

# PROJECT AUSTRALIA

Land that  
Engineering Job  
in Australia

IAN  
LITTLE

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# Chapter 12

## *Getting a CV together*

This is the most important chapter of this book for migrants trying to get a job in Australia.

In general, engineers from overseas are able to get to Australia and find some jobs advertised, but they find it difficult to get job interviews. The main reason is that they don't understand how to prepare their CV/résumé so it is attractive enough to potential employers.

As you follow the tips in Chapter 3, you will have a greater number of quality job opportunities to apply for. In this chapter we help you develop a CV that is irresistible to employers. You will work out your strengths, the most effective parts of a CV, tailoring your CV to particular jobs and employers, and how to write a covering letter that sells you effectively. Engineer-based samples are included.

There are some useful books and websites with general information on how to prepare a CV. A book written specifically for migrants is *Land That Job in Australia*, by Dr Jim Bright and Karen Bright, which is available elsewhere on the Tribus Lingua website.

The recruiting company SEEK has a section of its website with job-search tips and sections on preparing CVs (including a checklist), interpreting selection criteria, cover letters, typical

interview questions and negotiating salaries.

Website: <http://www.seek.com.au/career-resources/>

Other useful sites:

<http://www.etm.com.au/>

<http://www.baysidegrp.com.au/bayside-personnel>

<http://bondrecruitment.com.au/employers/articles.shtml>

<http://www.careerone.com.au/jobs/job-search/get-that-job>

### **What's in a name: CV or résumé?**

Like many people, I thought a curriculum vitae (CV) and a résumé were the same thing. Technically, a résumé is a shortened version of a CV. However, we will stay with the popular masses and consider the terms interchangeable. I can assure you that if one advertisement says send a CV and another says send a résumé, they both expect to receive the same document.

From now on, we'll stick with CV — it has fewer letters.

### **Two-part preparation**

Preparing CVs for job applications can be divided into two parts. The first is to prepare your CV as you see yourself and for the ideal job you would like. This 'basic' or 'vanilla' CV will emphasise the experience and skills which you believe are your strongest points. It will reflect the areas that are important for you to win that ideal job. It will also address the issues you would normally expect to find in a job description.

I call it a vanilla CV because it is plain in the sense that it has no distinctive flavour added to make it appeal to a specific prospective employer. You may like your vanilla CV, but that's not the point. You need to flavour it according to what you think the employer will like.

Obviously, that's what the second part of preparing your CV is about: tailoring it to match the culture, wording and feel of each prospective employer, as well as the specific criteria of the job you are applying for. The response you are after is: 'I like that. Let's find out more about this applicant.' Which means you'll get an interview.

It takes time and effort to remake your CV for every application, but it's well worth it. Compare it to the time you spend out of engineering, or in a job that doesn't utilise your professional skills.

The difference between sending out a vanilla CV and sending out an individually tailored one is like the difference between firing a high-powered heat-seeking missile and firing a shotgun.

### **The vanilla CV**

We all have a lot more skills and attributes than we realise, derived from many sources. When preparing your CV — and preparing for job interviews — you need to be aware of them all.

You will have at least three sets of skills to draw on:

- Skills obtained from education and training, directly related to your engineering discipline and specialist expertise.
- Transferable skills. General skills and attributes you have from your work or training in other areas that can be applied on the job, such as organisation and management.
- Life skills. These have been acquired throughout your life. They won't be asked for in a job advertisement, but they make you a more valuable employee. They help define you as a person. They may have been acquired through working in a family business, speaking foreign languages, or partaking in hobbies and pastimes. They include leadership skills acquired through participating in community bodies and sports. Life skills often relate to your attitudes and personal attributes. For example, if you grew up on a farm, you may have experience with a range of hands-on skills such as welding and fixing machinery which gave you a practical outlook on getting things done.

### **Typical engineering job descriptions**

Here are three generic job descriptions for engineer, senior engineer and managing engineer positions. They have the generic attributes and skill sets for the different levels, and they are common across engineering disciplines. I recommend that you build your vanilla CV around your particular skills, but to meet these typical requirements. This will reduce the amount of work you will have to do to match a specific application.

Chapter 12 has explanations for some of the words commonly used in position descriptions and selection criteria.

## ***Typical engineering job description — engineer***

### **Understanding and implementation of engineering and design process**

- Understands the normal design deliverables required for an industrial project.
- Understands the requirements of other engineering disciplines.
- Understands principle of and has experience in squad checks and key document change notices.

