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

Name:	Date: April, 2011
Job Title: Project Engineer (Ovens)	Department: Engineering
Related "market" titles: Senior	Supervises (Positions):
Mechanical Design Engineer	Status: Exempt
Completed By: HR Manager	Reports To (Position) : Director of
	Engineering

Part II – Position Objective

Provide broad-based equipment design expertise and leadership to large OEM projects. The scope of the responsibility encompasses all aspects of engineering from mechanical to electrical and instrumentation. Responsible for the technical integrity of product, from design concept to final product. Provide the leadership associated with running project on time and within budget.

Part III – Job Responsibilities

Essential Duties

- 1. Provide broad-based design expertise in terms of functionality, cost, and manufacturability of large OEM projects.
- 2. Organize & conceptualize assemblies and sub-assemblies so that portions of the job can be effectively and appropriately delegated amongst the project team.
- 3. Utilize design software to:
- Provide design concept & specifications for other members of design staff
- Perform engineering calculations
- 4. Translate product performance requirements into technical specifications.
- 5. Select and specify materials and interact with purchasing to modify materials or components when necessary.
- 6. Oversee design staff to include delegation of tasks, approving rework, and checking drawings and BOM's for accuracy.
- 7. Communicate with other members of the project team and other departments to ensure projects are completed within time/budget constraints.
- 8. Provide necessary guidance, mentoring, and training on Harper-specific technology and best practices to transfer knowledge and increase efficiencies.
- 9. Collaborate with chief engineer on projects that require in-depth technical analyses.

10. Interface and provide assistance to subcontractors and customers.

11. Review and certify final release of drawings.

- 12. Support manufacturing with design/fabrication/assembly improvements and ensure project is completed within time/budget constraints.
- 13. Provide support during the installation and start-up phase of projects.
- 14. Provide technical expertise and support during customer interactions.
- 15. Actively manage & drive overall project cost, schedule, and quality performance relative to internal metrics & contractual requirements.
- 16. Assist Applications department with engineering studies as needed.

IV – Knowledge, Skills, Education

Knowledge, Skills, Education

1. BSME or BSMT required

- 2. In depth knowledge of mechanical engineering design skills
- 3. In-depth knowledge & experience designing assemblies, sub-assemblies, and components using the following manufacturing processes:
- Sheet metal
- Large structural fabrications
- Machining
- Low-volume assembly
- 4. In-depth knowledge of & experience with:
 - Convection ovens
 - Fan systems
 - Sheet metal fabrication
- 5. Experience & familiarity with convection heating, thermal layout/design, and air-flow systems.
- 6. Must be fully proficient with 2D & 3D design tools, such as Autocad and Inventor.
- 7. Capability to develop innovative optimal designs
- 8. Must demonstrate good judgment, ability to make decisions and delegate tasks effectively.
- 9. Must possess ability to communicate effectively with customer
- 10. The following is considered desirable: familiarity with:
 - Automated material handling systems
- 11. Must be able to travel (both domestic & international)- 25%

V – Physical Requirements

The job requires the following less than 1/3 of the time:

- 1. Standing
- 2. Walking
- 3. Reaching with arms/hands
- 4. Climbing or balancing
- 5. Stooping, kneeling, crouching or crawling
- 6. Talking or smelling
- 7. Lifting or moving up to thirty pounds

The job requires the following $1/3 - 2/3$ of the time:	
1. Sitting	
The job requires the following more than 2/3 of the time:	
1. Using hands	
2. Talking	
3. Hearing	