品質管理

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Let's capture Data to analyze "what, how, & why?

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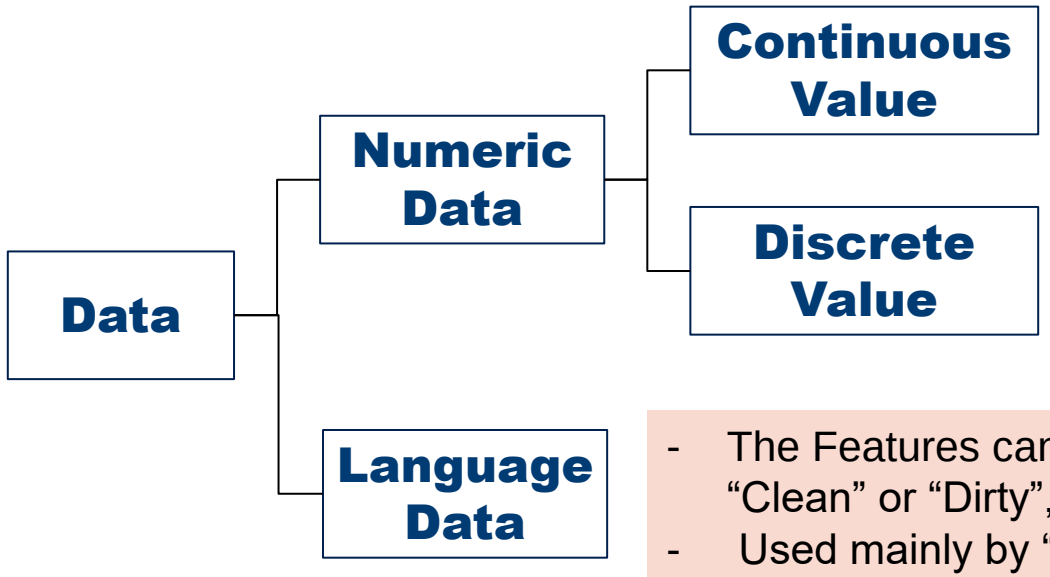
Issues

- **Get Data of Quality Failures** → Starting Point is "**Capturing Data**"
  - **Internally discovered ones**
  - **Customer Claims**
- **Analyze** what kind of Problems & the causes of **Why** those happened actually?
- **Think out** what kind of **Countermeasures**?
- Think out **How to stabilize** Quality by preventing Failure Arising?

Kind of Data for Quality Management



Measured by Continuous Value
(Ex) Length (mm),
Weight (kg), etc.

The Feature can be obtained by Counting number of Unit
(Ex) number of items or members

- The Features can be expressed by Language such as "Clean" or "Dirty", "Strong" or "Weak"
- Used mainly by "Cause & Effect Diagram", "QC 7 Tools" etc.

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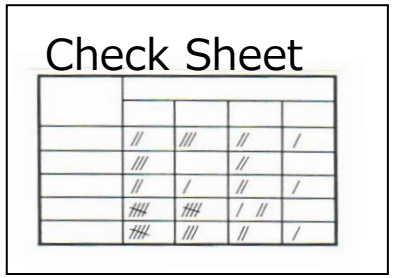
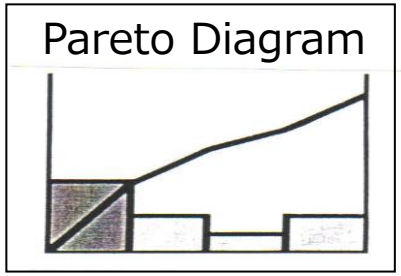
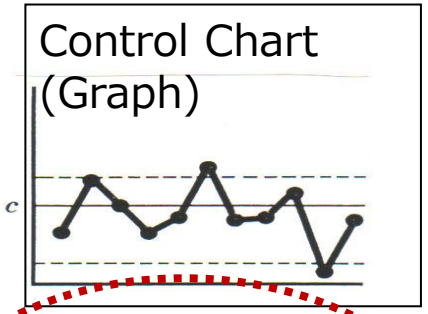
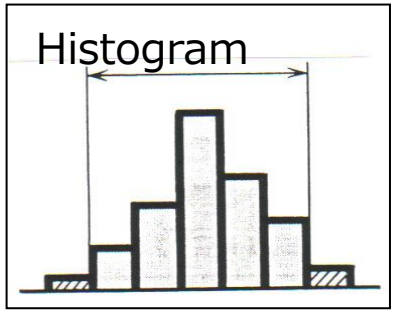
QC 7 Tools

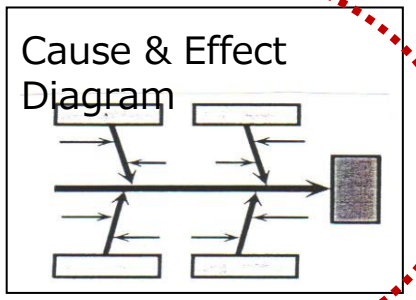
- Check Sheet
- Pareto Diagram
- Control Chart / Graph
- Histogram
- Cause & Effect Diagram
- Scatter Diagram
- Stratification / Classification

