**Statistical Process Control (SPC)**

Statistical Process Control (SPC) is an industry-standard methodology for measuring and controlling quality during the manufacturing process. Quality data in the form of Product or Process measurements are obtained in real-time during manufacturing.

This data is then plotted on a graph with pre-determined control limits. Control limits are determined by the capability of the process, whereasspecification limits are determined by the client's needs.

**Control Limits on an XBar Range Chart**

Data that falls within the control limits indicates that everything is operating as expected. Any variation within the control limits is likely due to a common cause—the natural variation that is expected as part of the process.

If data falls outside of the control limits, this indicates that an assignable cause is likely the source of the product variation, and something within the process should be changed to fix the issue before defects occur.