

Job Description: Equipment Commissioning Technician

Status: Non-exempt, full-time

Salary: Approximately \$50,000 to \$70,000 per year with overtime

Summary of the Position: The Equipment Commissioning Technician is a demanding, highly skilled technical position. This EC Tech performs electro-mechanical equipment assembly, participates in system qualification testing and prepares equipment for deployment. In the field they perform equipment installation, troubleshooting and provides support as required to bring the equipment into operation. During the commissioning period the EC Tech collects system process and equipment performance data, provides guidance to the customer in safe and effective operation of the equipment, and provides detailed reports on the system and its performance to the main office. The EC Tech also inspects and performs on-site service for the existing installed equipment base. The position requires a thorough knowledge of electro-mechanical equipment installation, operation, and troubleshooting combined with the ability to complete tasks effectively and safely on-site based on guidance from the home office.

Duties and Responsibilities

General:

Under general supervision by the Engineering Manager performs the following tasks in support of Thermochem Inc.:

- Responsibly executes all work assignments with a focus on safety, quality, responsible creativity, electrical/mechanical aptitude, and follow through.
- Coordinates work tasks details with stakeholders prior to start of work.
- Attentively participates in Job Safety Analyses and other safety meetings in the home office and in at customer sites.
- Routinely records and reports detailed technical data at the home office and during deployment in the field.
- Assists with preparation of equipment installation reports.
- Prepares and adapts equipment operation and maintenance manuals.
- Provides sound technical advice, contributes to process development, and demonstrates technical competence and continued improvement with minimal direction.
- Performs other assigned duties and tasks as required.

Equipment:

- Reads and understands assembly drawings, system schematics, and bills of material to kit parts, build, test, and install electro-mechanical equipment.
- Utilizes commercial instruction manuals and typical product specification sheets to correctly perform tasks including but not limited to: install valves in correct orientation, replace valve and pump seals, properly torque compression fittings and seal NPT threads.

- Safely and methodically performs equipment testing including but not limited to: low pressure leak checks with air (100 psi), high pressure leak checks (5,000 psi) with water or (2,000 psi) gas, pump operation, valve operation, and steam valve operation.
- Diagnoses and fixes basic electronic circuits using equipment including digital volt meters, oscilloscopes, and power supplies.
- Solders surface mount, fine pitch, through board and high temperature components.
- Builds and tests medium complexity Programmable Logic Controller systems.
- Performs routine maintenance of field equipment and instrumentation with initiative-taking attention to detail.
- Prepares and packs equipment for transport to the field in support of initial installations, routine field operations and direct-to-customer use.
- Operates field equipment in the laboratory and in the field in a safe and effective manner.
- Assists in the preparation and maintenance of equipment inventories for general field operations, equipment-specific installation and service kits, and field sampling tools, instruments, sampling bottles and miscellaneous equipment.

Safety:

- Works safely and appropriately in powerplant, wellfield, machine shop, and office environments.
- Attentively participates in safety meetings on-site with the customer and in the home office.
- Assists in the development and maintenance of safety procedures for new and existing tasks.
- Actively discovers, learns and follows client-specific safety requirements.

Education, Skills, and Abilities

Education/Experience:

- Minimum of 5+ years of experience.
- Minimum AA/AS degree, or a specialized and relevant training/certification, or alternative equivalent.

Skills:

- Demonstrated ability to comprehend, interpret, and convey detailed technical data.
- Demonstrated excellence in identifying problems and developing solutions.
- Demonstrated ability to develop and maintain good interpersonal skills in order to communicate rapidly and effectively within the organization and to represent the company in a professional manner to clients.
- Demonstrated computer literacy skills including ability to access and read word processing documents, spreadsheets, and navigate through a basic file folder structure.
- Strong skills in Microsoft Office (Outlook, MS Teams, Excel, Word, PowerPoint, Access).
- Must be able to work with a high degree of self-direction and sound, safe, independent judgment.

- Must sustain high productivity in both field and office environments.
- Strong written and verbal communication skills.
- Must be team-oriented, flexible, and able to meet tight deadlines.

Work Hours and Travel:

- Office work hours are M-F 7:30 to 4:30pm.
- Hours during field deployment vary but are approximately 10 to 12 hrs. per day, up to 7 days per week.
- Field deployments typically last 2 to 21 days on site, travel time not included.
- Frequent and extensive travel within the US and internationally, approximately 15 to 30 weeks per year.
- Must be available to work overtime and varying hours, including frequent and extended assignments to remote work sites with limited connectivity.

Physical Requirements:

- Ability to lift 70 lbs. and to push/pull up to 100 lbs.
- Sitting, lifting, bending, climbing, twisting, reaching, walking, standing and repetitive motion
- Work distribution is approximately: 15% Computer/desk, 25% shop/warehouse, 20% travel, 40% field
- Driving of company vehicles and operation of equipment and machinery (with training)

Working Conditions:

- Standard indoor conditions during office work
- Outdoor sheltered working conditions for shop/warehouse work
- Outdoor unsheltered conditions during field work, including extreme heat and cold, all weather
- Field deployments in all environments from greenfield to fully operational power plants

Licenses:

- Class C motor vehicle operator's license
- Driving record acceptable for Thermochem's corporate insurance policy
- Passport
- IATA DG Shipping (optional)
- HAZWOPER (optional)

Skills Advancement:

- This is an entry-level position that requires a steep learning curve. The skills learned in this position are applicable throughout the company, and our successful Field Technicians are often selected for higher positions in the Field and Laboratory departments.