



Executive Search & Management Consulting since 1979

SYSTEMS ENGINEERING DIRECTOR **POSITION SPECIFICATION**

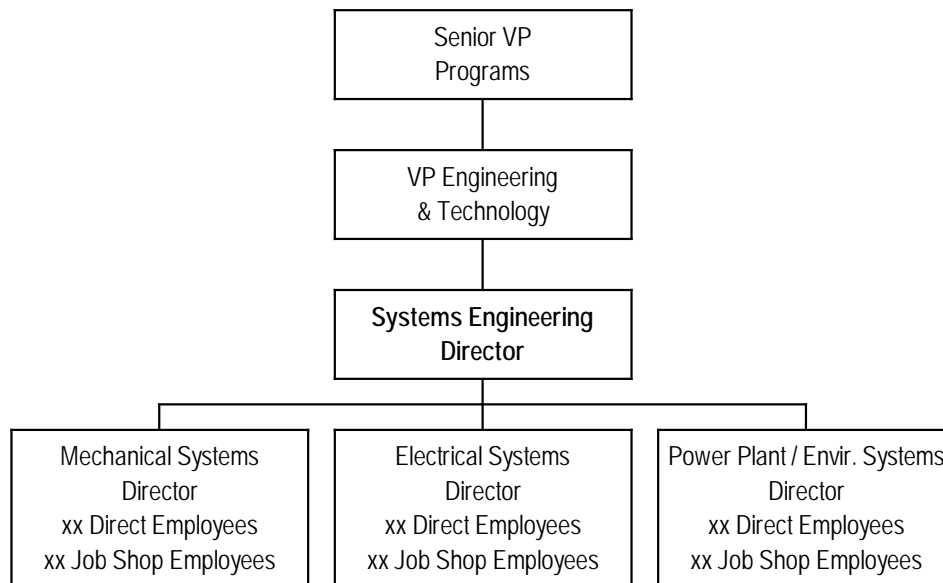
OVERVIEW:

[Company] is a [location]-based manufacturer of [products]. The firm has entered its [xx] year, with record revenues \$[xx], strong momentum and significant projected growth. Perceived as the leader in [products], the firm has a contractual backlog of \$[xx], and is highly profitable. The company recently acquired ownership of [Company Y], which has completion and service capabilities at its facilities in [locations].

The company's [location] headquarters facility is responsible for primary manufacturing of [products]. The firm intends to hire a **Systems Engineering Director [SED]**, reporting directly to [Superior], Vice President of Engineering. The mission for the newly created position is to achieve a higher level of engineering leadership and performance, to bring focus to the systems groups in [location], and to help implement a higher level of performance and accountability. As well, the SED will be expected to make significant progress on resolving technical projects on the engineering issues list.

SCOPE OF OPERATION:

The SED will manage a staff of three direct reports, and a total organization of approximately xxx people, as configured on the organization chart shown below:



The SED is part of the core engineering group that will be based in [location]. Primary responsibilities will include new product development and product engineering. There will be

dotted-line responsibility into the [x centers], located in [locations]. The SED will also have dotted-line responsibility for the [x centers], located in [locations].

PERFORMANCE OBJECTIVES:

The SED will be responsible for labor allocation, planning, budgets, policies and procedures, and scheduling in support of the corporate strategic plan. To complete the mission for this position, the SED must balance the business needs of the corporation with the engineering goals to produce the following critical actions and results:

1. **Improve Level of Talent:** The SED must rapidly assess the technical capabilities of the systems groups, create a skills analysis matrix, and outline a plan to improve the level of talent within each group. This will be achieved through:
 - a) New hires: The SED must ensure that new hires possess needed technical skills that will help complete the skills matrix.
 - b) Strategic replacements: The departments contain many long-tenure individuals. Prior to these employees retiring or leaving the company, the SED must ensure that replacements are handled strategically, consistently adding value to the team.
 - c) Skills training: By encouraging continuing education, and defining and helping to arrange for specific skills training (within a limited budget), the SED must ensure that each engineer on the team is optimizing their knowledge and capability.
 - d) Cross training: When practical, the SED must identify individuals who possess a particularly valuable knowledge base, and arrange cross training to upgrade the overall departmental skill set.
2. **Improve Accountability:** The SED and his/her direct reports must take a project engineering approach, and identify all cross functional resources impacting engineering projects. The SED must establish a high-level milestone schedule, and drive this scheduling down through the departments to a detailed level, to ensure that each participant in a project understands and takes responsibility for assigned tasks. The SED must get other departments to accept an appropriate level of accountability for their representative share of the work. The SED will monitor cross-functional performance and ensure that project resolution is expedited.
3. **Improve Productivity:** The SED must obtain the highest possible level of work output from the systems groups, staying within departmental budgets. The SED can positively impact productivity by hiring well, balancing the workload, defining objectives, improving the technical capability of the department, and helping to improve morale.
4. **Employee Recognition:** The SED must improve employee recognition programs, including mentoring, departmental awards, social events, etc. to foster improvement in performance and teamwork.
5. **Simulations:** To deal more effectively with the increasing complexity of systems on [Company product], the SED must champion improved simulation ability. This will include internal lobbying for simulation funds, and, when funds are available, improving facilities, software packages, and scheduling for more simulation work.

