

POWER GENERATION AND WATER, APRIL 2017

Power Generation and Water

A global leader in power and automation

ABB Power Generation



Global Power Generation and Water

Competitive advantages



- Cutting edge technology with a track record of innovation
- Leader in automation and excitation systems
- Product portfolio covering the entire plant
- Globally installed base and proven track record
- Global manufacturing and engineering footprint
- Strong local presence supporting customer focus
- Significant service presence to support installed base
- Skilled, experienced workforce

Global Power Generation and Water

Delivering up to 25% of a plant / Brista

Power and Automations



Automation

- Distributed control systems
- Turbine Automation
- Safety systems (SIL2 and SIL3)
- Plant performance monitoring & optimization
- Asset management

Instrumentation

- Field instruments
- Control valves and actuators
- Carbon in ash
- Flame detection

Electrical systems

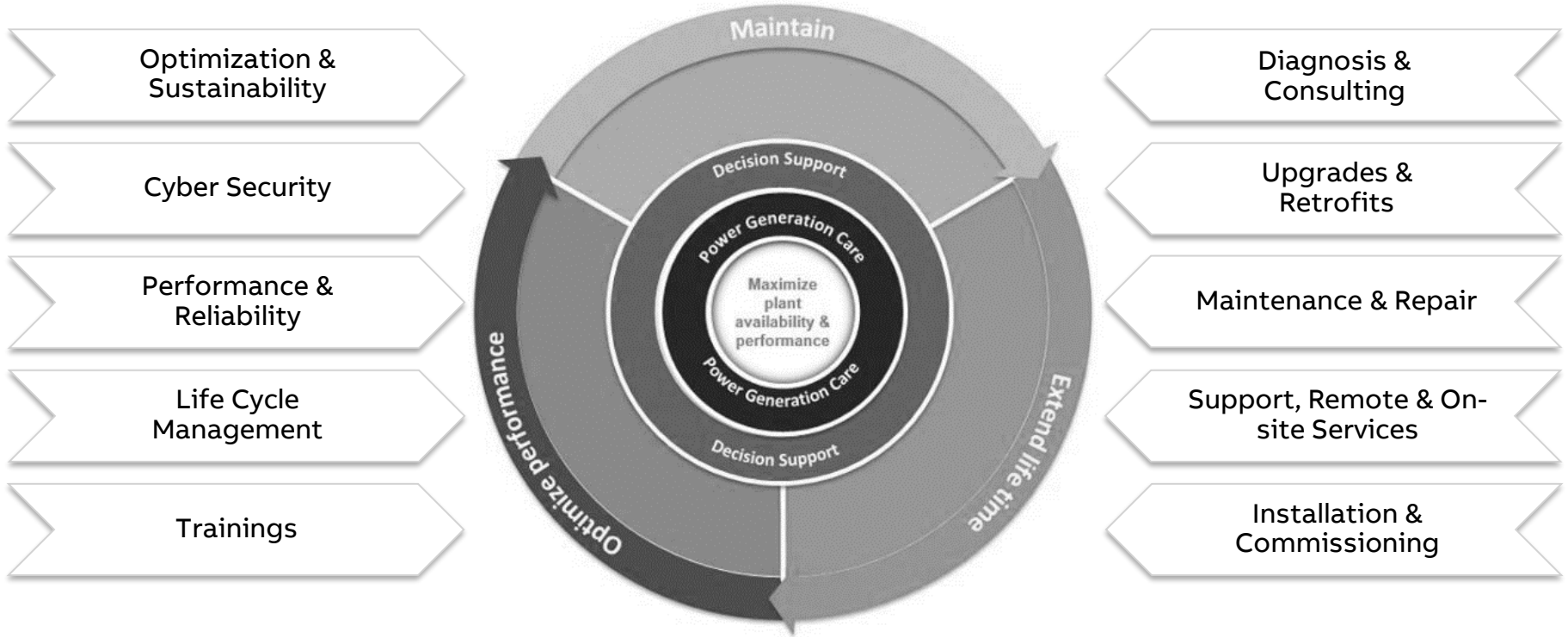
- Grid connection
- HV substations
- MV/LV switchgears
- Transformers
- Excitation systems
- Generator protection
- Generator circuit breaker & bus duct
- Synchronization
- Drives
- UPS systems
- Emergency power supply
- Cabling

