

HanPHI Plant Health Index

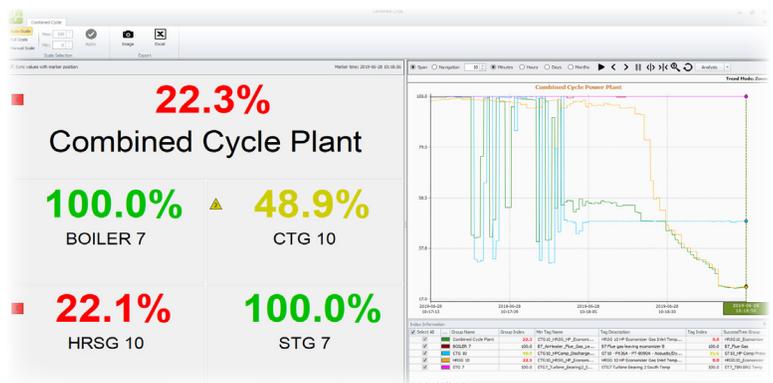
HanPHI's plant health index provides a **real-time health** index from **0 to 100%** for the plant, system, equipment, all the way to the sensor level. The index provides an intuitive illustration of plant health status so that all types of users have a clear understanding of the current status of their plant and equipment.

HanPHI analyzes the real-time and expected values to convert complex process conditions into a simple, easily read index. The index gives users actionable intelligence on functional, hidden, and potential failures.

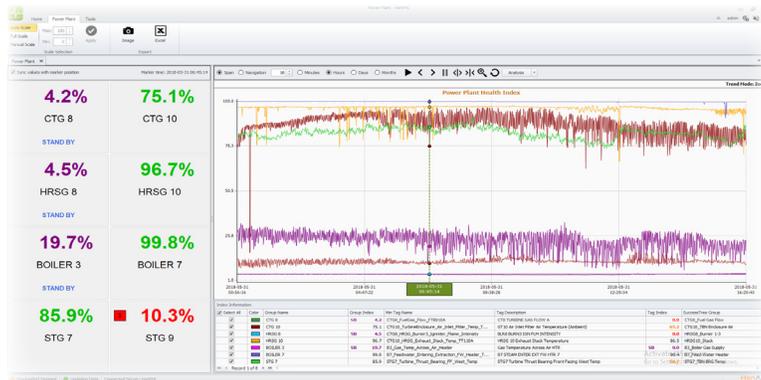
How It Works

HanPHI calculates the index by **comparing real-time values with expected values**. The expected value is a result of HanPHI building patterns and models based on fault-free, normal historical data. These patterns do not look at a single tag by itself but rather **groups of correlated tags** to understand more holistically how a plant, systems, and equipment operate. Based on the deviation between the real-time and expected values, the index decreases from 100%. The closer to 0 the health index gets, the higher priority the deviation is. On the index display, users:

- View the plant's overall health index and its top-level systems or subsystems
- View tag level information that affects the system or subsystem's index
- Analyze abnormal situations using the index trend
- Configure the display (multiple index displays and output signal trends) based on critical systems



With the **predictive-modeling and health-indexing** technology, HanPHI provides a real-time comprehensive view of complex and dispersed assets across the fleet. By calculating the plant health index with the success path algorithm, HanPHI derives each plant component's health index, allowing users to easily monitor equipment, a single site, or an entire fleet.



What's the Value?

Early warnings based on the health index identify areas for predictive maintenance, reducing maintenance costs, unscheduled downtime, and equipment failures. With HanPHI, you can eliminate potential operational risks, extend equipment lifecycles, and increase asset reliability, efficiency, and safety within your limited budget.