

SCHAFFER CORPORATION
DESCRIPTION
OF
LABOR CATEGORY DESCRIPTIONS

TITLE: CHIEF SCIENTIST/TECHNICAL OFFICER

Grade: Grade 27

General Characteristics

Directing the major/critical technical/scientific aspects of projects/contracts for the company to ensure effective and successful mission accomplishment. Formulation and execution of current and long-range objectives, development and implementation of plans and strategies, the establishment of controls for operating efficiency and use of state of the art principles, technology, applications and methods.. This individual is responsible for the oversight of program/project development from inception to execution/completion

Direction Received:

Reports to the Board of Directors on general business matters and to the individual responsible for the projects/contracts, as appropriate.

Typical Education and Experience:

Bachelor degree with a Master's preferred, 15 years of experience including 10 years of experience in project management and/or operational functions. Experience in all aspects of business leadership is required.

Professional Role

Accountability is at the highest level of the program. Provides the overall strategy for the organization.

TITLE: SENIOR SCIENTIFIC/TECHNICAL SPECIALIST

Grade: Grade 24

General Characteristics:

Manages overall responsibility for advanced and/or multiple programs within a certain business area. This individual makes decisions and/or recommendations regarding project/contract mission strategy, utilizing advanced scientific/technical principles, technology and methods. This individual also is responsible for the assessment and oversight of resource allocation.

Direction Received:

The position reports to the Chief Scientist on general business matters and to the individual responsible for the projects/contracts, as appropriate. Experience in all aspects of technical performance and resource utilization is required.

Typical Education and Experience:

Bachelor degree with a Master's preferred, 15 years of experience including 10 years of experience in management and/or operational functions. Experience in all aspects of developing business is required.

Professional Role:

Provides overall strategy and direction for programs in the business area.

TITLE: SENIOR TECHNICAL LEAD/SPECIALIST

Grade: Grade 22

General Characteristics:

Directs and manages personnel with overall responsibility for technical performance of contracts. This individual also provides direct technical contributions to projects/contracts at an advanced/senior level. Provides guidance and input on resource assessments and allocations.

Direction Received:

The position reports to a Senior Scientific/Technical Specialist on general business matters or to the individual responsible for projects/contracts, as appropriate.

Typical Education and Experience:

Bachelor degree with a Master's preferred, ten years of experience including five years of experience in management and/or operational functions. Experience in all aspects of developing business is required.

Professional Role

Provides overall strategy, direction and technical contributions to achieve project/contract mission requirements.

TITLE: PRINCIPAL ENGINEER/ SR. SCIENTIST

Grade: Grade 21

General Characteristics:

Initiates and performs work of major significance in broad problem areas. Pertinent guides and references are few. Key information bearing on the problem is found chiefly in the minds of leading authorities or in published or unpublished papers on the subject. Emphasis is upon theoretical premises rather than methods. Conceives and plans investigations of broad areas of considerable novelty and importance to overall programs. Evaluates and recommend advancements that often serve as basis for establishing major R & D programs or new areas of technical activity. Failure of effort can result in failure of the company to keep pace with developing technology and a significant setback for the program. Recognition of the employee's technical expertise extends beyond the company's bounds and is widely recognized in the community. Often attracts business due to his/her expertise and assists management staff in pursuing business. May participate in national panels or working groups and represent the company at conferences and symposia.

Direction Received:

Receives general administrative direction. The employee largely determines which specific projects or areas of investigation to pursue.

Typical Education and Experience

Those jobs are typically representative at the highest levels on the technical. Formal education, above the bachelor level, and very long experience are typical. However, acknowledged unique mastery is the principal characteristic of these jobs.

Professional Role:

A recognized leader and authority. Consulted extensively by associates and others within or outside the company, with a high degree of reliance placed upon scientific interpretation and advice. Typically, will have contributed inventions, new designs, or techniques that are regarded as major advances in the field.

TITLE: PROGRAM MANAGER

Grade: Grade 21A

General Characteristics:

Responsible for managing multiple contracts and programs, involving several customers. Contracts and programs are usually complex and involve large dollar values. Generally involved in contractual issues, and therefore, must possess a sound working knowledge of contractual concepts and needs, and customarily supervises a staff of diverse backgrounds and program responsibilities. Must effectively manage the technical performance the technical performance and financial resources of contracts.

Direction Received:

Usually reports to a General Manager. Accountability is at the highest level of the program. The employee has significant autonomy in determining the organization and utilization of resource within his/her assignments.

Typical Education and Experience:

Typically, a Bachelor's degree plus graduate level degree and at least 15 years professional and relevant experience, with five (5) years experience at a program manager level.

