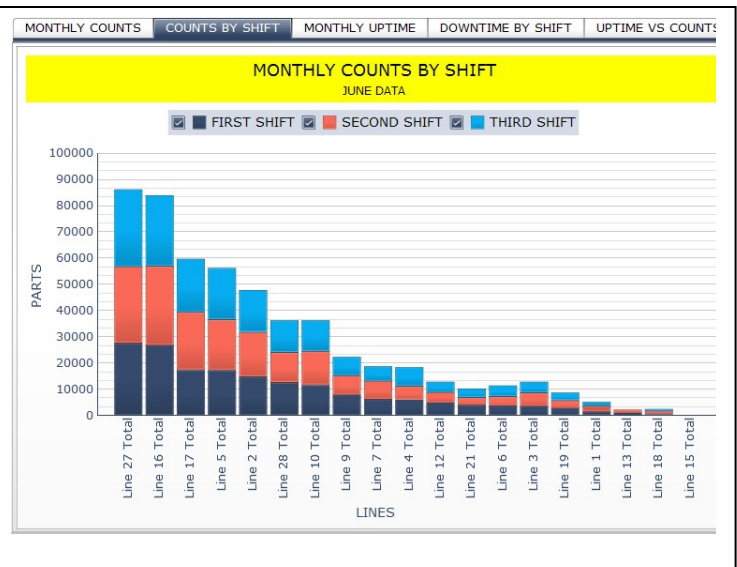
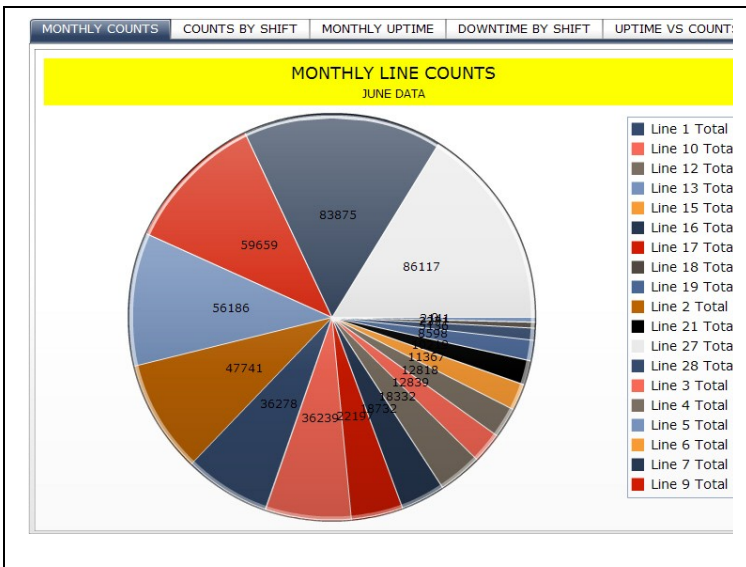


