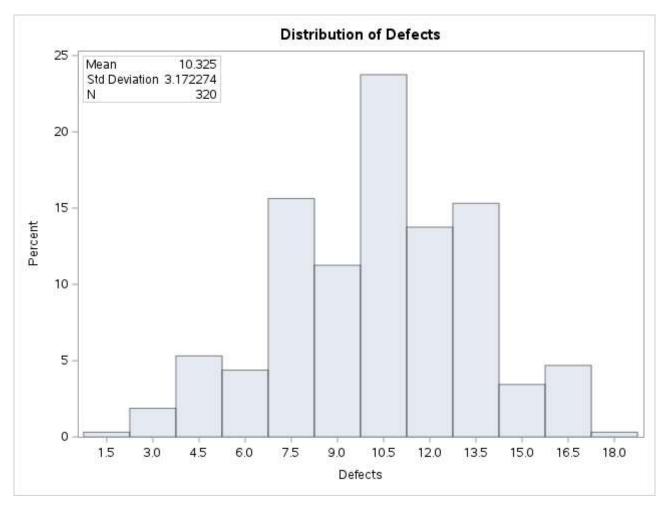
Quantiles (Definition 5)		
Level	Quantile	
100% Max	18.0	
99%	17.0	
95%	15.5	
90%	14.0	
75% Q3	12.0	
50% Median	11.0	
25% Q1	8.0	
10%	6.0	
5%	5.0	
1%	3.0	
0% Min	1.0	

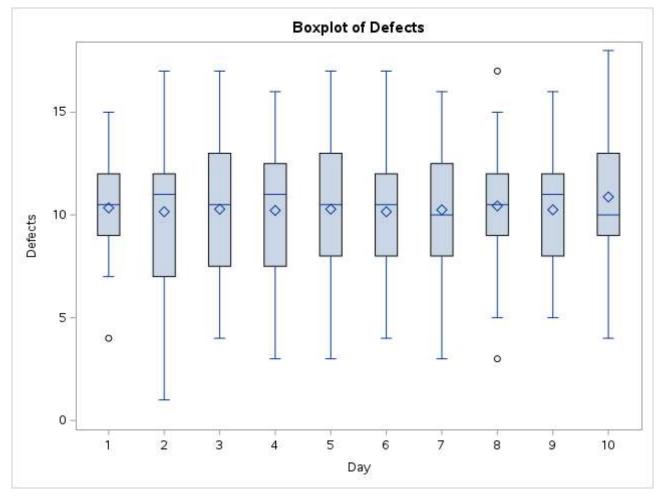
Extreme Observations				
Low	Lowest		est	
Value	Obs	Value	Obs	
1	48	17	135	
3	244	17	183	
3	197	17	253	
3	143	17	292	
3	139	18	291	

Missing Values				
Missing		Pe	rcent Of	
Value	Count	All Obs	Missing Obs	
	1	0.31	100.00	

# **Histogram of Defects**

The UNIVARIATE Procedure





### **Boxplot of Defects**

#### The MEANS Procedure

Analysis Variable : Defects						
Day	N Obs	N	Mean	Std Dev	Minimum	Maximum
1	32	32	10.3437500	2.5350367	4.0000000	15.0000000
2	32	32	10.1562500	3.2834814	1.0000000	17.0000000
3	32	32	10.2812500	3.6210351	4.0000000	17.0000000
4	32	32	10.2187500	3.5079116	3.0000000	16.0000000
5	32	32	10.2812500	3.3334509	3.0000000	17.0000000
6	32	32	10.1562500	3.0911880	4.0000000	17.0000000
7	32	32	10.2500000	3.4454271	3.0000000	16.0000000
8	32	32	10.4375000	3.0367374	3.0000000	17.0000000
9	32	32	10.2500000	3.1004682	5.0000000	16.0000000
10	32	32	10.8750000	3.0240968	4.0000000	18.0000000

# **Histogram of Defects every 15 minutes**

The UNIVARIATE Procedure Variable: Defects

Moments					
N 320 <b>Sum Weights</b> 320					
Mean	10.325	Sum Observations	3304		

Moments					
Std Deviation	3.17227409	Variance	10.0633229		
Skewness	-0.1850724	Kurtosis	-0.2466066		
Uncorrected SS	37324	Corrected SS	3210.2		
Coeff Variation	30.7242042	Std Error Mean	0.17733551		

	Basic Statistical Measures				
Location		Variability			
Mean	10.32500	Std Deviation	3.17227		
Median	11.00000	Variance	10.06332		
Mode	11.00000	Range	17.00000		
		Interquartile Range	4.00000		

Note: The mode displayed is the smallest of 2 modes with a count of 44.