Service

Complete engineered and integrated automation and electrification solutions

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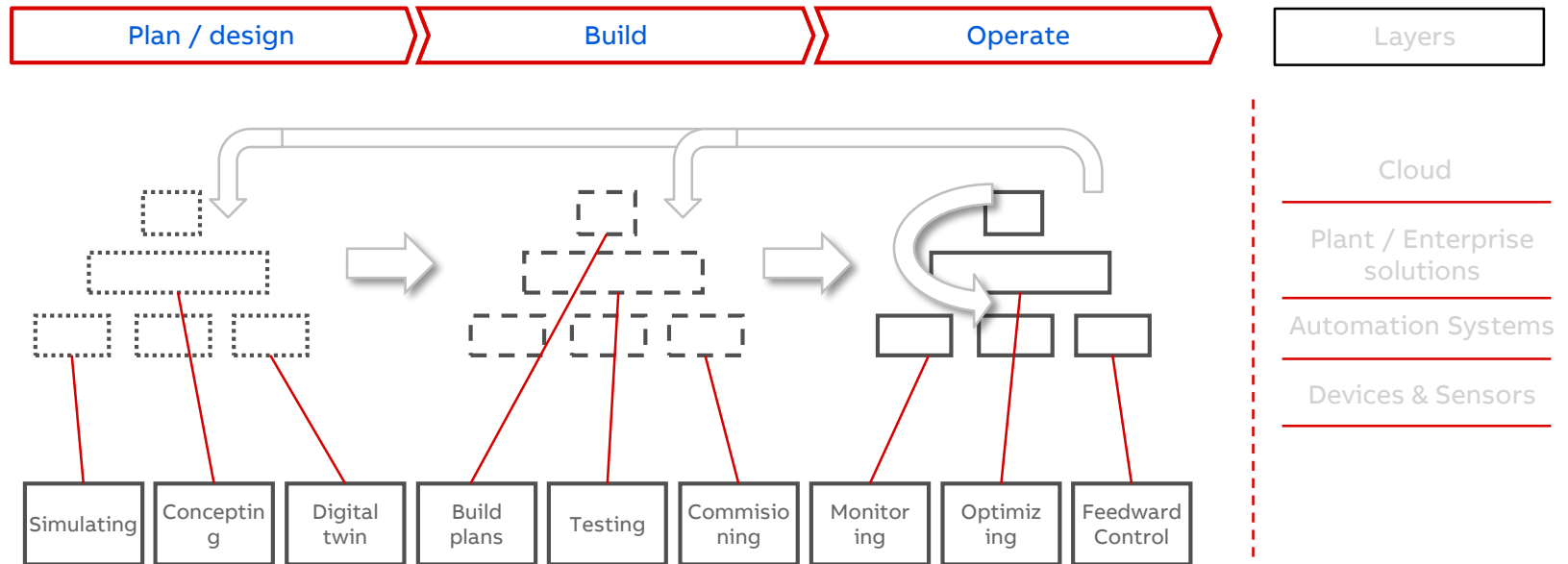
Power Generation Care: Holistic portfolio of professional lifecycle services