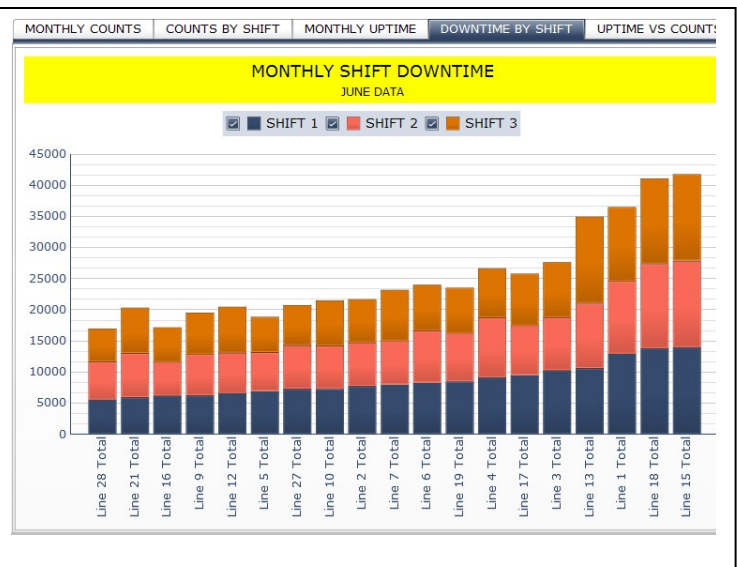
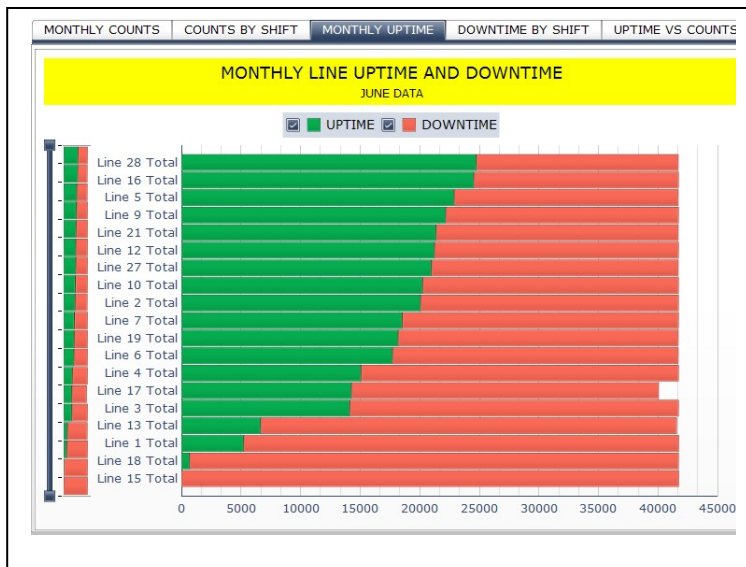


SAMPLE REPORTS CREATED FROM TSS-NET DATA

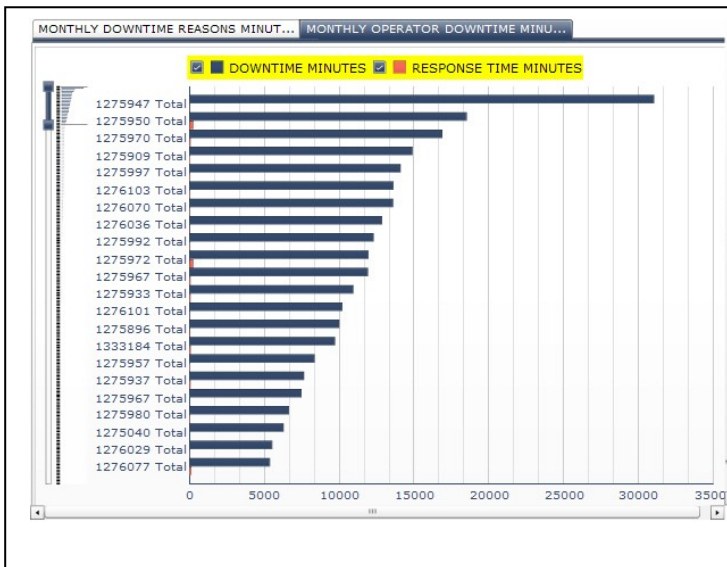
IMPAX TSS-NET collects data daily or more often if the customer's requirements dictate. This data is put into comma delimited files that can be loaded into various programs to create multiple types of charts and graphs. The examples below were created with Xcelsius 2008, sold by SAP. All charts are interactive: holding the mouse over any object will show the numbers behind the chart. The user is capable of creating useful and informative dashboards.



