

Multi-Vari Analysis

Data Worksheet

Now let's take the Multi-Vari concept and utilize MINITAB™.

First Open the MINITAB™ Project "Analyze Data sets.mpj" and select the worksheet "MVInjectionMold.mtw". Now create the Multi-Vari Chart in MINITAB™.

After you create the graph as indicated, take a few minutes to

create graphs using a different order. Always use the graph that shows the variation in the easiest manner to interpret.

The screenshot shows the Minitab interface. On the left, the 'Stat' menu is open, and 'Multi-Vari Chart...' is selected. In the center, the 'Multi-Vari Chart' dialog box is displayed with the following settings:

- Response: Diameter
- Factor 1: 'Within Unit'
- Factor 2: 'Unit to Unit'
- Factor 3: Temporal
- Factor 4: (empty)

On the right, the data worksheet 'MVInjectionMold.MTW' is visible, containing the following data:

| | C1 | C2 | C3 | C4 | C5 |
|---|----------|--------------|-------------|----------|----|
| | Temporal | Unit to Unit | Within Unit | Diameter | |
| 1 | 1 | 1 | 1 | 5.00 | |
| 2 | 1 | 1 | 2 | 5.00 | |
| 3 | 1 | 1 | 3 | 5.00 | |
| 4 | 1 | 1 | 4 | 5.00 | |
| 5 | 1 | 2 | 1 | 5.20 | |
| 6 | 1 | 2 | 2 | 5.15 | |
| 7 | 1 | 2 | 3 | 5.18 | |

Run Multi-Vari

Here is the graph that should have been generated.