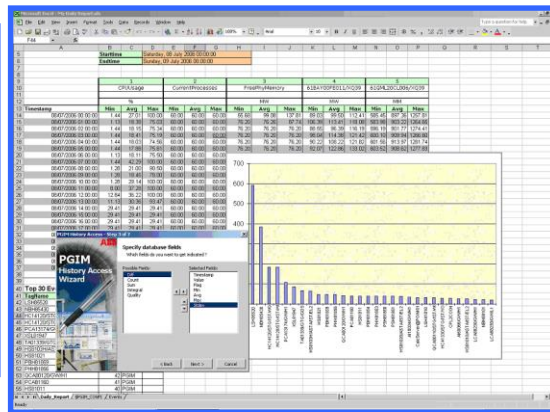
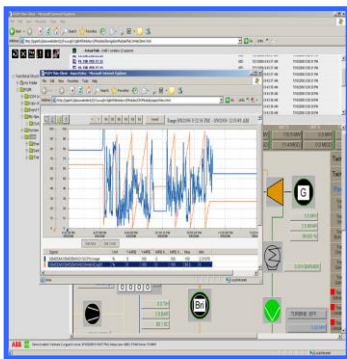
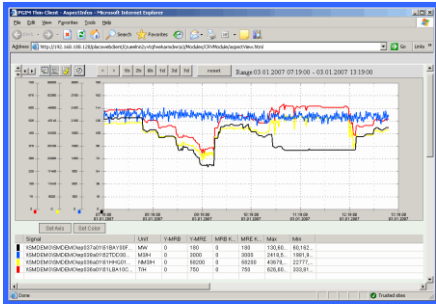
Advanced service solutions provide continuous automation and control system upgrades that make the most of your investment, while reducing operation and maintenance costs