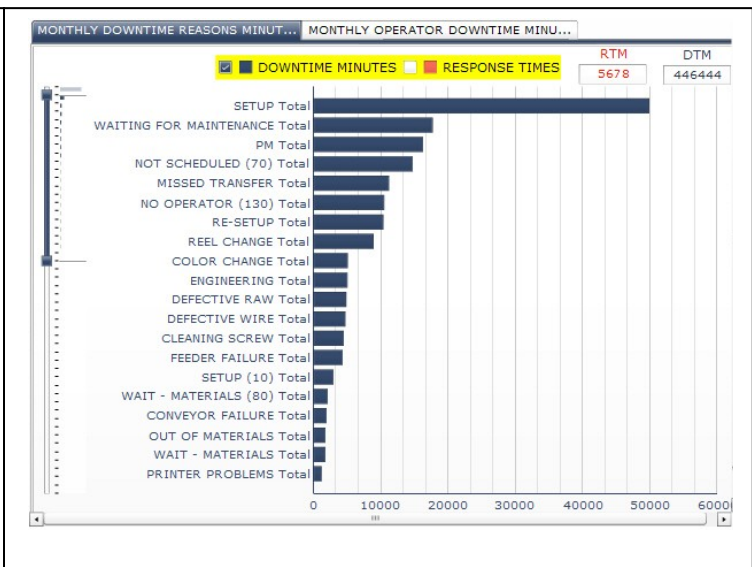
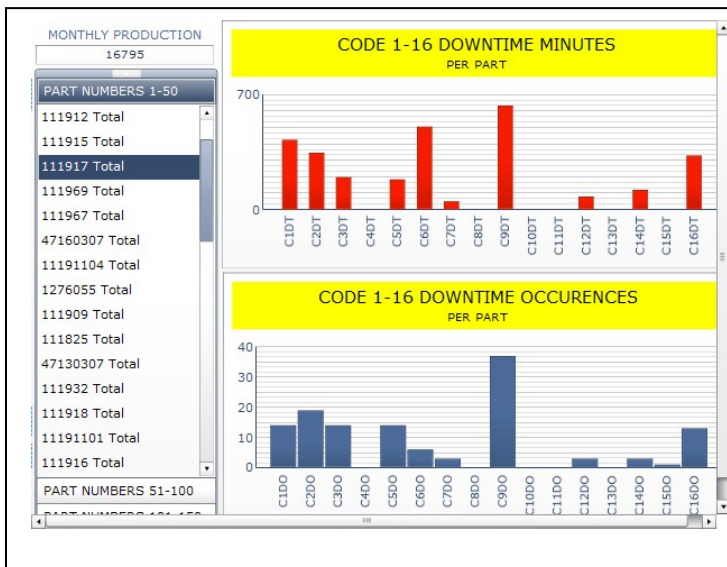
In the example to the left, a Pie Chart is used to depict the various production lines' totals for the month of June. In the example to the right, a Stacked Bar Graph is used to depict the production line's totals for each shift along with the overall totals.



In the example to the left, each line's uptime and downtime is depicted in a Pareto type of chart. In the example on the right, a Stacked Bar Chart is used to depict each shift's downtime for each line.



