# G L Balaji

# Technical Sales support engineer Thermal & load calculation expert



## **SUMMARY**

A mechanical engineer by profession, track record in designing & calculating mechanical systems, P & ID ,turbines for power generation and service business areas and thereby contributing to the success of proposals, sales, and project execution. A continuous learner, having a deep passion for technical details and commercial success. Currently based in Hamburg, Germany (with a granted work visa permit) and originally born and brought up in India.

# EXPERIENCE

### SIEMENS GAMESA RENEWABLE ENERGY (GERMANY)

Wind Turbine Company

Solution Engineer - Load Calculation (Feb'24 - as of today)

- Learned the application of MATLAB and BHawc tools in 2 months' time, and designing wind turbine load cases for power production, start up, emergency, parked or standstill conditions.
- Calculating suitability check for ultimate load and fatigue load based on wind parameters like air density, shear value, and upflow angle. Reviewing aerodynamic simulation in Bhawc tool and engineering quality by submitting check list.
- Currently engaged in 3 projects: Knajsoberget, Nuenwalde and Eemshaven\_West, and supporting sales & proposal teams for a better decision making of configuration.
- Contributing to the standardization of configurations by calculating power curve, ULS-ultimate load and FLS-fatigue loads and post processing tower load.

#### SIEMENS ENERGY (INDIA)

Siemens Steam Turbine

Technical Sales Support Professional (July'19 – Aug'21) Component Engineer – Thermal Calculation (Sept'21 – Jan'24)

- Prepared HMBD, heat rate, steam rate, and exhaust pressure curves. Collaborated on steam turbine design optimization with sales and project teams.
- Conducted flow path calculations, achieved 97% OTD, and created detailed bill of materials, resolving site issues and customer queries.
- Fair understanding process diagrams, adept in CT/PT, generator protection, and relay systems.
- Executed on-site performance guarantee tests, monitoring flow, pressure, and temperature gauges, and DCS in the control room.
- Deep understanding in turbine supervisory panel, governor, vibration monitoring, over speed protection. Provides inputs to control logic and interprets P&IDs.

#### NUCLEAR FUEL COMPLEX (INDIA), in external contract

Mechanical Maintenance Engineer (July'18-June'19)

- Monitored regularly tube rolling mill and checked lube oil quality thru' refractometer to ensure uninterrupted operations.
- Contributed to the planning and coordination of planning of maintenance works in the entire facility.
- Worked (hands-on) on Pilger mill machine maintenance, which is used to make zircalloy tubes, further in which uranium pallet to be inserted.

♣ + 49 152 52685861☐ gl.balaji95@gmail.com

Holstenring11, 22763 Hamburg

#### **EDUCATION**

Jawaharlal Nehru Technological University Kakinada (INDIA) Bachelor of Technology Specialized in Mechanical Engineering 2013–2017

Masters Certificate course in CAD/ CAM from Indo Danish Tool Room 2017-18

#### LANGUAGES

☑ English – fluent

☑ German – beginner

☑ Hindi -Native

Software Skills

Auto CAD
Solid works
Catia
ProE(Creo),
Unigraphics
Ansys MS Office
Matlab
BHawc tool
Turba
Turca
krawal

GENERALINFO

DOB: July 14th, 1993

**Hobbies:** Drawing

Sports: Cricket, Badminton