

Process Health Assessment



"AchieveandSustainPeakOperationalPerformancewhile Reducing Risk"

<u>**Process Health Assessment**</u> is a value-added method of guiding and assessing the health of your automation assets, determining areas for improved performance, and highlighting potential risks to process uptime.

Loy Instrument has developed an innovative, proactive evaluation process for customers wanting to achieve improved process control while understanding their current risks. This will enable customers to evaluate the current state and performance of the main elements of their control systems, including: PID Controls, Actuators, Burners, HMI, Transmitters, Sensors, Recorders, Programmers, Flame Safety and other system critical process control devices.

In addition to the above, the assessment report will also provide detailed information of these devices which will include model number, serial number, age of device, availability, and asset location.



Plant Asset Control System Health

This survey will supply the information necessary to understand your current state and help guide in the planning to achieve optimum performance while reducing risk.

Why Should You Be Interested in This Type of

Process Assessment? This service will form the basis to drive better automation related business decisions, resulting in:

- More informed decision-making
- Reduced risk of unexpected hardware obsolescence
- · Lower operating expense costs for the installed system
- · Identify areas for improved energy efficiency
- Increased process uptime and reliability
- Increasing production output
- Optimizing parts management and allocation

Why is it Critical for Your Plant Automation Assets to be Holistically Surveyed?

Through your plant assets lifecycle, the control systems are subject to expansions, hardware refresh, and ongoing modifications as the process requirements in the plant change. Attention is required to ensure that these changes are supported by current controls and the latest technology. This service will help guide and plan for control system optimization and avoid reacting to unscheduled downtime and potential loss of product.



Hardware and legacy parts have an expected service life, most of which are exceeded in most systems. However, as hardware becomes older, replacements are not always available, leaving systems exposed to long downtimes if parts fail. Auditing against migration paths and best practice can highlight the potential issues and ensure continued availability.

Maintenance releases and hardware refresh can require firmware and hardware upgrades to allow compatibility with current and future releases. Ensuring that the systems are all audited against best practice, current software releases and hardware compatibility is therefore vital.

Loy Instrument can also supply loop performance audits of the process control loops, whilst rectifying the tuning issues will reduce the variability in the process, improving efficiency, throughput and quality, and reducing maintenance cost and downtime too.

How Does this Health Assessment help Address the Issues?

This report will focus on the following core areas, which are all related to addressing the issues raised above.

- · Executive Summary Report with asset matrix
- · Guided technology integration and synchronization
- Energy optimization
- · Lifecycle planning versus obsolescence
- Process control recommendations for improved control

How Does this service help with Plant Performance

Priorities? The information supplied in this report is aimed to supply the information necessary to address the key concerns related to operation in today's climate—reducing the total cost of ownership, increasing the safety, reliability, efficiency, and improving the overall awareness of the health of the equipment controlling your plant assets.

For More Information

Learn more about how Loy Instrument's Asset Survey Program can improve plant performance visit our website <u>www.loy-</u> <u>instrument.com</u> or contact us at 317-890-0474 for more information



Figure 2: Alignment of ASP information to Customer Requirements

How are these services Deployed?

Customers can incorporate this service as an additional entitlement to their existing Loy Instrument services contract or on demand. The health assessment can be executed when a significant change or expansion has been or will be done, prior to a planned shutdown or as a basis for a long-term automation plan. Loy Instrument will then collect and benchmark the data for the report, paving the way for a road map to continuously improve the reliability and efficiency of both the control system and the process plant. The aim for this service is to support customers who wish to create and drive automation road maps to ensure that the underlying infrastructure continues to return on the initial investment that was deployed for their plant assets while mitigating risk.

What Process Improvements will Loy Instrument Help Me

Make? As with any process, improvement is not possible without measurement. Aging equipment and multiple changes of the system and hardware all influence the control system and other system components.

By benchmarking the system and the processes associated with it, customers have seen the following benefits as a direct result of this service: reduce downtime, decrease maintenance cost, increase time between failures, decreased life cycle cost, and assisted in the development in a long term automation road map.

Loy Instrument Engineered Services can help implement these strategies. The Loy Instrument Engineering team consists of process control specialists, calibration services and combustion expertise. This Health Assessment is an efficient, effective and comprehensive way to improve and sustain peak operational performance and reliability of the automation systems at your facility while reducing risk.