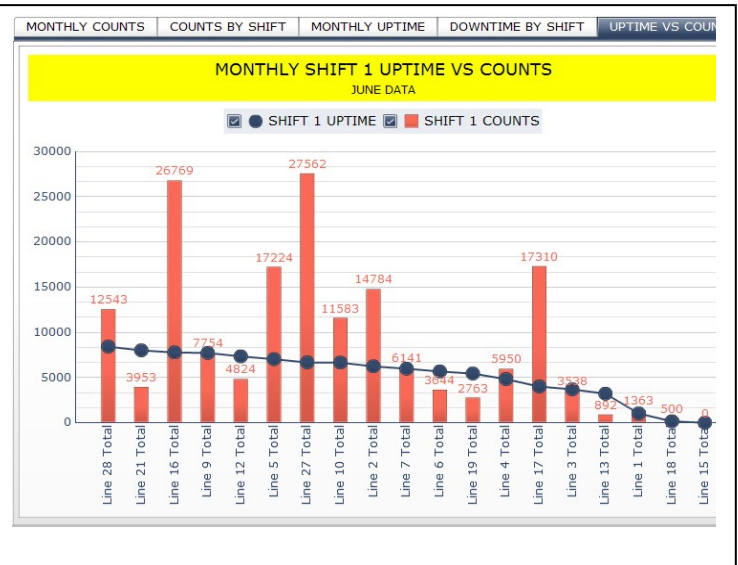
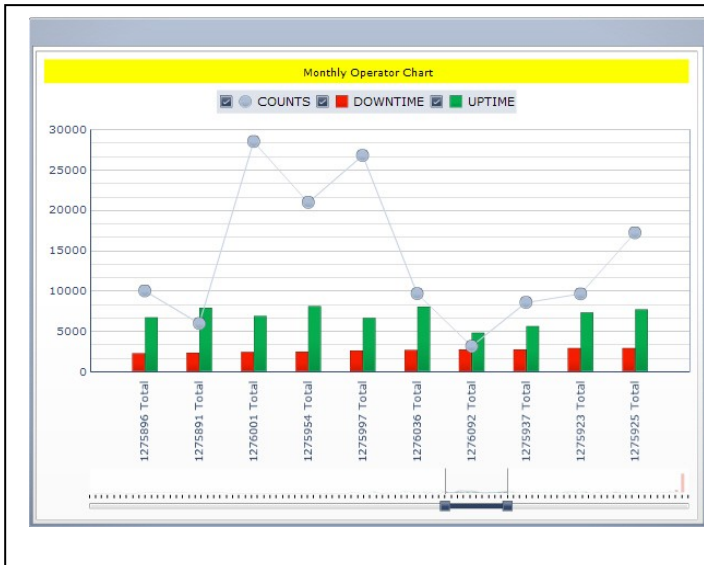
In the above two examples, the downtime minutes are shown for each operator. The blue chart shows the overall downtime minutes and response time minutes for each operator, and the red chart shows each operator's response time for the month. On the top left of both charts, you can see the slider that allows the user to zoom in on only certain items. Also notice that the left chart shows both downtime minutes and response time minutes, while the chart on the right shows that you can view just the response times, zooming in to show more detail.



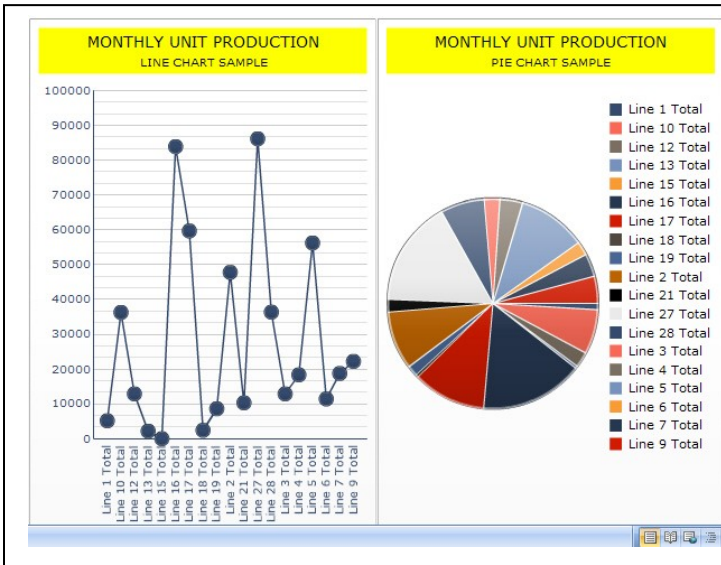
The example on the left shows the downtime minutes and the number of downtime events for part number 111917. The user can select any part number and the respective graphs will be shown. This enables the user to determine the most problematic part numbers run in the plant. The second Pareto chart shows the number of downtime minutes for each downtime reason. Notice how many minutes of production were lost due to the amount of time waiting for maintenance.



TIME SAVER SYSTEMS



The Monthly Operator Chart on the left graphs operator's uptime and downtime and the number of parts produced by that operator. The chart on the right shows the monthly shift 1 uptime for each line compared to the number of parts produced on that shift. In both cases, uptime does not directly correlate with number of parts produced.



The two graphs on the left show monthly unit production in both a line chart and a pie chart. Users can select from any number of different types of charts to show their data. The two graphs on the right show monthly downtime minutes and events for the top sixteen downtime reasons. With the sliders on this chart, the user would be able to select fewer codes to have a more in depth look. When sliders are used, the charts automatically resize to accommodate and depict the data in the most meaningful way. The scaling is done based on the largest number in the selected data.