

# Reliability Engineer: Sr. Principal Reliability Engineer

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Develops, coordinates and conducts technical reliability studies and evaluations of engineering design concepts and design of experiments (DOE) constructs. Recommends design or test methods and statistical process control procedures for achieving required levels of product reliability. Compiles and analyzes performance reports and process control statistics, and investigates and analyzes relevant variables potentially affecting product and processes. Ensures that corrective measures meet acceptable reliability standards. Analyzes preliminary plans and develops reliability engineering programs to achieve company, customer and governmental agency reliability objectives. May develop mathematical models to identify units, batches or processes posing excessive failure risks. As necessary, proposes changes in design or formulation to improve system and/or process reliability. May determine units and/or batches requiring environmental testing, and specifies minimum number of samples to obtain statistically valid data.

## **Discretion/Latitude**

Works under consultative direction toward predetermined long-range goals and objectives. Assignments are often self-initiated. Determines and pursues courses of action necessary to obtain desired results. Work checked through consultation and agreement with others rather than by formal review of superior.

## **Knowledge, Skills and Abilities**

Applies advanced technical principles, theories, and concepts. Contributes to the development of new principles and concepts. Widely recognized for achievements, technical expertise and meritorious standing within professional field. Identifies, analyzes and develops new business opportunities. Establishes customer contacts, conducts research and analysis into their future plans and needs, assists with the development of their specifications, develops proposals, and delivers marketing presentations.

## **Problem Solving**

Works on unusually complex technical problems and provides solutions that are highly innovative and ingenious.

## **Impact**

Develops advanced technological ideas and guides their development into a final product. Erroneous decisions or recommendations would typically result in failure to achieve critical organizational objectives and affect the image of the organization's technological capability. Functions in a program leadership role. Plays a key role in implementing programs/projects and makes significant contributions to department goals and overall functional strategic planning efforts.

## **Liaison**

Serves as organization spokesperson on advanced projects and/or programs. Acts as advisor to management and customers on advanced technical research studies and applications. Often instrumental in attracting and obtaining major new company business.

## **Minimum Education and Experience**

15+ years with BS in designated Engineering or related field. Employees usually have advanced degree in field of specialization.