Professional Role:

This is a job for someone with proven ability and experience managing several programs.

TITLE: CONSULTING ENGINEER/SCIENTIST**Grade:** Grade 20

General Characteristics: Plans, organizes, and executes assignments or projects involving unique problems or complex issues which have an important role in major company programs. Relevant guides are not readily apparent, and frequently have major gaps or are only partially related to the problem. Projects require the use of advanced techniques and the modification or extension of existing theories. Explores the subject area, defines the scope of the project, and selects problems for investigation. Conceives, plans, and leads projects in problem areas of considerable scope and complexity which involves the application of unconventional or novel approaches. As staff specialist, this position is frequently assisted on individual projects by engineers, scientists or technicians. Failure to achieve project objectives could result in failure to reach a major division goal.

Direction Received:

Supervision received is essentially administrative with assignments given in terms of broad objectives and limits. Projects may be initiated without prior consultation where own work or that of others requires it.

Typical Education and Experience:

Bachelor Degree plus more than ten years, Masters degree plus eight, or Ph.D. degree plus more than six years experience is typical. However, broadly recognized mastery is the principal characteristic rather than degree or time.

Professional Role:

Recognized as a technical expert within the division or company. Acts independently on technical matters pertaining to own field. Ideas for solving new or difficult problems are often sought by other engineering units, or by other divisions doing related work. Frequently presents results of assignments that may have led or may lead to patent disclosures.

TITLE: ENGINEER/SCIENTIST 5**Grade:** Grade 19**General Characteristics:**

Performs difficult technical assignments whose scope, importance or complexity requires special skills. In-depth understanding of the technology, techniques and methods in addition to experience in their application to a broad range of problems. Non-standard methods are frequently employed requiring the use of judgement and innovation in filling information or procedural gaps. Problems encountered may be unique, solvable only through application of advanced or sophisticated technology. Work consists of several complete and conceptually related phases involving some entirely new features. Participates in establishing design constraints, preparing engineering development proposals and feasibility studies, and assisting management in setting technical objectives. Assists lower level professionals and frequently

functions as a group or project leader with a temporarily assigned staff of engineers, scientists and technicians. May be accountable for the development of new or modified components, products, manufacturing processes, materials, equipment, etc. Often works in conjunction with members of the management staff in pursuit of new business.

Direction Received:

Generally guided by predetermined project objectives. Initiates projects within the scope of existing programs and works, as a rule, independently under a supervisor whose role is largely administrative.

Typical Education and Experience:

Bachelor degree plus ten, Masters degree plus eight, or Ph.D. degree plus five or more years experience in an engineering or scientific discipline. The experience should represent progressively more complex assignments.

Professional Role:

Recognized as a technical expert within the company. Possesses a thorough knowledge of general principles and theories in a professional field and a working knowledge of related disciplines. Requirements for ingenuity are extensive. Contributes significantly to the solution of applied problems, the results of which are sometimes sought by outsiders.

TITLE: ENGINEER/SCIENTIST 4

Grade: Grade 18

General Characteristics:

Performs difficult or complex conventional engineering or scientific assignments. Is capable of solving technical problems autonomously and may be developing an understanding of the workings of the business area. Often has technical supervisory responsibilities on a task and is also responsible for the technical training and development of more junior staff.

Direction Received:

Supervision is chiefly in the form of instructions of general results expected. Work is reviewed upon completion with supervisory approval required for the resolution of unusual problems or changes of objective.

Typical Education and Experience:

Bachelor degree or equivalent with 8 to 10 years experience in an engineering or scientific discipline. Attainment of this level of technical competence without formal exposure to principles and theories would be difficult. May also be an entry-level assignment for personnel with a Ph.D. degree in this discipline and at least 5 years of experience.

Professional Role:

A fully qualified professional who possesses a thorough knowledge of precedents and engineering or scientific principles including some specialization in a particular field. Technical leadership and creativity are definite requirements. Novel approaches are reviewed before adoption. This is a level that many people may attain as their career top.

TITLE: SENIOR BUSINESS ANALYST**Grade:** Grade 18A**General Characteristics:**

Provides complex financial, managerial, contractual, and programmatic support to projects. May monitor programmatic, financial, and contractual aspects of assigned programs/contracts. May be responsible for business development.

Direction Received:

Works under broad supervision and may supervise others.

Typical Education and Experience:

Bachelor degree in finance, business or accounting preferred plus 10 years relevant experience or High School plus 20 years relevant experience. MS, MBA or CPA preferred.

Professional Role:

This job requires a specialist who can independently accomplish complicated tasks and direct others.

