HanAra Software

Ways to Use HanPHI®: Overhaul Mapping

CATCH

HanPHI provides a plant health index to give you early warnings of potential and hidden equipment failures. Since HanPHI is comparing real-time values to HanPHI expected values, it also alerts you of potential sensor issues, including mismapped sensors.

The Overhaul

By utilizing HanPHI, the plant was given a clear understanding of how healthy its equipment was prior to an overhaul, pinpointing areas that should be addressed. After completing the overhaul, all of the equipment was brought back online, but HanPHI gave them early warnings for 10+ sensors with low health index.

Was the equipment less healthy after the overhaul than before the overhaul?

No. But why then did HanPHI give early warnings?

Investigation

When analyzing these sensors, the plant determined that no data and abnormal data was being transmitted. After further investigation, the plant determined that during the overhaul, someone had changed the sensor addresses. With mismatched addresses, the data was not being transmitted to the appropriate addresses. The plant quickly remapped the sensors to the correct addresses so that the plant and HanPHI received good data.

After remapping the sensors, the HanPHI health index began to rise and returned to normal.

The Value

These sensors were critical for the plant to monitor. A significant value change in these sensors would point to an issue with the equipment, process, or operations.

If these sensors were critical, why did the plant not notice the change after the overhaul? The plant has thousands of sensors and definitely more than 10+ critical sensors that they need to monitor. The existing historian did not provide an easy method to view the sensors with bad or no data. So how can the plant double check the quality of its critical sensors?

That's where HanPHI comes in. HanPHI is capable of monitoring all the sensors all the time, pinpointing the plant to areas where they should focus, like mismapped sensors. With HanPHI, the plant can rest assured that they are monitoring the real-time status of the plant and making decisions based on quality information.

HanPHI

HanPHI, our patented intelligent software, learns, models, and analyzes data to provide actionable early warnings to operators, engineers, and managers before catastrophic failure occurs.
By utilizing advanced machine learning to turn sensor data into a health index for predictive maintenance, guesswork is eliminated and your valuable assets are kept in optimal condition with impending failures identified days, weeks, or even months in advance.

About HanAra Software

HanAra Software connects deep industry knowledge with innovative technology to provide integrated data management and predictive maintenance solutions for process plant management. Through the implementation of HanAra solutions, plants enjoy results including reduced costs, increased efficiencies, and ultimately improved plant safety. HanAra Software combines solutions with training and care programs to support clients every step of the way.

HanAra Software is the United States headquarters of South Korean-based BNF Technology. BNF Technology is a professional software development company that provides optimized software solutions for operational management of process plants. Coal-fired, combined-cycle, seawater desalination, and petrochemical plants use our solutions. Since the year 2000, BNF Technology has provided various solutions to more than 250 units across two continents to help them achieve operational excellence.