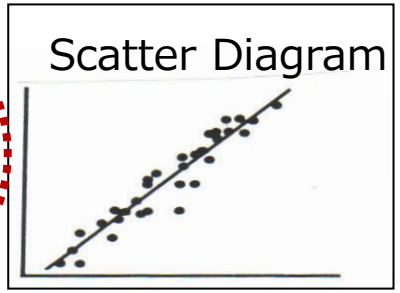


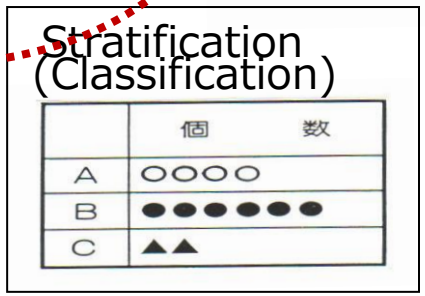












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Frequency Distribution Table

番号	区間	中心値	度数マーク	度数
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2	198.25～198.75	198.50	𝍸𝍸	2
3	198.75～199.25	199.00	𝍸𝍸𝍸	3
4	199.25～199.75	199.50	𝍸𝍸𝍸𝍸𝍸𝍸𝍸	31
5	199.75～200.25	200.00	𝍸𝍸𝍸𝍸𝍸𝍸𝍸	34
6	200.25～200.75	200.50	𝍸𝍸𝍸𝍸	16
7	200.75～201.25	201.00	𝍸𝍸	8
8	201.25～201.75	201.50	𝍸𝍸𝍸	3
9	201.75～202.25	202.00	𝍸𝍸	2

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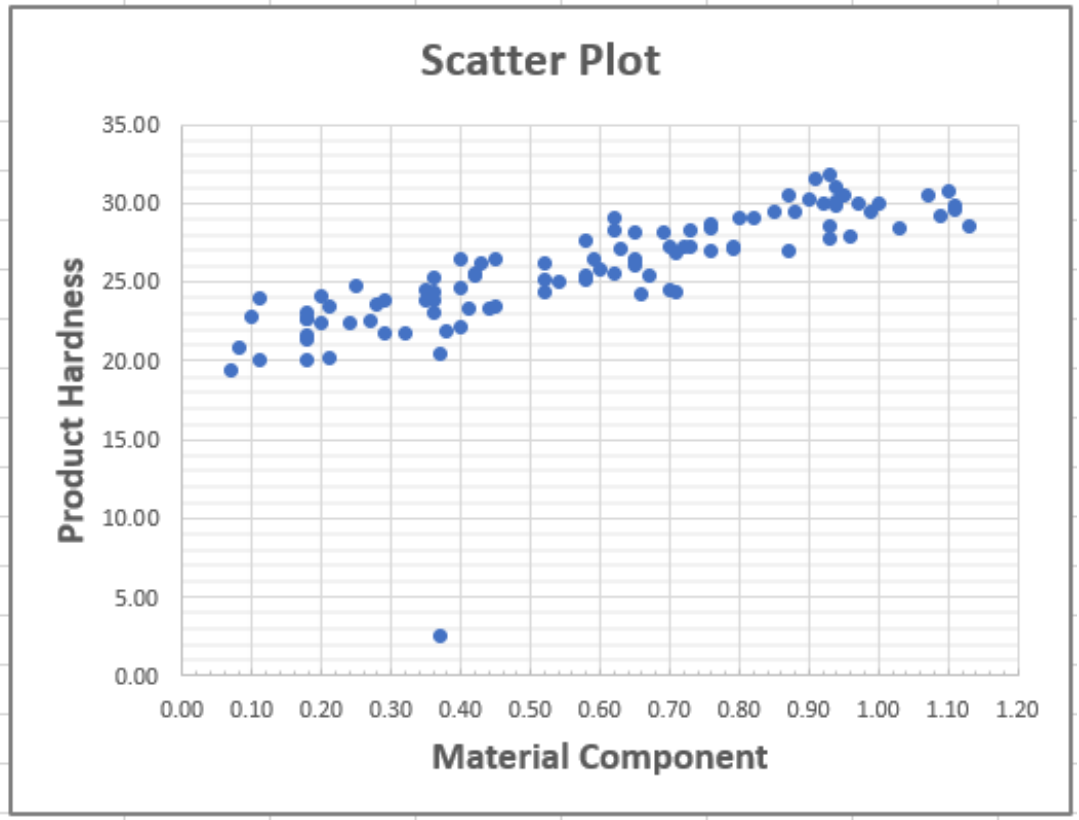
Generate “Scatter Plot

- “Title”, Name of x- axis and y-axis written

2. Rearrange all data in vertical order

No	Material Component x	Hardness y
1	0.52	26.20
2	0.58	25.40
3	0.66	24.20
4	0.18	22.70
5	1.00	30.00
6	0.71	26.90
7	0.87	27.00
8	0.36	25.30
9	0.62	25.60
10	0.73	27.30
11	0.76	28.70
12	0.40	24.60
13	0.24	22.40
14	0.94	31.00
15	0.94	29.80
16	0.90	30.30
17	0.52	25.10
18	0.45	23.50

3. Generate "Scatter Plot Graph"



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