Number of Data Columns	Data Type	Sample size	More than 1 defect per Sample ?	Control Chart Selected	Data Looks like	Center Line	Upper Control Limit (UCL)	Lower Control Limit (LCL)	Chart Looks like	Where is it in the Decision Tree ?
1 or	By one or more categories	A period of time, geography, historical data, etc	n/a	None. Data visualization based on: a) Comparison b) Relationship c) Distribution d) Composition	It depends. See "Choosing the Right Chart"	n/a	n/a	n/a	It depends. See "Choosing the Right Chart"	Right Chart
1	By category	n/a	n/a	Recommended: a) Pareto Chart b) Bar Chart	A B 1 Circuit Board Defects 2 Bad 3 Bridge 1 4 Damage 6 5 Excess 3 6 Extra 1 7 Insued Lead 3 9 Missing 6 10 Deen 2 11 Orent 2 12 Poor Wetting 1 13 Solder hall 2 14 TH Void 16	n/a	n/a	n/a	Pareto Chart Bar Chart	Right Chart
Y and X	Cause and Effect Calories vs weight Speed vs consumption Output vs productivity Hour vs customer	n/a	n/a	Recommended: a) Scatter Chart b) Matrix Plot	A B Feed Consumption Field 1 Seed Consumption Field 1 Seed Consumption 3 House Seed Consumption 5 House Seed Consumption	n/a	n/a	n/a	Scatter Chart y Matrix Plot	n/a
1	Integers (whole number) days, hours, batch number	Constant	Yes	c Chart	A B 1 Date Accidents 2 12-Date 1 3 03-Jan 3 4 04-Jan 0 5 23-Jan 7 6 28-Jan 3 7 05-Feb 2 9 05-Feb 1 10 22-Feb 8 12 22-Feb 8 12 22-Feb 3 13 10-Mar 4	Ē	$\bar{c} + 3\sqrt{\bar{c}}$	$\bar{c} - 3\sqrt{\bar{c}}$	Accidents c Chart Accidents c Chart Accidents c Chart Jacob Chart Accidents c Chart Jacob Chart Accidents c Chart Jacob Chart J	
1	Decimals (variables)	Individuals	n/a	ImR Chart	A B Batch 1 Number Viscosity 2 B1 33.75 3 B2 33.05 4 B3 34.00 5 B4 33.81 6 B5 33.46	\bar{x}	$\bar{x} + 2.66 \overline{mR}$	$\bar{x} - 2.66 \overline{mR}$	Individuals Chart of Averages	THE PARTY OF THE P
2	Integers (whole number)	Constant	No	np Chart	A B C Sample conforme Sample 1 Number Cans Size 2 S1 S2 S1 S2 S6 3 S1 S5 S6 4 S1 S6 S0 6 S5 4 S0 6 S5 4 S0	\overline{np}	$\overline{np}+3\sqrt{\overline{np}(1-\overline{p})}$	\overline{np} -3 $\sqrt{\overline{np}}(1-\overline{p})$	17.00 17.00	### A PART
2	Integers (whole number)	Varies	Yes	p Chart	A B C Month Science Births 2 Jan 66 370 31 Feb 64 383 4 Mar 77 446 5 Apr 50 454 6 May 64 465	$ar{p}$	\bar{p} +3 $\sqrt{\frac{\bar{p}(1-\bar{p})}{n}}$	\bar{p} -3 $\sqrt{\frac{\bar{p}(1-\bar{p})}{n}}$	0.23 VOT. Unaudisplanted receipt 0.33800 0.30 0.30 0.30 0.30 0.30 0.30 0	
2	Integers (whole number)	Varies	Yes	u Chart	A B C Sample Month Per to Sample 2 Jan 19 Defects 5, 5122 A February 1 4 Jan 19 14 5,043 6 May-19 4 5,038	\overline{u} $\overline{u} = \frac{c}{n}$ $c = total \text{ nor } n = subgroup$		\bar{u} -3 $\sqrt{\frac{\bar{u}}{n}}$	000 000 000 000 000 000 000 000 000 00	THE PARTY OF THE P
2 to 12	Decimals or Integers: diameter length resistance	Subgroups *****	n/a	XbarR Chart	A 6 5 6 5 0 5 6 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$ar{ar{x}}$ $ar{R}$	$\begin{array}{c} {}^{\text{Averages}}\\ \bar{\bar{x}} + A_2 \bar{R} \\ {}^{\text{Ranges}}\\ D_4 \bar{R} \end{array}$	$\begin{array}{c} {}^{\text{Averages}}\\ \bar{\bar{x}}-A_2\bar{R}\\ {}^{\text{Ranges}}\\ D_3\bar{R} \end{array}$	JVS - regions control limit A control limit lim	Manual Ma
12 to 25	Decimals or Integers: diameter length resistance	Subgroups *****	n/a	XbarS Chart	1 2 2 2 2 2 2 2 2 2	$ar{ar{x}}$ $ar{S}$	$\begin{array}{c} {}^{\text{Averages}}\\ \bar{\bar{x}} + A_3 \bar{R} \\ {}^{\text{Ranges}}\\ B_4 \bar{S} \end{array}$	$\begin{array}{c} \bar{\bar{x}} - A_3 \bar{R} \\ \bar{\bar{x}} - A_3 \bar{\bar{R}} \\ \text{\tiny Ranges} \\ B_3 \bar{\bar{S}} \end{array}$	JASE - Negaria control final	THE PARTY OF THE P
> 25	Decimals or Integers: diameter length resistance	Subgroups ******	n/a	Xbar σ Chart	1 10 000 0	$ar{ar{x}}$	$\bar{\bar{x}} + \frac{3\sigma}{\sqrt{n}}$	$\bar{\bar{x}} - \frac{3\sigma}{\sqrt{n}}$	JGspec controllers	**************************************