

HOLGER LUKAS, P.E., C.C.P.

EDUCATION

BS Marine Engineering - U.S. Merchant Marine Academy, 1966
Licensed Professional Engineer
Certified Cogeneration Professional

MEMBERSHIPS

American Society of Mechanical Engineers
Past Chair, Board of Directors of ASME International Gas Turbine Institute
Cogeneration Institute of the Association of Energy Engineers
American Society of Heating & Air Conditioning Engineers
National Society of Professional Engineers
Chair, ASME Performance Test Committee 3 "Fuels"

LICENSES AND CERTIFICATES

US Coast Guard License as Second Assistant Engineer of Steam Vessels any Horsepower
US Coast Guard License as Third Assistant Engineer of Motor Vessels any Horsepower
Licensed Professional Engineer -- State of Minnesota
Licensed Professional Engineer -- State of New York
Certified Cogeneration Professional

FIELDS OF COMPETENCE

Forensic Engineering
Failure Analysis
Mechanical Design and Design Analysis
Fuels & Fuel, Lubrication, and Cooling Systems Engineering
Gas Turbine Application Engineering
Propulsion & Power Systems Maintenance & Operation
Cogeneration & Power Plant Design

CAREER HISTORY

USCG - licensed Marine Engineer, sea duty

United Technologies Corp. - Turbo Power & Marine System - Gas Turbine Engineer responsible for testing ancillary equipment of aircraft derivative industrial gas turbines and for design of lube oil and fuel oil systems.

FORCON INTERNATIONAL

Brown Boveri Turbomachinery (and predecessor companies) - Gas Turbine Design, Fuel Systems, and Senior Mechanical Systems Engineer responsible for design, development, commissioning, purchase specifications, and trouble shooting of fuel, lubrication, and cooling systems.

Experience included distillate oil, natural gas, and crude and residual oil.

Encotech, Inc. with assignments including:

- Failure Analysis and Forensic Engineering
- Fuel Oil Treatment Plant Design and Commissioning
- Corrosion Testing of Materials for Recuperative Heat Exchanges
- Cogeneration Feasibility Studies
- Cogeneration Plant Design, Startup and Commissioning
- Gas Turbine & Diesel Cycle Engine Failure Investigations
- Power Plant Cycle Efficiency Studies

Independent Consultant with assignments including:

Failure analysis and cause and origin investigations

- Gas Turbines
- Steam Turbines
- Medium Speed Diesels
- Generators
- Compressors

Scope of damage assessment

Due Diligence investigations of new gas turbines

Expert witness services

Member of Dispute Resolution Board (DRB) of a 800MWe combined cycle plant

Adjudicator on Long Time Service Contract for two 170 MW gas turbines

Languages - Fluent in German and Spanish. Knowledge of French.