

# Feature Spotlight: Bubble Charts

# Key Benefits & Capabilities

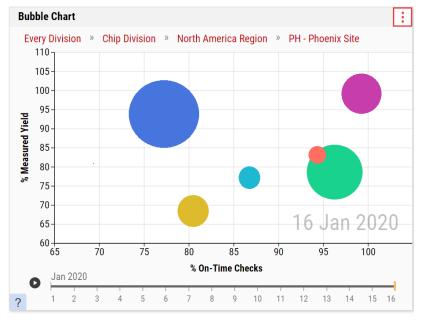
Hidden insights are waiting to be discovered in all quality and process data—and InfinityQS® Enact® bubble charts make it easy to bring those insights into the light. Bubble charts provide quality professionals and plant management with a better understanding of the performance of their quality program, their manufacturing processes, and their team members. Bubble charts offer important insights that can be acted on by plant personnel to increase profits, and improve efficiency.

#### Advanced Data Analysis

Bubble charts are a variation of a XY or scatter plot—with one statistic plotted on the X-axis, the other statistic plotted on the Y-axis, with the bubble size representing the third variable.

In Enact, this charting option is available in Aggregate dashboards, and provides a highly visual way to explore the relationships between statistics belonging to three categories: process events, yield, and sampling compliance. Data can be examined over different time periods (days, weeks, months) and different levels of hierarchy (processes, lines, sites, etc.).

Bubble charts are a great way to examine a large amount of data using a single chart—instead of viewing dozens or even hundreds of control charts.



Bubble charts enable you to set priorities, identify opportunities, and improve accountability

#### Animation

One of the most impactful features of Enact bubble charts is animation. Clicking the bubble chart's animation playback button activates the bubbles. The bubbles then move to show how statistics change over the selected time period. Animation enables managers to quickly spot which site is performing better or worse than the rest. These charts can also expose data collection issues.

For example, are there large gaps in the data? Were there data collected that were grossly out of range, or were data collected always within specification? Bubble chart animation is a unique capability that significantly expands the value of Enact, empowering manufacturers to examine, understand, and correct issues quickly.

#### Drill-down Capability

To expose data in the next level down in a hierarchy, simply click the desired bubble. For example, you can click a bubble to view a new chart showing the production line level data for that site. Click again to view the process level data for that specific line. The hierarchy path is displayed at the top of the bubble chart; clicking this path moves you back up the hierarchy. This powerful drill-down capability helps you quickly determine where you should apply resources.

#### **Bubble Size Options**

You can configure Enact to display bubbles in one of two ways: bubble size can be determined based on the number of aggregated measurements included for the hierarchy level selected, or all bubbles can display in the same size. If the variable bubble size option is chosen, managers can use it to spot possible data collection issues. For example, if one bubble is significantly smaller than other bubbles, it may mean that data collection efforts are sub-standard. If a large bubble is present showing superior data collection efforts, managers can investigate why this team is doing so well—and learn best practices.

#### Statistical Categories & Available Statistics

Enact provides a range of statistics that are organized into three categories—Sampling Compliance, Yield, and Events. By selecting appropriate statistics, you can gain meaningful insights into staff performance, operational efficiency, and compliance. The statistics available for display in bubble charts are listed in the table below.

Sampling Compliance	Yield	Events
<ul><li>All Checks:</li><li>% Completed, % On-Time,</li><li>% Late, % Missed</li></ul>	<ul><li>% Expected Yield</li><li>% Measured Yield</li></ul>	> Total OOS Events > >USL Events > <lsl events<="" td=""></lsl>
<ul><li>Data Collections:</li><li>% Completed, % On-Time,</li><li>% Late, % Missed</li></ul>		> Total NCC Events > T2 (U) Events
<ul><li>Checklist Collections:</li><li>% Completed, % On-Time,</li><li>% Late, % Missed</li></ul>		> <t2 (l)="" events=""> &gt;MAV (U) Events &gt; <mav (l)="" events<="" td=""></mav></t2>

## **Bubble Charts Use Case**

There are many uses for bubble charts, however one important use stands out: whether your team is collecting quality data on time, and how well your processes are performing measured through yield.

#### On-time vs. Yield

Managers can display % Measured Yield vs. % On-Time Data Collection. Are processes or lines performing adequately as measured by yield, and are operations teams performing up to standards as measured by on-time data collection performance?

> Bubble animation enables managers to visualize how performance changes over time, and helps point them in the right direction when deciding on priorities—enabling them to quickly spot areas of concern and drill down to analyze and determine the root cause of the issue.

### Gain deeper insight into your quality performance.

Ready to learn more about bubble charts and Enact? Email us at info@infinityqs.com or call us at +1 800.772.7978.