TITLE: ENGINEER/SCIENTIST 3**Grade:** Grade 17**General Characteristics:**

Performs moderately complex assignments within a discipline that may involve design, test of materials, specification preparation, process study, research investigations, etc. Selects and adopts modifications of standard data sources. Provides solutions to problems that present a number of variables but may be solved through application of standard techniques involving some innovations of methodology. Independent decisions are permitted within project objectives and known technologies. Participates in defining engineering approaches and in planning and scheduling work. May provide technical or project leadership to a small group of engineers and technicians.

Direction Received:

Primarily guided by specific assignment objectives and must clear alternative courses of action through management. More senior professionals provide technical assistance on unusual or complex problems during assignments.

Typical Education and Experience:

Bachelor Degree or equivalent with five to eight years experience in an engineering or scientific discipline. This position may also be considered as the entry-level assignment for personnel with a Ph.D. level degree in the discipline and little or no experience.

Professional Role:

An operating professional who possesses competent working knowledge of engineering or scientific principles and precedents. May show signs of technical expertise in a narrow field of application and may also begin the technical development of entry engineers/scientists or aides. Novel approaches are usually reviewed before adoption.

TITLE: SR. TECHNICIAN/TECHNOLOGIST

Grade: Grade 16

General Characteristics:

Collaborates in the design, development and evaluation of experimental and mechanical apparatus, equipment, experimental facilities, and instrumentation systems. Selects the designs, methods, materials and equipment. Translates objectives into design concepts. Collects data, analyzes results from scientific experiments and assists in the preparation of reports relating such results to project objectives. Selects and prepares samples and materials. May provide technical presentations to customers and technical staff and may prepare reports, papers, and talks on technical accomplishments. May provide work leadership for lower-level employees.

Direction Received:

Supervision is chiefly in the form of instructions of general results expected. Work is reviewed upon completion with supervisory approval required for the resolution of unusual problems or changes of objective.

Typical Education and Experience:

Technical training equivalent to an Associates Degree and 8 years related experience.

Professional Role:

This job requires a fully qualified technician who possesses a thorough knowledge of technical principles including some specialization in a particular field. Novel approaches are reviewed before adoption. This is a level that many people may attain as their career top.

TITLE: BUSINESS ANALYST**Grade:** Grade 16A**General Characteristics:**

Provides moderately complex financial, managerial, contractual and programmatic support to projects. May monitor programmatic, financial and contractual aspects of assigned programs/contracts.

Direction Received:

Works under general supervision.

Typical Education and Experience:

Bachelor degree in finance, business or accounting preferred plus 5 years relevant experience or High School plus 10 years relevant experience.

Professional Role:

This job requires a highly competent person who can independently accomplish complicated tasks.

TITLE: TECHNICIAN 4**Grade:** Grade 15**General Characteristics:**

Responsible for the efficient, safe and correct operation of major scientific and mechanical instruments and apparatus. Prepares operational procedures, equipment and materials, specifications and technical summary reports. Plans fabricating, assembling, installing and testing of a variety of experimental apparatus and equipment. May perform fabrication, assembly, installation, operation, maintenance, modification, testing and related technical support activities. Selects and prepares samples and materials. May provide work leadership for lower-level employees. Diagnoses and debugs equipment and decides upon repair or replacement actions.

Direction Received:

The employee is primarily guided by specific assignment objectives and must clear alternative courses of action through management. Scientists and engineers provide technical assistance on unusual or complex problems during assignments.

Typical Education and Experience:

Technical training equivalent to an Associates Degree and 8 years related experience.

Professional Role:

Fully qualified technician who possesses a thorough knowledge of technical principles that may include some specialization with a particular application. Technical leadership and creativity are definite requirements. May also begin the technical development of entry technicians.

Title: EXECUTIVE SECRETARY

Grade: Grade 13

General Characteristics:

Performs diverse and advanced secretarial, clerical and administrative duties for executive-level managers such as direct reports to the President. Utilizes a thorough knowledge of the business. Assignments generally involve work of a confidential nature. Facilitates decision-making. Assembles and analyzes information, prepares reports, manuals, agendas, correspondence, graphics, technical drawings, graphs, equations, formulas, and charts. Answers mail and inquiries, arranges and makes appointments and travel reservations and answers telephone calls. Checks and processes expense reports. May take dictation and transcribe notes for letters, memos or reports. Operates and maintains general office equipment such as computer, typewriter, Dictaphone, copier, calculator, fax or other similar machines.

Direction Received:

Under general supervision and acting on own initiative. Receives instructions and task specifications.

