

by Roger Corley, Life Cycle Engineering

6 things to look for when you hire your next

MAINTENANCE PLANNER

Why do maintenance departments need to "invest wisely" when hiring for a maintenance planner position? Consider this: A skilled maintenance planner will save three hours in time and/or materials for every hour of effective planning he or she does. Having the right person in this position can mean the difference between an efficient planning and scheduling process and one that wastes time and money.

In my 30-plus years in the heavy-chemical industry and in my time later as a consultant, I've identified six primary attributes to look for in an applicant:

1. **Good communication skills:** Your candidate must be a good communicator. The planning role touches many work streams. Your planner-to-be must be able to express himself or herself verbally and in writing to be effective in all of those touch points. The planner must be able to put down a coherent, appropriately detailed job plan on the work order. Failure to do so will cause delays and could even result in a technician missing vital safety information and getting injured.

2. L**ogical thinking:** You can use logic puzzles in the hiring process to determine whether the person thinks in a logical progression. Whether it is an unfolded shape puzzle or another logic puzzle, this will reveal how much logic or "thinking in steps" a person possesses. Even a simple test, such as building a job plan for cutting the grass, may reveal this necessary trait.

3. **Computer literacy:** The planner will likely be the facility's superuser of the CMMS (computerized maintenance management system), so he or she will need to quickly become an expert user and teacher to be effective. Familiarity and experience working with spreadsheets and software programs like the Microsoft Office suite will help the planner prepare the detailed reports that will be required as a part of the position.

4. **Organizational skills:** It has often been said that you can tell a lot about a person by looking at his or her desk or workspace. Organizational skills are as important as any other trait. I have seen planners whose desks are a disorganized jumble of papers. In this situation, things may get overlooked or delayed because documentation, records, and notes get lost in the mess. This, again, can cause delays or worse.

5. **Attention to detail:** When I was in the armed forces, I learned in a very real way what attention to detail really means: To me, it means the ability to finish. In the planning world, detail can be a tricky thing. Too much detail can seem to the tradesperson like someone is telling him or her how to perform tasks. By contrast, I have always thought of planning as creating a checklist to help remind the craftsperson what comes next. I would never presume to tell a skilled craftsperson how to use his or her tools. At the other end of the spectrum, too little detail may cause a job delay or even cause someone to be injured because the planner left out an important safety note.

6. **Ability to visualize:** This is a planner competency that might not come naturally. What's required is the ability to visualize, in one's mind's eye, the best way to perform the requested maintenance task. Experience gained through repetition and siphoning knowledge from experienced craftspeople are the only tools I know of to develop this competency.

Having these planner competencies will not guarantee that the candidate will be a successful employee, but not having them will almost certainly mean a rough road ahead.

Roger Corley is a work management and materials management subject-matter expert with Life Cycle Engineering (www.lce.com). He has more than 30 years of experience in maintenance planning and scheduling and materials management. Corley is a certified facilitator for maintenance planning and scheduling with the Life Cycle Institute. Contact him at rcorley@LCE.com.



by Terry Alexander, Life Cycle Engineering

6 things to look for when you hire your next RELIABILITY ENGINEER

During my 30-plus-year tenure in industry maintenance and operations, I have seen organizations create or fill reliability engineering positions without clearly defining expectations and qualifications. Ironically, this approach could introduce failure into the RE position.

The reliability engineer's primary role is to identify and manage risks that could affect plant or business operations. The reliability engineer must provide leadership, direct the asset management plan, and assume responsibility for improving asset reliability.

This person also champions the plant's work processes, procedures, and practices that ensure adherence to reliability best practices. As the main steward of the plant's installed capacity, the reliability engineer builds and oversees the daily operations asset plan to ensuring optimal utilization and efficiency of the plant's assets.

To help you find the right person for this important role, here are six attributes to consider when hiring or developing your next reliability engineer:

1. **Communication and computer literacy:** The candidate must possess the ability to communicate effectively with all levels of the organization. He or she should also possess the computer skills required to build effective key performance indicators and create documents supporting asset reliability.

2. **Logical thinking and organizational skills:** The reliability engineer needs to be a logical thinker with excellent organizational skills to accomplish these dimensions of the role: professional and systematic building of the asset operating plan and the risk management plan; ensuring standardization of processes and procedures for proper operation and operator care of production assets; and anticipating reliability- and nonreliability-related risks that could affect plant operations.

3. **Proven leadership skills:** The reliability engineer will need a leadership skill set that promotes the open communication needed to guide efforts that ensure reliability and maintainability of the plant's equipment, processes, utilities, facilities, controls, and safety/security systems.

4. **Flexibility and multitasking skills:** The reliability engineer wears a lot of hats. To be effective, he or she must be able to juggle the previously mentioned controls and processes in a flexible manner, ensuring that there's no failure to meet expectations. He or she also will need to be able to multitask well, especially if managing multiple sites across a corporation.

5. **Formal reliability engineering certification or educational background:** Professional development in the reliability engineering field will ensure that the candidate is proficient using analysis techniques such as statistical process control, reliability modeling and prediction, fault tree and Weibull analysis, and Six Sigma methodology. Your candidate also should have experience using reliability tools such as root-cause analysis and root-cause failure analysis (RCA and RCFA); a failure reporting, analysis, and corrective action system (FRACAS); overall equipment effectiveness (OEE); cost of goods sold (COGS); and other reliability engineering parameters that define operating condition with the liability and costs of assets.

6. **Knowledge of reliability engineering program elements:** A strong candidate should have a working knowledge of lifecycle asset management, configuration management, risk management, and loss elimination. In addition, because the reliability engineer is the owner and developer of your PM/PdM program, the candidate should have a working knowledge of all predictive technology strategies and how to apply them.

While these are not only the attributes to look for in your new reliability engineer, I believe they are the most important characteristics for ensuring that your candidate will succeed in the position.

Terry Alexander is a senior reliability engineer subject-matter expert with Life Cycle Engineering (www.lce.com). He has more than 30 years of experience in the maintenance reliability field and possesses his reliability engineering certification (REC) through Life Cycle Engineering/Clemson University. Contact him at talexander@LCE.com.