

Press Release: ETN launches a new initiative on Gas Turbine Life Assessment and Extension

ETN Global, an esteemed international members association in the field of turbomachinery technology, is delighted to announce the launch of the Gas Turbine Life Assessment and Extension Working Group. This revolutionary initiative aims to tackle the challenges associated with extending the life of gas turbine components, with a specific focus on critical parts such as hot gas path components, rotors, and compressors. The initiative is aligned with sustainability goals, promoting the utilisation of existing parts and reducing operational costs, while also contributing to the conservation of precious materials.

Traditionally, gas turbine components are designed with a nominal design life as determined by the original equipment manufacturer. However, advancements in technology and operational practices have provided operators with an opportunity to extend the useful life of these components beyond their initial recommended limits. The Gas Turbine Life Assessment and Extension initiative seeks to explore the feasibility of extending the life of these components and develop effective strategies to manage the associated risks.

The Working Group has identified several key initiatives that will be addressed, each dedicated to specific aspects of gas turbine life assessment and extension:

1. **Enhancing Confidence in Life Prediction:** This initiative focuses on employing advanced non-destructive inspection techniques to improve confidence in predicting the remaining life of critical parts under cyclic duties.
2. **Rotor and Disc Lifting:** By developing an engineering platform and utilizing non-destructive inspections, this initiative aims to estimate the time to initiate creep and fatigue cracks in rotors and discs, enabling informed decisions regarding their life extension.
3. **Compressor Integrity and Reliability:** This initiative seeks to develop comprehensive inspection and risk assessment methods to address the integrity and reliability of compressor parts, minimizing the risk of unplanned outages and enhancing overall compressor performance.

Dr. Siavash Pahlavanyali, from RINA Consulting, the Chairman of ETN's Gas Turbine Life Assessment and Extension Working Group, emphasizes the importance of collaboration in this initiative:

"The Gas Turbine Life Assessment and Extension initiative invites owners, operators, and service providers to join forces and contribute to these critical engineering analyses. By working together, we can expand our knowledge, effectively manage risks, and extend the useful life of gas turbine components."



ETN Global warmly invites all interested parties to participate in the Gas Turbine Life Assessment and Extension Working Group. This initiative offers a valuable opportunity for collaboration, enabling us to overcome the significant challenges by working towards finding solutions associated with gas turbine life assessment in the face of evolving fuel options and increased cyclic operations.

More information about the Gas Turbine Life Assessment and Extension Working Group is available on [our website](#).

To express interest in joining the new initiative, please contact ETN's Senior Technical Manager Rene Vijgen: rv@etn.global



For further details related to the press release, please contact ETN's Communications Manager Viktorija Charbagi: vc@etn.global

About ETN: *ETN Global is a membership association bringing together the entire value chain of the gas turbine technology community and addressing operational and research challenges of utilities, industrial users and oil & gas sector. Through cooperative efforts and by initiating common activities and projects, ETN encourages and facilitates information exchange and cooperation to accelerate research, development, demonstration, and deployment of safe, secure and affordable carbon-neutral turbomachinery-based energy solutions by 2030, implemented widely and globally by 2050. More information available on: www.etn.global*