Automation impacts the whole value chain

Opportunities all along the entire lifecycle / Brista

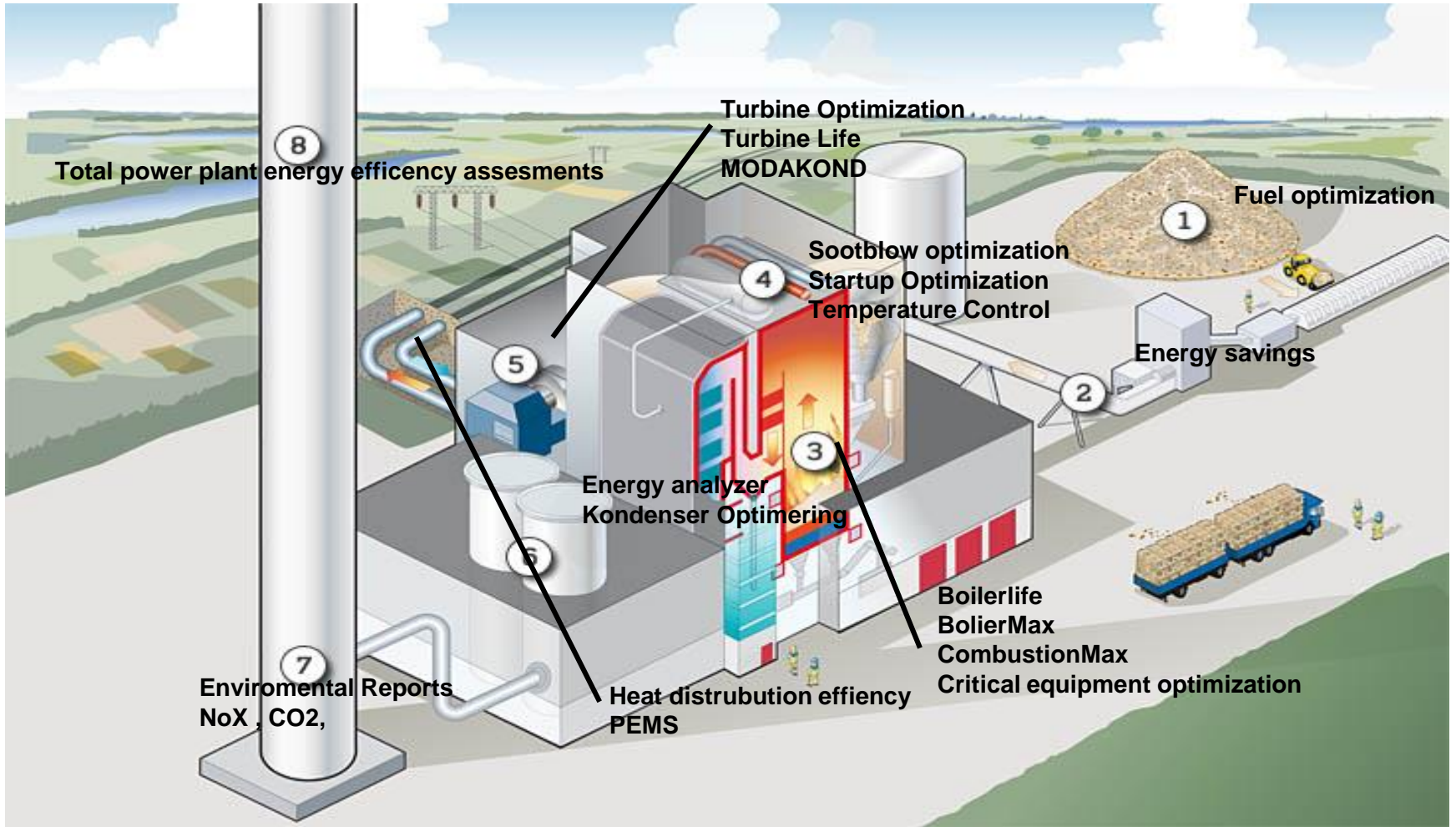


S+ Historian - Power Generation Information Manager

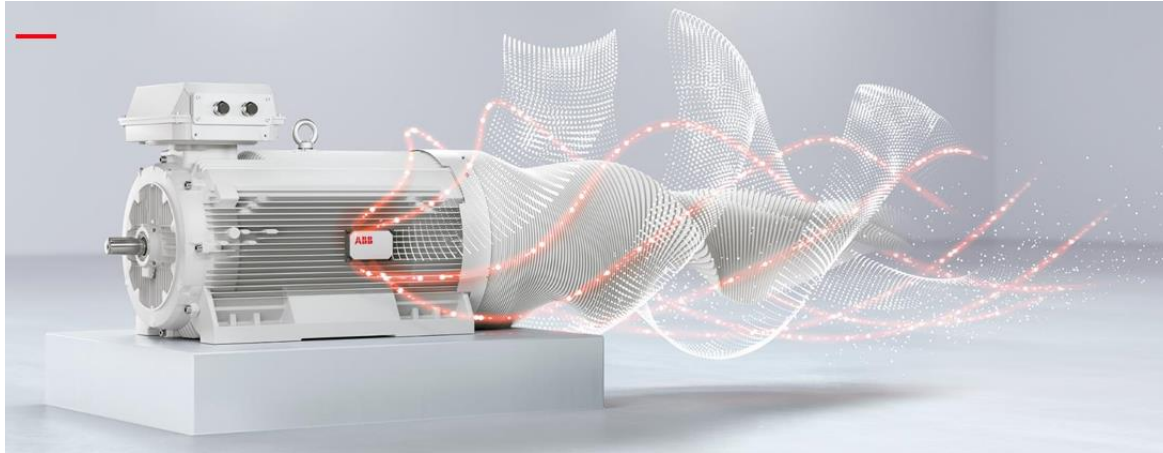


- **Information Management**
is the collecting, archiving and consolidating data from various production facilities, control systems, and commercial systems.
- **EEMUA 191 Alarm Management**
Provides Alarm and Event management functions as requested by the EEMUA 191 guideline.
- **Intuitive Interface**
Visualizing and analyzing process parameters with a convenient easy to use drag & drop interface.
- **Open Interface**
Making data available to other optimization applications e.g. for performance calculation, operation schedule optimization, EXCEL reporting.
- **Connect to Business Data**
Delivering process parameters, status variables and counter readings to maintenance and financial systems.
- **Open Client/Server architecture**
S+ operates on a distributed, open client/server architecture supporting an unlimited number of Tags per system
- **Industrial^{IT} enabled**
S+ is a product of ABB's Industrial^{IT} family, integrated in System 800xA and designed for long-term protection of asset investment.
- **Process Optimization Platform**
S+ is the base platform for all OPTIMAX applications.