6. **Design Simplification:** The SED has a unique opportunity to be a new set of eyes to examine current design parameters and seek ways to simplify designs. This could include using fewer parts; looking at methods of manufacturing, testing and installation; examining how systems communicate with each other; challenging long-standing designs for potential improvements, etc. When simplification opportunities are identified, the SED will take such discoveries and create an action plan to implement the change throughout the systems.
7. **FAA Regulations:** As FAA certification becomes increasingly challenging, the SED must proactively seek ways to obtain approvals more easily. The SED must anticipate, predict and prevent FAA objections, and build solutions into designs. The SED must know how and when to negotiate interpretations with the FAA, and teach the teams how to implement smart FAA strategies. The SED must help the site managers understand and deal with the differences between FAA offices.
8. **Management Development:** With guidance and assistance from the SED, the systems Directors will continue to mature and add value to the organization. The SED must help each Director to round out his technical and management skills, and plan for hiring that will complement and enhance the skill set currently possessed by each manager.
9. **Improve Accuracy of Performance Reviews:** The SED will help the Systems Directors to improve accuracy of performance reviews by ensuring that departmental goals with specific, tangible performance objectives are defined for each individual. The SED will further ensure that deficiencies in performance are specified, quantified, and a resolution plan is established for correcting such deficiencies. Potential solutions could include remedial training, changing job assignments, coaching, or, in extreme cases, discharge. The SED must ensure that each individual is highly accountable for performance, with specifics of individual performance understood by all parties.

PERFORMANCE EVALUATION:

The success of the SED in meeting the above performance objectives will be measured by the following:

- Significant progress is being made on engineering issues list items.
- Issues are moved rapidly from the issues list to the implementation list.
- The systems engineering groups are performing to schedule.
- The quarterly task lists for each department move to [xx%] on-time completion from current level of [yy%].
- The systems engineering groups succeed in having other departments accept more accountability for resolution of issues.
- Performance reviews are more accurate, and lead to specific action for improvement.
- There is an obvious and noticeable increase in the talent level of the groups.
- Successorship planning and hiring of backups for key individuals is happening regularly.
- There is a qualitative improvement in relations with the FAA: Fewer items move to dispute stage; there are fewer escalations of issues to higher management levels (on both sides).
- The SED demonstrates a high level of support to engineering organizations at outlying sites.

- The SED contributes concrete suggestions for design improvements and methodology.

BACKGROUND AND EXPERIENCE:

The ideal candidate will have the following education, work history, knowledge and skills:

- Bachelor's degree in *[Specialty]* Engineering.
- *[xx]* years of progressively responsible experience in *[industry]*, with at least *[x]* years in management of engineering in a production environment.
- Must have had engineering responsibility for all or most of the following *[product]* systems: *[systems a, b, etc.]*.
- Experienced with FAA regulations part 25.
- Must have managed an organization of at least *[xx]* people, preferably over *[number of people]*.
- Strong written and verbal communication skills, including excellent presentation skills.
- Good program/project management skills, with the ability to develop goals, schedules, tracking processes, and achieve closure on projects.
- Skilled in identifying root cause corrective action for *[product]* issues.
- Familiar with CADAM and CATIA.

PERSONALITY AND CHARACTER:

The successful candidate will be have all or most of these unique traits:

- Autonomous; works well independently.
- Self-starter.
- Highly motivated.
- Highly credible.
- Decisive.
- Strong leader.
- Team player.
- Task-oriented.

REPORTING RELATIONSHIPS:

The SED reports to *[Superior]*, the Vice President of Engineering. *[Superior]* has a *[degree]*, and *[degrees]*. He has been with *[Company]* since *[year]*; joining the company as a *[position]*, and progressing through positions as *[positions a, b, etc.]*.

[Superior] considers himself a stickler for details and metrics, and wants daily feedback from key reports on schedule and budget performance. He will have daily interaction with the SED either in person, on the phone or via e-mail. *[Superior]* will expect the SED to be proactive, and take responsibility for issues. *[Superior]* does not want surprises, but will treat mistakes calmly and seek solutions.

COMPENSATION:

Base salary of *[Salary]*. Bonus is targeted at *[Percentage]*, and is based *[Percentage]* on personal and departmental performance goals, and *[Percentage]* on corporate goals. The company has been paying close to *[Percentage]* of target in recent years.

Company benefits include: Medical insurance (choice of HMO, PPO, or indemnity plan); Dental plan (2 choices); Short-term disability insurance; Long-term disability insurance; Life insurance; Flexible Spending Accounts; Investment plan (company matches *[Percentage]* of first *[X]* %; employee can contribute up to *[X]*%; Pension plan; Employee Assistance Program (EAP).