Typical Education and Experience:

High school plus advanced secretarial training, or equivalent experience. 8 to 10 years prior high-level secretarial and administrative experience. Working knowledge of commonly used PC applications.

Professional Role:

The job requires a fully qualified person who possesses a thorough knowledge of secretarial and administrative precedents and principles. This is a level that many people may attain as their career top.

TITLE: ENGINEER/SCIENTIST 2

Grade: Grade 13A

General Characteristics:

Performs engineering, computer science or other scientific work of moderate complexity. Demonstrates the ability to solve technical and computer problems. May design moderately-complex analysis, design and implementation.

Direction Received:

Works under occasional supervision.

Typical Education and Experience:

BS or High School plus 4 years relevant experience. Computer-related, engineering or scientific degree preferred.

Professional Role:

This is a job for a developing engineer or scientist.

TITLE: PROGRAM PLANNING CONTROL ANALYST 2

Grade: Grade 12

General Characteristics:

Provides basic support to projects combining one or more of the following areas of expertise: Technical Training, Quality Control, Acquisition Management, Data Management, and/or Financial Management. Develops plans including budgets and schedules to meet contractual/project requirements for an assigned portion of a program. Conducts program plan studies. Participates in establishing and defining program plan requirements. Coordinates interdepartmental development of program plans and interfaces with vendors and customers. Monitors and reports performance against plans to ensure that contractual, cost and schedule objectives are met.

Direction Received:

Performs most assignments independently but with detailed instructions.

Typical Education and Experience BS/BA in Accounting, Business Administration, Engineering, or Science or equivalent major or experience. Has strong computer skills and is able to write and communicate effectively.

Professional Role:

This job requires a competent person who can independently accomplish complicated tasks.

Title: BUSINESS STAFF

Grade: Grade 12A

General Characteristics:

Performs basic administrative and financial tracking functions for line and staff managers and customers. Responsibilities may include conference planning or tracking financial or project data.

Direction Received:

Works under close supervision.

Typical Education and Experience:

High School plus 3 years relevant experience. BS in finance, business or accounting preferred.

Professional Role:

The job requires a person still in the process of development.

TITLE: ADMINISTRATIVE ASSISTANT

Grade: Grade 10

General Characteristics:

Performs administrative support work with some clerical and secretarial duties. Assignments generally include preparing reports; checking and verifying non-routine bills, schedules, receipts, invoices, purchase orders, and other documents; maintaining records requiring classification and compilation of varied information. May assist in preparing budgets. Performs reconciliation and control functions, and compiles special studies. May perform clerical and secretarial tasks. May operate general business machines such as typewriter, personal computer, copier, calculator, data entry terminal, fax or other office machines.

Direction Received:

Works under regular supervision. Requires the exercise of some discretion and use of limited judgement and initiative.

Typical Education and Experience:

Reading, writing, arithmetic and communicative skills equivalent to those obtained in high school or commensurate experience. Requires 3-5 years of related experience. May require typing proficiency of 50-60 wpm and a working knowledge of commonly used PC applications such as word processing, spreadsheets, and databases.

Professional Role:

This is an entry to mid-level position whose tasks are usually established.

TITLE: ADMINISTRATIVE AIDE

Grade: Grade 9

General Characteristics:

Performs a variety of semi-routine clerical duties of moderate complexity. Performs duties such as maintaining files, keeping records, preparing schedules, compiling and checking reports, searching for information contained in files, processing department documents requiring specific knowledge of functional operations, posting records, typing correspondence and reports from rough drafts, answering telephones, and distributing mail and packages. May operate general business machines such as typewriter, personal computer, copier, calculator, data entry terminal, fax or other office machines.

Direction Received:

Works under regular supervision. Standards are well established with generally prescribed formats. Guidance from supervisors is readily available. Follows written and verbal instructions with work usually subject to spot check.

Typical Education and Experience:

Reading, writing, arithmetic, and communication skills equivalent to those obtained in high school or commensurate experience. Requires 1-2 years of work related experience.

Professional Role:

This is an entry-level position whose tasks are usually subject to standard practices.

TITLE: ENGINEERING AIDE

Grade: Grade 9A

General Characteristics:

Primarily a job for a student majoring in science or engineering or an entry-level employee performing basic science or engineering functions under close supervision. Performs semi-professional engineering or scientific assignments.

Direction Received:

Works under close supervision of a more senior staff member and receives specific and detailed instructions about required tasks and results.

Typical Education and Experience:

High School plus years post High School education in a technical field.

Professional Role:

This is an entry-level position whose tasks are usually subject to standard practices.

