



Pump Efficiency Curve

Pump Efficiency Charts are used to display how a pump or pump station is operating along its head-discharge curve. Pump Efficiency Charts can be created from the Pump Efficiency subtab of the Chart section in the [Command Center](#).

Setup

The following fields are present in the interface:



Historical Chart	Gauge Chart	Status Chart	Watcher	Pump Efficiency	Export
Data Source X(*):	Hidden Hills Station Flow ▼				
Data Source Y(*):	HeadDiff - HeadDifference ▼				
Speed Curve:	Hidden Hills Pump 1 Status ▼				
Speed Range:	0.5 - 1.1				
Label:	Hidden Hills Station Curve				
Data Interval(*):	15 minute ▼				
Time Range(*):	<input checked="" type="checkbox"/> 2016-07-01 00:00 - 2016-07-31 00:00 <input type="checkbox"/> Days Offset: <input type="text"/>				

Field	Description
Data Source X (*)	<p>Select the data feed to be used for the X-axis.</p> <p>In a typical head-discharge curve, this data source should represent the total flowrate through the pump(s).</p> <p>Note: By default, Info360 shows the first 1000 sensor listing. To show search results beyond the first 1000, enter a keyword and then click the search icon (indicated by the red search icon .</p>
Data Source Y (*)	<p>Select the data feed to be used for the Y-axis.</p> <p>In a typical head-discharge curve, this data source should represent the total head difference across the pump(s).</p> <div style="border: 1px solid green; padding: 5px; margin-top: 10px;"> <p> Tip:</p> <p>BizBlock is a great tool for converting inlet and discharge pressure feeds into a continuously calculated head difference feed. Get a walkthrough of this setup on the How To page.</p> </div>
Speed Curve	You can input a feed here that will be used to filter out the points that will be plotted. For example, perhaps you only want to show points when a certain pump is turned on.
Speed Range	Speed range is a min and max filter used on the Speed Curve feed above to determine which points get plotted.

Label	The Label text will appear as the title of the pump curve chart.
Data Interval (*)	Select the sampling interval to be used for generating the pump curve. In practice, the smallest stored time interval is used to see the most recent data, while an hourly interval may be used to summarize over a long period of time.
Time Range(*)	Choose either a specific time window or the most recent set of days to base the pump curve on.

Features

Once added to the Workspace, the pump curve can be further configured using a few built-in features.

Feature	Description
 Reference Chart	<p>The Reference Chart tool on Pump Efficiency charts actually opens up the original chart settings for you to edit the same fields described above in the setup phase.</p> <p>In addition, you can modify the color, symbol and size of the points displayed in the scatter chart.</p> <p><input checked="" type="checkbox"/> Customized Color: <input type="text" value="05b1d1"/></p> <hr/> <p>Point Symbol(*): <input type="text" value="Cross"/></p> <hr/> <p>Point Size(*): <input type="text" value="2"/></p>
 Pump Efficiency Options	<p>The Pump Efficiency Options popup allows you to enter the pump manufacturers curve data as a reference.</p> <p>Simply write/paste in the data with commas separating values for both X and Y series.</p>

Pump Efficiency Chart Example

The following chart shows the pump efficiency of the Hidden Hills Station Flow sensor along the head discharge curve. The chart shows that as you increase the x-axis, there is a decrease in the efficiency, or a negative slope.

