

Fact sheet

Powering quality and safety

Global services and technology for the power industry that minimize risk and maximize operations

Power operators around the world rely on Intertek's Total Quality Assurance services and innovative technology to manage their assets, reduce risk and improve safety, performance and reliability.



Power Generation

Global demand for reliable electricity is increasing as a result of rising population growth and improving economic conditions.

Over the coming decades, as new power generating technologies are implemented, the industry faces the formidable challenge of meeting global energy demand while maintaining reliable output, utilizing reduced operating and maintenance budgets; aging conventional power plant fleets and transmission networks; and a complex electrical grid that becomes more challenging to maintain year after year.

Energy Sectors

Intertek supports the following sectors with a wide range of quality assurance services:

- Power Generation & Equipment
- Power Transmission & Distribution
- Wind & Solar
- Wave & Tidal
- Nuclear
- Oil & Gas
- Coal & Solid Fuels
- Biofuels.

Innovative Technologies

Intertek's expertise and strategic approach drive the development of new technologies, producing leading-edge software products that optimize the operational cycles of our customers' plants so they can recover the costs.

Aware™

The Aware suite of software products helps power plant owners and operators organize data and increase cooperation among groups for improved asset integrity management.

TubeMod®

TubeMod is a patented technology used to improve boiler tube life and reliability. TubeMod was developed as an extension of Intertek's TubeAlert – Remaining Useful Life methodology to provide a cost-effective alternative for superheater and reheater component replacement.

Aware RealTime

Aware RT is a real-time analytics software that helps fossil, steam and combined cycle power plant personnel monitor and analyze equipment damage and the economic impact of operation.

WindAware

WindAware is a fully customizable web-based online dashboard to manage performance metrics for wind farms. The analytics tools include general purpose life-data analysis to forecast and improve the remaining useful life of wind turbine equipment.

Our Solutions

Construction Support Services

Our experts provide a variety of services before and during construction – services such as feasibility studies, surveying, technical assessments, vendor auditing, design verification, on-site quality control inspection, construction site safety and more.

For more information



industry.services@intertek.com



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Condition Assessment

Our experts have first-hand knowledge of plant engineering, from construction to retirement, and possess a thorough understanding of the design, operation and maintenance of the equipment including identification of potentially hazardous conditions before they lead to failure.

Cost of Cycling Power Plants

Our range of services help you understand your cycling startup, shutdown and load-follow costs and provide guidelines to operate more efficiently.

With our wide range of services and Total Quality Assurance expertise, we deliver consistently with precision, pace and passion, enabling you to power ahead safely.

Our Services

Vendor Surveillance

Intertek's expert vendor inspectors and technical auditors efficiently manage complex supply chains to ensure that equipment and material meet customer and industry quality standards as well as on-time delivery of those items which ensures that your project remains on schedule and costly delays are avoided.

Surveying Services

Correcting manufacturing defects and integration issues can be time consuming and costly. Intertek's surveying services team provides detailed information about your power plant's infrastructure, so you can be confident that component integration will be successful.

Failure Analysis & Forensic Engineering

Our knowledgeable forensic engineers perform on-site investigations into the root cause of failures as well as possible contributing factors that lead to accidents, complex failures, fires, and explosions.

The failure modes we investigate often include fatigue, fracture, creep, corrosion, erosion, low-quality welds, wear, improper material selection, poor design or improper maintenance.



Non-Destructive Examination

Intertek provides non-destructive testing, both in discrete projects and in conjunction with our engineering evaluations and condition assessments.

We utilize non-invasive evaluation and testing methods such as visual (VT), liquid penetrant (PT), magnetic particle (MT), ultrasonic (UT), eddy current (ET), radiographic (RT), and metallurgical (e.g. replication, hardness, pmi) to determine the integrity of materials, components or structures such as pipelines and piping systems, turbines, generators, boiler tubes, storage tanks, and structural steel.

High Energy Piping Integrity Management

High energy piping (HEP) system examinations are necessary to ensure the safety of personnel and reliable operation of power plants and include a Grade 91 evaluation program based on walkdowns, stress analysis, support adjustments, remaining life estimation; life management assessment with complete design review, hot and cold pipe support walkdowns, as-designed and as-found stress analyses, code compliance and life consumption analyses; and a condition assessment program that utilizes conventional and advanced non-destructive examination methods.

Metallurgical & Mechanical Testing

Operating a full-service, independent, fully equipped metallurgical laboratory, welding shop, and mechanical testing laboratory, we provide failure analysis, probable root cause analysis, specialized mechanical testing, weld procedure specification reviews, remaining life assessment, boiler and heat recovery steam generator (HRSG) tube sample analysis, and creep rupture testing.

Wind Energy Services

Intertek supports wind power industry manufacturers, owners, developers, and operators with critical services including product and system certification, structural analysis and inspection, field inspection and labeling, reliability engineering, failure analysis, independent verification, and monitoring.

For more information



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