

**HARPER INTERNATIONAL****POSITION DESCRIPTION**

The Position Description is the tool used by Harper International to communicate and clarify the essential job functions, establish the basis for performance expectations, and identify training needs for each position.

**Part I - Reporting Structure****Job Title: Engineer, Technology Center****Department: Technology****Reports To: Director of Technology****Supervises (Positions):****Status: Exempt****Part II – Position Objective**

- 1) Conducts [with help from technicians] process trials for potential customers of thermochemical processing systems of Harper International
- 2) Effectively communicate results of laboratory work in timely, well-organized written and oral formats.
- 3) Provides leadership in a laboratory facility, in a manner that provides seamless operation in a **safe**, world class environment.
- 4) Leads in the design of test set up and experimental work to help customers develop new materials and processes on an industrial scale.

**Part III – Job Responsibilities****Essential Duties**

1. Lead and coordinate laboratory testing from the inquiry/proposal stage through testing, reporting and material disposition.
  - Includes scheduling testing, procuring materials, creating timelines and action items, ensuring that drawings, materials, parts, etc. are received, designing the test, documenting test results, reporting results, disposing of material, coordinating payments and reporting on budgets.
2. Use critical thinking skills to determine if a test is appropriate for Harper, examine potential technological gaps in our equipment and/or processes as they relate to the test.
3. Review MSDS information, conduct safety meetings, and otherwise take full responsibility for the **safe operation** of the facility, before, during and after a test.
4. Monitor equipment maintenance and wear and tear, budget for, order and oversee installation of new equipment and parts and needed.
5. Actively participate in the investigation of technological advancements or new technologies and provide conceptual or practical applications for these technologies within the business units .
6. Interact with Sales to understand & evaluate client specifications/requirements.
7. Coordinate with Sales to prepare proposals inclusive of all necessary specifications / information.

8. Provide the coordination between Sales, Applications, and Engineering to accommodate customer specifications and provide technical solutions.

#### **IV – Knowledge, Skills, Education**

1. Bachelor's Degree in chemical engineering, material science or related field
2. Familiarity with multiple engineering disciplines (electrical, process, materials, mechanical) ideal.
3. Must have industrial scale testing equipment design experience preferably in an R&D/ product development setting.
4. Understanding of high temperature processes essential
5. Must possess high degree of technical depth and creativity
6. Exceptional people and project management skills
7. Solid understanding of the practical application of engineering fundamentals (from a "1<sup>st</sup> principals" perspective)
8. Strong "hands on" bias" with mechanical adeptness.
9. Experience in running industrial lab experiments, to include handling of hazardous materials, **safety compliance**, etc.
10. Must possess the following "soft" skills"
  - a. Comfort & ability to deal with ambiguity
  - b. Commercial savvy
  - c. Good judgment
11. Above average written communication abilities, including proposal and lab writing skills

#### **V- Work Environment**

1. Industrial, high temperature processing laboratory
2. Variability in work hours depending on the testing – this can include first or third shift work.

#### **VI - Physical Demands**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to walk. The employee is frequently required to sit, use hands, reach with hands and arms, talk and hear. The employee is occasionally required to stand, stoop, kneel, crouch or crawl.