



## Senior Electro-Mechanical Technician

Tulum Energy is an early-stage technology company developing an innovative Turquoise Hydrogen pyrolysis solution for clean and inexpensive hydrogen production. Our platform technology will have a major impact in our world's attempt to decarbonize by reducing greenhouse gas emissions. As we race towards this critical goal, we are building a team of world class individuals that are comfortable working at a start-up company, are innovators and have a passion for climate change.

We are currently looking for an experienced **Senior Electro-Mechanical Technician** to lead the preparation, instrumentation, controls, gas sampling and repairs of Tulum's reactor. You will further assist the Test Team in conducting actual reactor and system testing of Tulum's Pilot and Commercial Plants (FOAK) at our host site in Monterrey, Mexico. In this role you will report directly to the Director of Field Deployments and will be a key Team member in Tulum's quest to achieve key performance goals (KPIs).

### Primary Responsibilities:

We are seeking a highly skilled and experienced Electro-Mechanical Technician to join our talented team. The ideal candidate will be responsible for the installation, maintenance, troubleshooting, and repair of complex electro-mechanical systems that form an integral part of the Thermal Pyrolysis system. This role demands a detail-oriented professional with a strong technical background in both electrical and mechanical disciplines, capable of working independently or as part of a team in a fast-paced environment.

### Key Responsibilities:

- Installation & Setup:
  - Install, assemble, and test various electro-mechanical systems and equipment per specifications and schematics. This will include all core (reactor and heat exchanger) and BOP (Balance of Plant) equipment. It will be your responsibility to ensure all are operating as per the Team's needs and requirements.

- Calibrate and align systems (gas and solid carbon sampling), instruments (temperature, pressure, heat flux, mass flow meters, etc.) to ensure optimal performance during test campaigns.
- Maintenance & Repair:
  - Perform routine and preventive maintenance on all said electro-mechanical equipment to minimize downtime and rapid turn-a-round times
  - Troubleshoot and repair system components, such as motors, sensors, actuators, carbon bag filters, etc. and control systems as needed
- Technical Support:
  - Diagnose and resolve issues with automation equipment, conveyors, material handling, electrical systems, DAQ (Data Acquisition) systems and other machinery as needed.
  - Collaborate with engineering and production teams to optimize system functionality.
- Documentation:
  - Maintain accurate records of work performed, including maintenance logs, repair reports, and system updates and test logs as needed
  - Update technical manuals and schematics as needed.
- Safety & Compliance:
  - Adhere to all safety protocols and regulations during installations, maintenance, and repairs.
  - Ensure compliance with industry standards and company policies.

#### Qualifications:

- Education:
  - Associate degree or technical diploma in Electro-Mechanical Technology, Mechanical Engineering, Mechatronics, or a related field. Relevant certifications (e.g., OSHA, PLC Programming) are a plus.
- Experience:
  - Minimum of 7 years of experience in an industrial setting (Petrochemical, Gas Turbine plant, Automotive, Gasification, etc.) working on a variety of electro-mechanical systems including calibration, maintenance and repair.
- Technical Skills:
  - Proficient in reading and interpreting electrical and mechanical blueprints, CAD Prints, schematics, P&IDs and electrical diagrams.

- Expertise in working with PLCs, HMIs, VFDs, and control systems (DCS, BMS, National Instruments, etc.).
- Strong understanding of hydraulic, pneumatic, mechanical, high pressure gas and combustion systems.
- Skilled in the use of hand tools, mills, lathes, drill presses, metal fabrication techniques, diagnostic equipment, and testing instruments.
- Some experience with CAD packages such as CATIA, Solid Works, AutoCAD, CREO or the like and associated GD&T standards
- Low and high voltage electrical background
- Additional Skills:
  - Strong problem-solving and analytical abilities.
  - Excellent communication and interpersonal skills.
  - Ability to work independently or collaboratively in a team environment.
  - Spanish Language Skills a plus
- Physical Requirements:
  - Ability to lift heavy equipment (up to 50 lbs) and work in physically demanding conditions.
  - Comfortable working in confined spaces, heights, and varying environmental conditions.

## Tulum Energy

Tulum Energy is an early stage and dynamic Start-up Company. Our Standard employment package includes a Base Salary, Bonus, Stock Options, Vacation and Health Insurance. For the current opening:

- The position is based initially in Monterrey, Mexico
- Salary Range: \$50,000-\$65,000 USD
- Permanent Full-Time Position