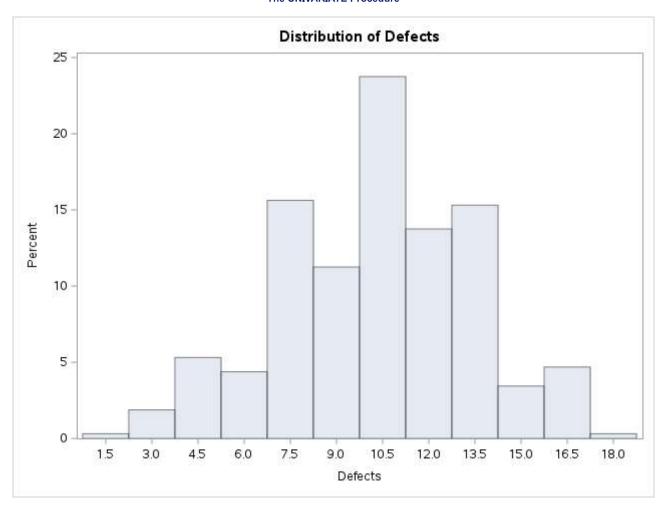
Tests for Location: Mu0=0				
Test	Statistic		p Val	ue
Student's t	t	58.22297	Pr >  t	<.0001
Sign	M	160	Pr >=  M	<.0001
Signed Rank	S	25680	Pr >=  S	<.0001

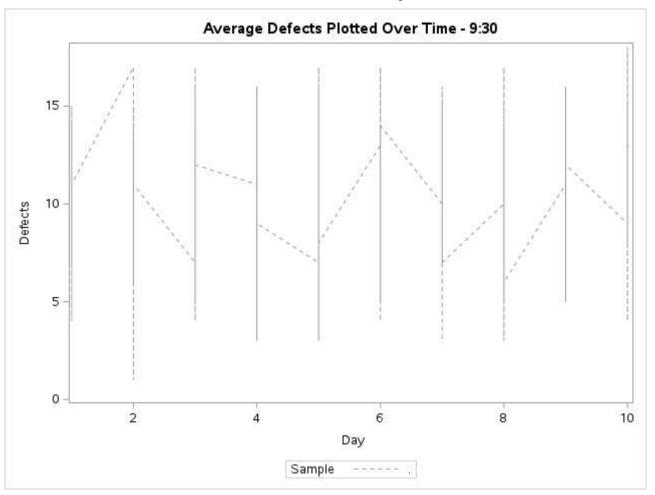
Quantiles (Definition 5)		
Level	Quantile	
100% Max	18.0	
99%	17.0	
95%	15.5	
90%	14.0	
75% Q3	12.0	
50% Median	11.0	
25% Q1	8.0	
10%	6.0	
5%	5.0	
1%	3.0	
0% Min	1.0	

Extreme Observations							
Lowest		Highest					
Value	Obs	Value	Obs				
1	48	17	135				
3	244	17	183				
3	197	17	253				
3	143	17	292				
3	139	18	291				

Missing Values							
Missing Value	Count	Percent Of					
		All Obs	Missing Obs				
	1	0.31	100.00				

The UNIVARIATE Procedure

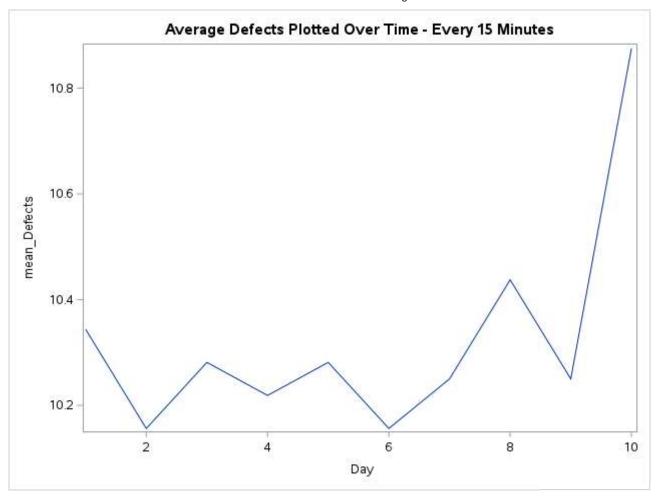




## **Average Defects Plotted Over Time - Every Hour Starting at 8:30**

#### The MEANS Procedure

Analysis Variable : Defects								
Day	N Obs	N	Mean	Std Dev	Minimum	Maximum		
1	32	32	10.3437500	2.5350367	4.0000000	15.0000000		
2	32	32	10.1562500	3.2834814	1.0000000	17.0000000		
3	32	32	10.2812500	3.6210351	4.0000000	17.0000000		
4	32	32	10.2187500	3.5079116	3.0000000	16.0000000		
5	32	32	10.2812500	3.3334509	3.0000000	17.0000000		
6	32	32	10.1562500	3.0911880	4.0000000	17.0000000		
7	32	32	10.2500000	3.4454271	3.0000000	16.0000000		
8	32	32	10.4375000	3.0367374	3.0000000	17.0000000		
9	32	32	10.2500000	3.1004682	5.0000000	16.0000000		
10	32	32	10.8750000	3.0240968	4.0000000	18.0000000		



Summary +