



# Plant-wide Software Suites

## RISKWISE for Combined Cycle Gas Turbines™ (CCGT)



**RISKWISE for Heat Recovery Steam Generators (HRSGs)** covers pressure parts (tubes, headers, drums etc.), ducting and steam pipework

**RISKWISE for Gas Turbines** covers hot section components (blades (buckets), vanes (nozzles), shrouds, burners, combustor, cross fire tubes, transition piece, etc.

**RISKWISE for Steam Turbines** covers HP, IP, LP rotors, blades, casings, nozzles, nozzle boxes, bearings, loop pipes, etc.

**RISKWISE for Balance of Plant (BoP)** covers boiler and turbine auxiliaries (fans, compressors, pumps, condensers, heat exchangers, etc.), generators, transformers, switchgear



Application to gas turbines for CRIEPI in Japan

Extended outage interval for HRSGs at PowerSeraya CCGT plant, Singapore using RISKWISE™



RISKWISE™ application at TNB's Pasir Gudang power station in Malaysia

## RISKWISE for Thermal Power Plant™

**RISKWISE for Boilers** covers pressure parts (tubes, headers, drums etc.) and steam pipework

**RISKWISE for Steam Turbines** covers HP, IP, LP rotors, blades, casings, nozzles, nozzle boxes, bearings, loop pipes, etc.

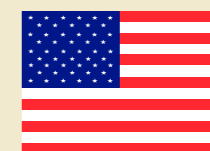
**RISKWISE for Balance of Plant (BoP)** covers boiler and turbine auxiliaries (fans, compressors, pumps, condensers, heat exchangers, etc.), generators, etc.



Application to boilers, steam turbine and balance of plant at Korea East-West Power Company's Danjing supercritical plant



RISKWISE™ - improved competitiveness for power plants worldwide



Optimised outage planning of US fossil power plants for Alstom Power Inc using RISKWISE for Boilers™



Engineers from The China Special Equipment Inspection & Research Centre (CSEI) undergoing a 3 day interactive training course in the use of RISKWISE™

### FEATURES AND BENEFITS AT A GLANCE

- User-friendly qualitative and quantitative input features and electronic reporting of outputs - includes time-based failure risk audit, risk plots (likelihood and consequence), remaining life indicators (RLI), inspection scheduler, and risk mitigation measures for each equipment item
- Can be interfaced or integrated into existing plant computerised maintenance management systems (CMMS) or inspection management systems (IMS)
- Fully compliant with ASME/API guidelines
- Available as individual products and suites in several language versions including English, Chinese, Japanese and Spanish

**Using the RISKWISE suite plant engineers and managers are able to improve plant availability and reduce maintenance spend by optimum inspection and maintenance overhaul scheduling of all plant areas**

[www.twisoftware.com/riskwise](http://www.twisoftware.com/riskwise)

**The Thermal and CCGT suites enable risk-based outage planning for the entire power plant**