



Advanced Performance Monitoring System

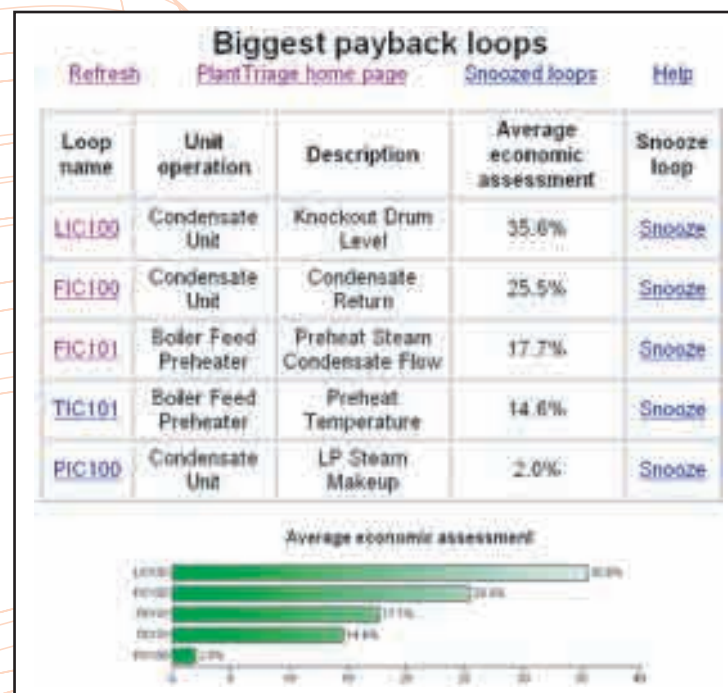
PlantTriage, Stay informed and Act

PlantTriage[®] is more than a performance monitor system. It's a total solution that enables maintenance and process engineers to do the whole work process from monitoring, analyzing, diagnosing and fixing the process within one environment. It results in a steady and continuous improvement of the product quality, costs, throughput, and waste reduction in process plants.

Inefficient plants are the norm- until they are treated with PlantTriage

Why use PlantTriage?

- 5% increase service factor (up time) of supervisory applications.
- Setpoints 3% to 5% closer to specifications because of reduced variation in the regulatory system.
- 200% to 300% increase in the productivity of maintenance and engineering people, since they are hitting the loops that make the most difference.
- PlantTriage "Biggest Payback Loops" identifies areas to work on that will yield the greatest economic return.
- 50% reduction in valve maintenance budget. Typical installation of PlantTriage results in total valve travel reduced by a factor of 5.
- PlantTriage includes integrated tools of PID tuner/analyzer to diagnose, tune, linearize and decouple the problems found. These tools increase the effectiveness of maintenance and engineering personnel by a factor of 5 to 10 since they can do the job quickly and have systematically optimized the process with award winning tools.
- PlantTriage includes performance tracking to see how the health of the entire plant, unit operations, or loops has changed over time. This is the control aspect of Six Sigma.



"The "Biggest Payback Loops" are those loops that by improving will yield the greatest economic return"

PlantTriage at Work

- 1. PlantTriage Assessor:** PlantTriage continually watches and analyzes your process for the areas that will make the greatest economic impact. The assessor monitors and evaluates over 30 separate analytical measures for every loop (up to thousands of loops) in your plant.
- 2. PlantTriage Monitor:** PlantTriage baselines the performance of your plant for future comparison. Compare your plant against the baseline to see how the changes you make improve the performance. PlantTriage continually monitors and assesses the performance of each area in the plant giving you complete control of how you baseline or compare performance.

3. PlantTriage Benchmarking and Key Assessment: PlantTriage templates allow you to very quickly benchmark for your plant using assessments that are important for your business. Use PlantTriage "Best Practice" templates or completely customize your own for complete control of the benchmark process.

