# Attribute Control Charts – P and NP Charts

This page provides information on creating P and NP attribute control charts. P charts are used to plot the **proportion** of nonconforming (defective) items, while NP charts are used to plot the **number** of nonconforming items.

P Charts

1. From an open JMP® data table, select **Analyze > Quality and Process > Control Chart > P**.

2. Select one or more continuous variables from **Select Columns**, and click **Process**.

3. Select a **Sample Size** and a **Sample Label**, and click **OK**.

   In the example below, the proportion of defective washers per lot is plotted on a P chart. Note: If sample sizes are not constant, the control limits will vary.

Washers.jmp (Help > Sample Data Library > Quality Control)
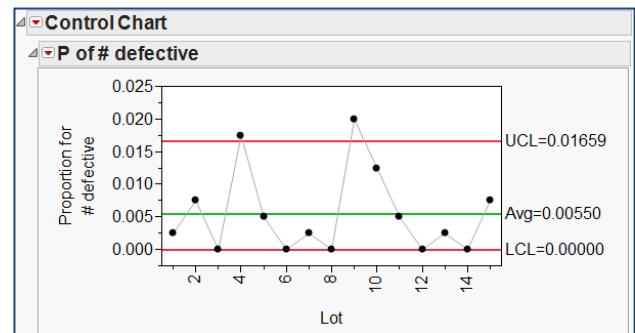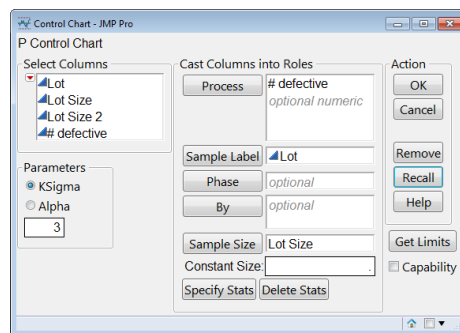

NP Charts

1. From an open JMP data table, select **Analyze > Quality and Process > Control Chart > NP**.

2. Select one or more continuous variables from **Select Columns**, and click **Process**.

3. Type a **Constant Size** (or select a constant **Sample Size** variable), select a **Sample Label**, and click **OK**.

   In the example below, the number of defective washers per lot is plotted on an NP Chart.

Washers.jmp (Help > Sample Data Library > Quality Control)
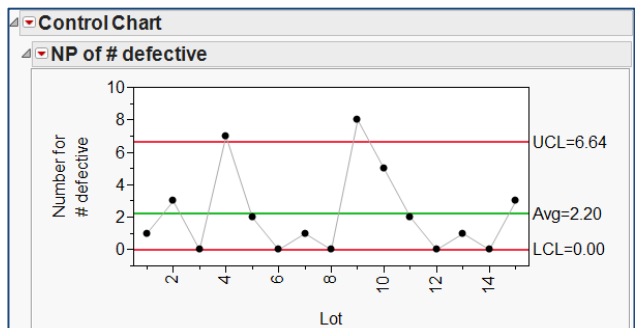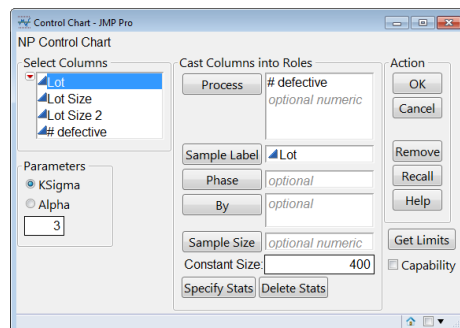
Tips:

- The process variable must be sorted in time order.
- Many options, such as **tests** for special causes and **capability** analysis, are available from the **red triangles**.

Notes: For information on capability analysis or producing other types of control charts, see the one-page guides under **Quality, Reliability and DOE** at jmp.com/learn. For additional details, see the book *Quality and Process Methods* (under **Help > Books**) or search for "attribute control chart" in the JMP Help.