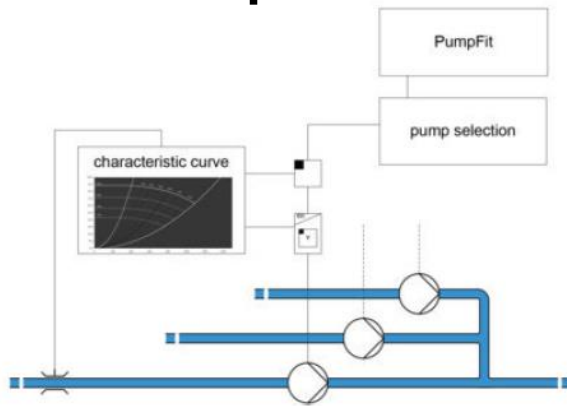
ABB Power Generation Optimax



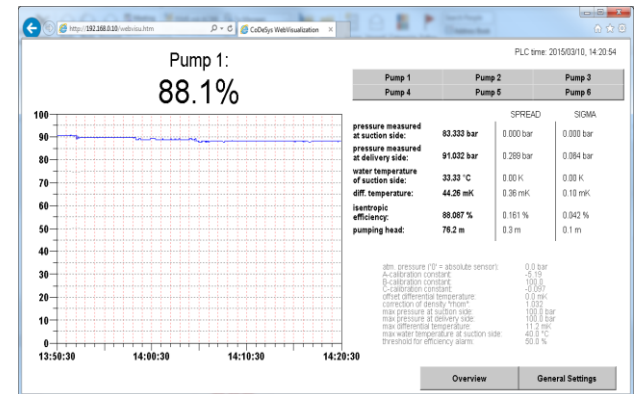
OPTIMAX[®] motor & drivesystems



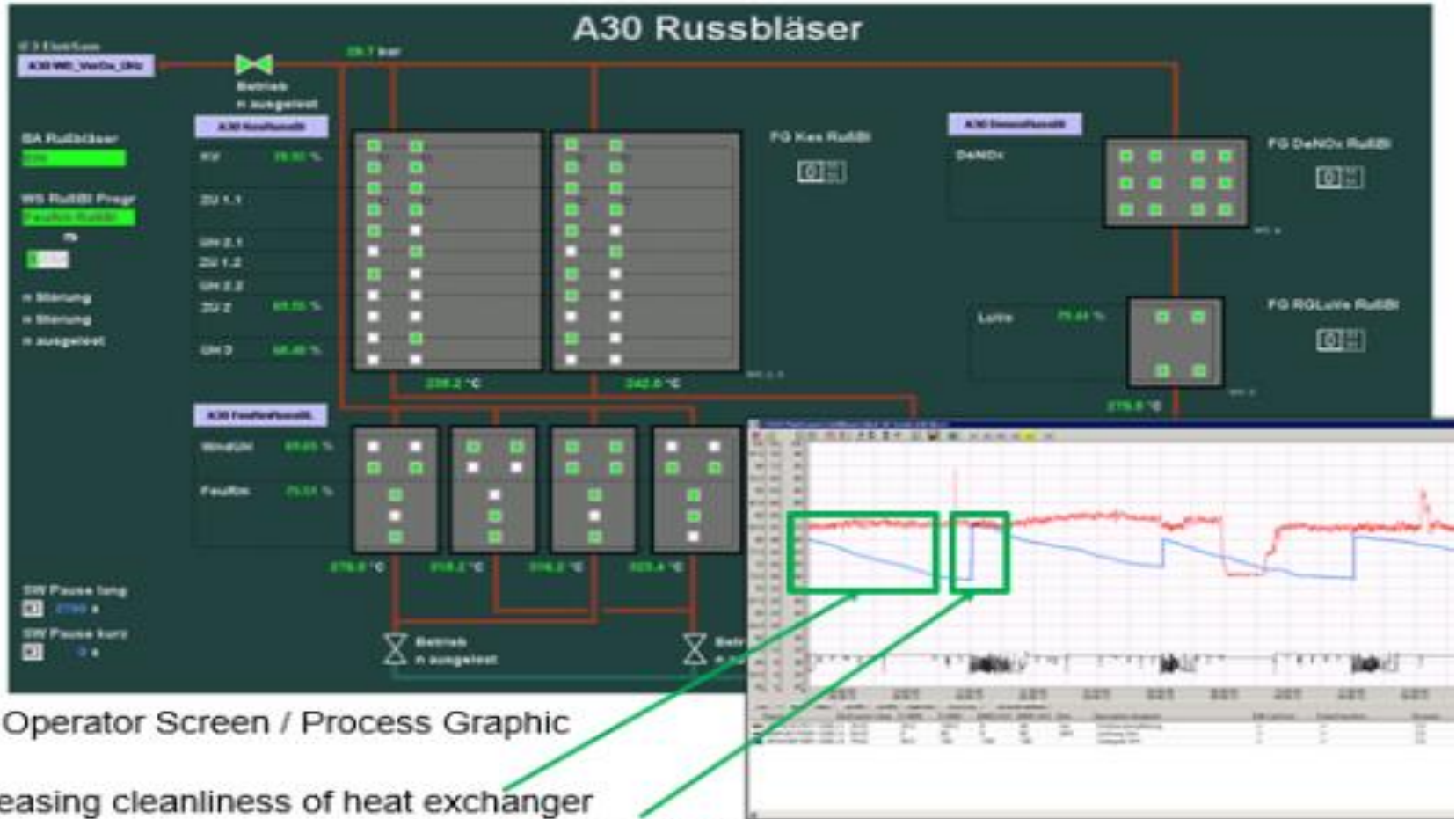
PumpFit



PEMS



OPTIMAX[®] Sootblow



Operator Screen / Process Graphic

Decreasing cleanliness of heat exchanger
Sootblowing activity

Trend display

OPTIMAX® BoilerLife



Thickwalled components

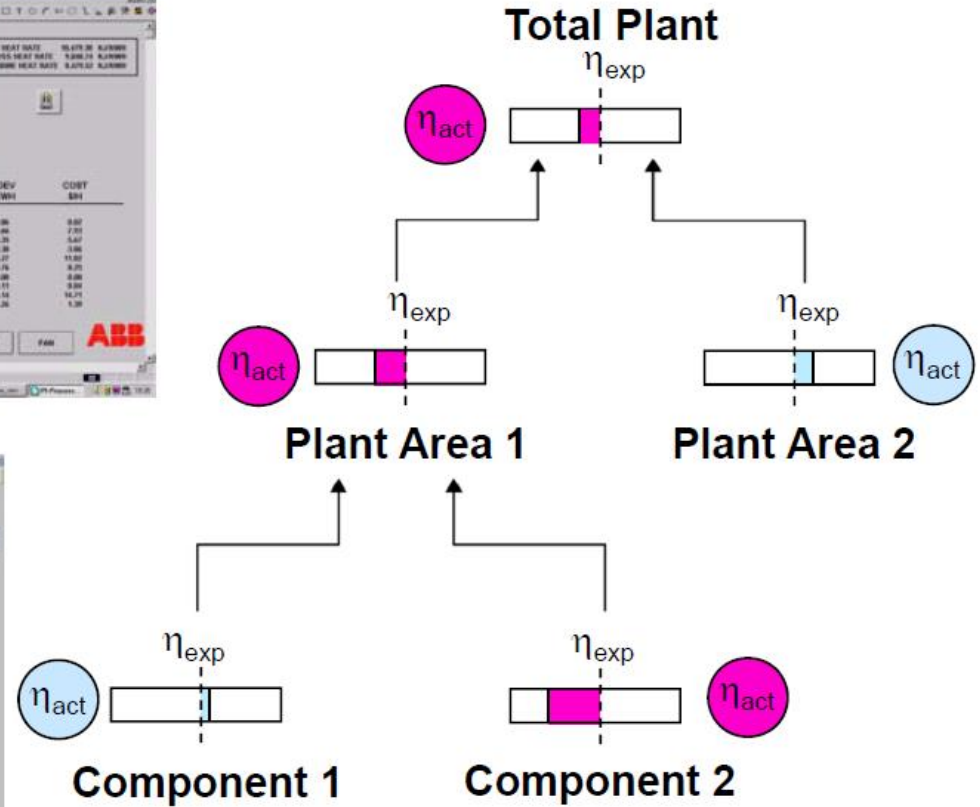