4. PlantTriage Tracker: Lets you track the performance of your plant over time in your web browser.

5. PlantTriage Biggest Payback Loops: these are those loops that by improving will yield the greatest economic return. The higher the Average Economic Assessment the greater the benefit to your plant you will achieve by improving the loop.

6. PlantTriage Optimization Analysis: After PlantTriage has pinpointed those loops that will yield the greatest payback, use the included PID Tuner Analyzer tools to diagnose and optimize the loop.

7. PlantTriage and Six Sigma: PlantTriage categorizes and defines processes as unit operations in your plant. PlantTriage provides the benchmarking to Measure your current performance on a unit operation basis. PlantTriage analyzes the data and pinpoints and prioritizes the problems to solve. PlantTriage includes all the tools in PID Tuner to then Improve the process and performance.

8. PlantTriage DCS Database Import: PlantTriage DCS Database Import provides an easy way to quickly set up your plant for monitoring and assessment. PlantTriage makes this easy by using a smart wizard-based bulk import. The wizard (Patent Pending) has intelligence so that it polls the control system for most of the data it needs.

10. PlantTriage Startup Service and Training: Purchase of a PlantTriage license includes 2 service periods. This service is performed by Expertune's official service provider, IPCOS. The first service period included with PlantTriage is to set up PlantTriage unit operations, data collection and the relative economic priority of your loops. During the second service period, you work with an IPCOS engineer to determine what are the key assessments for your type of industry.

11. PlantTriage Historian: PlantTriage Historian is a full featured data historian package specifically designed to make pinpointing process improvement opportunities easy. All process variables and performance measures are archived for complete viewing any time in the future. PlantTriage obtains data from your process direct in real-time via OPC. PlantTriage also supports obtaining data direct from your plant historian via OPC HDA (Historical Data Access).



Tree map: performance of all the controllers on a plant/site in one picture

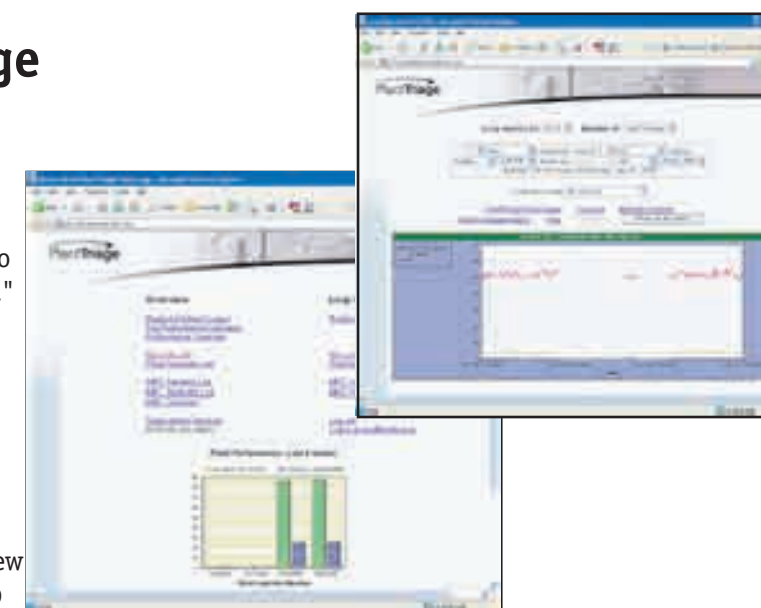
Customers about PlantTriage

"Benefits of five times the manpower" from the "Problem Solver" Award

"PlantTriage offers us a systematic, focused approach to raise the performance levels of our automation system." Lead Engineer Control Systems, Bayer Polymers

"Atlantic LNG achieves 1% increase in production with PlantTriage." Instrument Engineer, Atlantic LNG

"The end results are that users can focus efforts where the impact on production quality and assets health gives the largest return on investment (ROI)...These new technologies pay for themselves from start-up..." , Pulp and Paper Canada, May 2004.



Log on the webserver and look at the performance (actual and trends), request reports, etc.