Eta**PRO**®

EtaPRO® Performance & Condition Monitoring Suite

EtaPRO is a real-time performance and condition monitoring system that combines thermal performance, anomaly detection, and machinery dynamics to maintain the health of your plant and equipment. A high-speed data historian, on-line log book, report and alert engines round out the Industry's premier platform for improving plant availability, capacity, and efficiency.

Eta**PRO**®

Installed on over 676,000 MW of power generation in 40 countries, EtaPRO provides unprecedented technology for power plant condition and performance monitoring:

EtaPRO APR – process and equipment **anomaly detection** using advanced pattern recognition

EtaPRO Predictor™ – advanced **machinery dynamics** for vibration analysis and fault diagnosis

VirtualPlant™ – best-achievable **thermal performance** with plant-specific thermodynamic models

EtaPRO Archive™ – high-speed **data historian** for trending and reporting

With EtaPRO, you'll:

Recognize Plant Anomalies Sooner

Using advanced pattern recognition, EtaPRO APR provides highly granular process and equipment predictive models for identifying changes in condition before they become critical.

Accurately Predict Best-Achievable Performance

EtaPRO's VirtualPlant uses plant design information and first engineering principles to predict online and offline target performance, as well as forecast plant heat rate and capacity for market participation.

Detect Rotating Machinery Faults Earlier

EtaPRO Predictor detects rotating machinery faults at their earliest stages by automatically tracking changes in vibration signatures. It provides automated diagnosis of specific machinery faults such as misalignment, imbalance, rubbing, cavitation, and blade faults as well as a comprehensive history of diagnostic measurements such as spectral maps, shaft orbits, and polar plots.

Store Results Cost-Effectively

EtaPRO Archive is EtaPRO's embedded, high-speed data historian capable of storing all your EtaPRO results as well as process data. Automated reporting and ad-hoc data mining are accomplished using the EtaPRO Excel add-in, while EtaPRO Archive's Accumulator™ counts, totalizes, averages, or integrates any EtaPRO data stream. Available real-time data interfaces include OPC DA, Modbus, ODBC, text, and PI.

Better Manage Off-Target Performance

EtaPRO's Concerns Viewer provides a single, asset-oriented display from which to track and manage anomalies and degradation identified by EtaPRO detection technologies. At-a-glance anomaly history speeds review of plant condition and saves time for end users.

Quickly Diagnose Plant Problems

EtaPRO's proven diagnostic engine provides full integration with VirtualPlant, APR, and Predictor results. Diagnostic routines run interactively or automatically online with diagnostic messages logged or emailed.
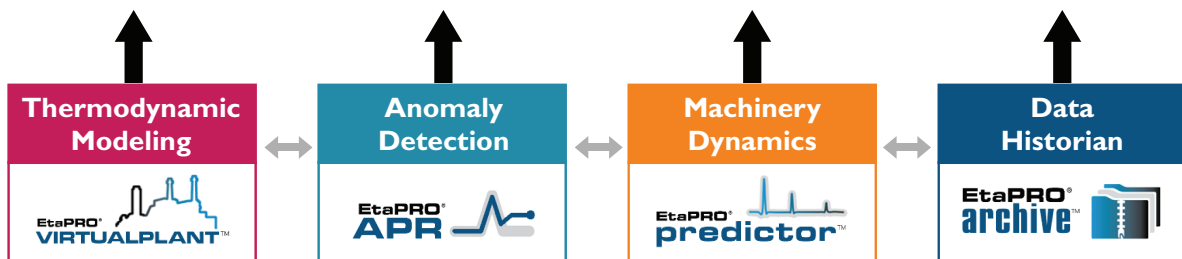
Save Time with Automated Reporting

Design your report in MS Excel using daily, weekly, monthly, yearly, or contract-to-date statistics for energy production, fuel consumption, operating hours, equipment starts/stops, time above or below target, etc. Reports can be scheduled to run automatically and be distributed at the frequency you choose.

Have EtaPRO Access Via Mobile Devices

EtaPRO comes with a web server for aggregating one or more EtaPRO servers on a single web page. Enterprise users can access real-time displays, trends, footprints, and reports. This includes full-function EPTrendSetter™, EPLog, and Concerns Viewer along with support of existing EtaPRO security credentials. Supports multiple browsers (IE, Chrome, Firefox, and Safari) and devices (PC, Mac, iPad, Android, and iPhone).

EtaPRO®

Your Power Plant Productivity Suite

Thermodynamic Modeling	Anomaly Detection	Machinery Dynamics	Data Historian
EtaPRO® VIRTUALPLANT™	EtaPRO® APR	EtaPRO® predictor™	EtaPRO® archive™