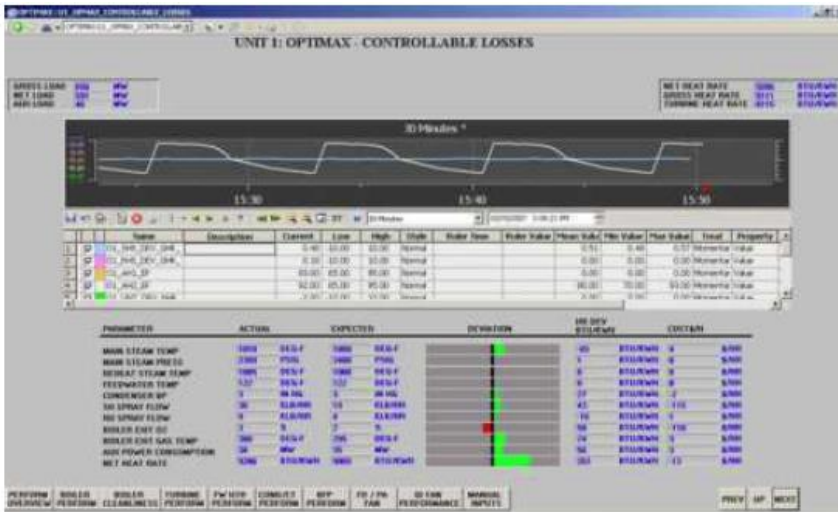
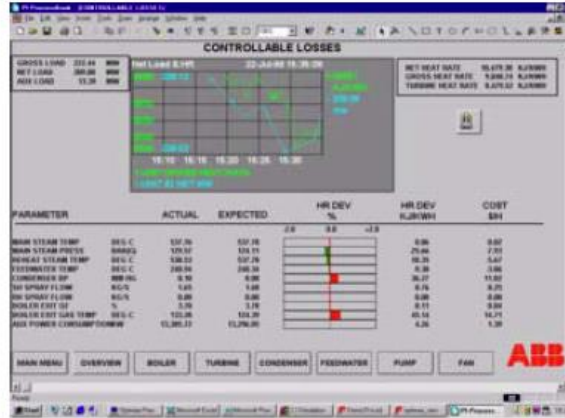
- Superheater
- Reheater
- Steam drum
- Separators
- T-compounds
- Pumps
- ...



Piping

- Fittings
- Pipes
- Elbows
- ...

OPTIMAX® Plant Performance Monitoring



Power Generation and Water

Summary

Why ABB

One ABB approach brings global competence to local projects

- ABB project management experience
- Optimized costs using global procurement
- Reduced commercial risk with ABB guarantees

Added value to client

- Increased availability
- Greater flexibility
- Optimized operating costs
- Support to finance projects

Supports fast track projects

- Shared responsibilities
- Guaranteed delivery
- Access to complete product range



For more information, visit our websites

new.abb.com/power-generation

new.abb.com/water

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