# Attribute Control Charts – C and U Charts

This page provides information on creating C and U attribute control charts. C charts are used to plot the number of nonconformities (or defects) in a sample, where the sample size is constant. U charts are used to plot the number of nonconformities per unit, where the sample size (or number of units) can vary.

C Charts

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

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 Flaws per Bolt of fabric is plotted on a C chart.

Fabric.jmp (Help >
Sample Data Library >
Quality Control)
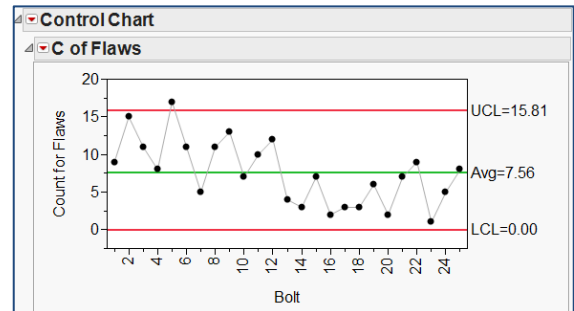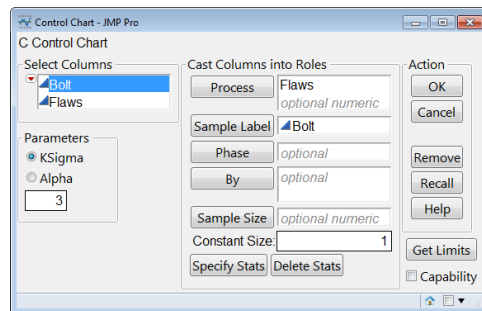
U Charts (or DPU Charts)

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

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

3. Select a **Unit Size** variable (the sample size), select a **Sample Label**, and click **OK**.

   In the example below, the number of defects (# defects) per unit inspected (Unit Size) is plotted on a U Chart. Hint: Since the Unit size is not constant, the control limits vary.

Example: Braces.jmp
(Help > Sample Data
> Quality Control)
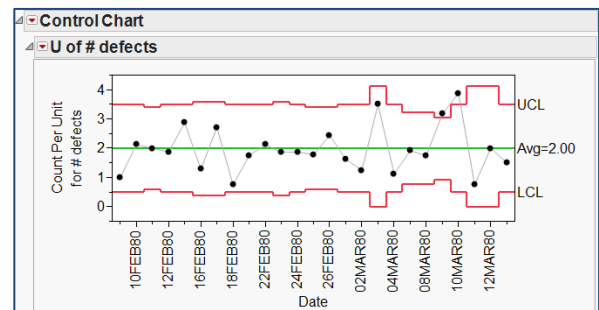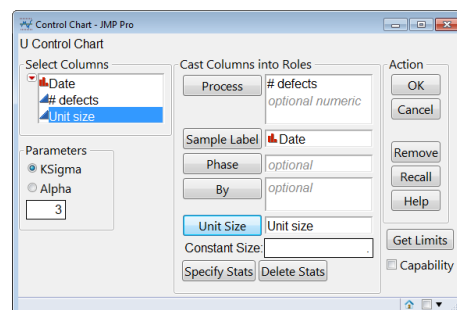
Tips:

- 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.