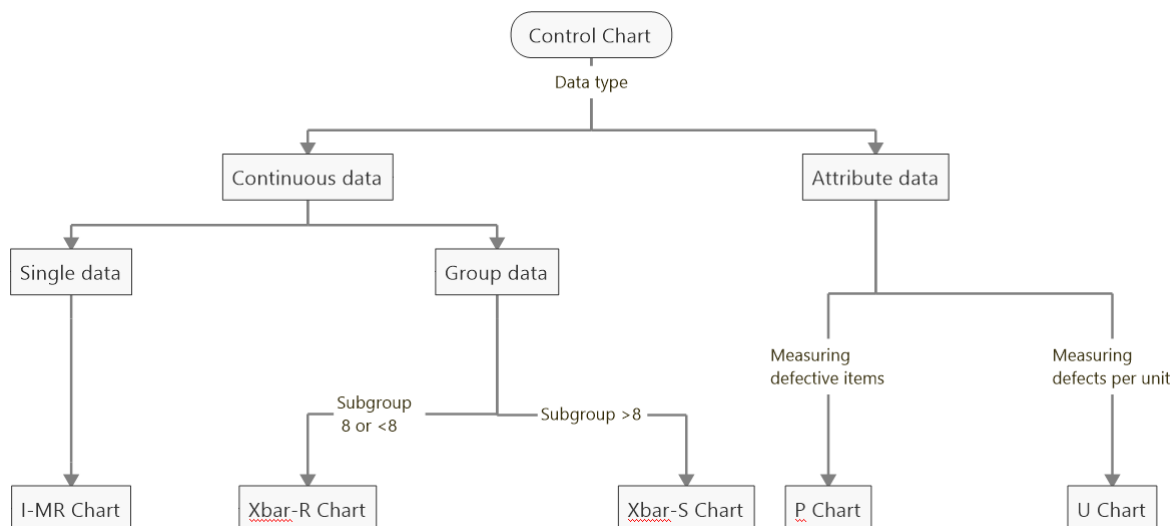


Control Chart in Testing Laboratory

Control chart is one of the most important tools in Statistical Quality Control. It can be used for continuous data or attribute data and accordingly the chart type to be decided.

The chart type also to be decided on the basis of sampling (in case of continuous data).

Refer below guideline to select the proper control chart.



Example:

1. To understand the detector performance, use I-MR chart. Pool data from intermediate test result.
2. To understand the detector response day by day, for a particular compound, use XBar-R or XBar-S Chart. Pool data from bracketing of batches for the day. If bracketing run is 8 or less, use, XBar-R Chart.
3. To measure the defective test reports (the report which has been rejected due to any errors), use P Chart.
4. To measure the number of defects in test report (wrong sample code, sample description, value typing mistake, etc.), use U Chart.

It means, the control chart needs to use to monitor each activity which has direct impact on laboratory credibility.

Again we need to recall 6M – Man, Machine, Method, Material, Measurement & Mother nature. Each have opportunity to do error and have direct impact on laboratory credibility. And each department contribute in that. Marketing can do error to quote the proper test, sample registration can do error in coding, sample cell can do error to record the data of sample handling and discard, QA can do error in evaluating the team performance, and so on.

To more about how to make all above control chart, write to Abhijit.bhar@outlook.com; abhijit@analyticalhub.in; or whatsapp on 9867423453