### **Application of knowledge**

- For simple design problems identifies issues and with limited supervision. Able to evaluate options and recommend preferred solutions or improved designs.
- With minimal supervision demonstrates use of shortcut methods to minimise calculation time when reviewing options.

### **Analysis and design calculations**

- Is able to interpret and present data in a way that is understandable and provides support for engineering decisions.

### **Equipment design and specification**

- Understands the constraints associated with materials that need to be considered in design.
- With minimal supervision reviews vendor data for simple equipment.
- Under supervision prepares data sheets for standard equipment and technical requisitions.
- Interprets and scopes overall package supply requirements including necessary individual equipment and system components for pumps.

### **General software and analytical skills**

- Demonstrates efficient use of word processing and spreadsheet software such as Microsoft Office Word and Excel.
- Experience in the use of databases such as Microsoft Office Access.

- Proficient in use of and working knowledge of the capabilities and operation of the intranet, internet and email.

### **Designs for constructability**

- Understanding of fabrication and construction requirements and limitations.
- Understanding of the mechanical handling requirements for equipment.
- Able to prepare commissioning procedure for simple systems.

### **Safety in the workplace**

- Conversant with and demonstrates workplace safety.
- Understands ergonomics and can incorporate requirements into designs.
- Understands and demonstrates safety in non-work-related activities.

### **Compliance**

- Has a working knowledge of QA system requirements.
- With minimal supervision is able to locate, interpret and apply relevant international and local standards.
- Understands and implements the requirements and procedures required for the preparation and checking of calculations, drawings and documents.

### **Communication**

- Written communication follows a logical sequence, clarifies purpose and importance, stresses major points, appropriate to audience needs.
- Expresses ideas clearly verbally in a concise and logical manner appropriate to audience needs.
- Facilitates agreement — gains agreement from partners to support ideas or take partnership-oriented action; uses sound rationale to explain value of actions.

### **Managing work, planning and organisation**

- Prioritises work — identifies more critical and less critical activities and assignments; adjusts priorities when appropriate.
- Determines project/assignment requirements by breaking

them down into tasks and identifying types of equipment, and materials needed.

- Accurately estimates hours to complete simple design tasks.
- Schedules work by allocating appropriate amounts of time for completing own and others' work; avoids scheduling conflicts; develops timelines and milestones.

## ***Typical engineering job description — senior engineer***

### **Understanding and implementation of engineering and design process**

- Able to define design deliverables required for Conceptual, FEED and Detailed Design projects. Establishes appropriate level of detail and checking required for each phase.
- Understands the engineering design sequence, the interaction with other disciplines.
- Demonstrates ability to manage project changes and the implications on schedule and cost.
- Has a knowledge of transient analysis requirements, such as slugging, wave impact, seismic, roll on vessels, etc., for mechanical equipment and systems
- Able to develop a discipline Design Basis for a project.

### **Application of knowledge**

- Develops alternative design concepts that satisfy the requirements of other disciplines, constructability and operability.
- Determines the advantages and disadvantages and relative costs of alternative design concepts and establishes preferred concept.
- Reviews and evaluates designs and calculation results to ensure outcomes are reasonable and take into account all significant factors.

### **Analysis and design calculations**

- Is able to interpret and present data in a way that is understandable and provides support for engineering decisions.
- Working knowledge of heat exchanger software (HTRI, HTFS etc.).

### **Equipment design and specification**

- Correctly selects materials for different services, environments and applications.
- Competently reviews and comments on vendor data for commonly used equipment.
- Prepares equipment specifications.
- Able to estimate high-level costs and schedule for mechanical equipment and auxiliaries.
- Experience in the preparation of data sheets and requisitions, technical bid analysis and vendor data review for a range of equipment.
- Interprets and scopes overall package supply requirements including necessary individual equipment and system components.
- Defines limits of supply between supply package and Purchaser interconnections.
- Integrates multi-disciplinary engineering design requirements within package specification documents.

### **General software and analytical skills**

- Demonstrates efficient use of word processing and spreadsheet software such as Microsoft software, and intranet, internet and email.

### **Designs for constructability**

- Able to identify and resolve the issues surrounding layouts and to prepare layouts for mechanical equipment packages that meet the demands of maintenance and operations and are easy to build.
- Understands the principles of human factors and can apply them to design of mechanical equipment.
- Contributes to design and construction reviews.
- Prepares commissioning procedure for complex systems.

### **Safety in the workplace**

- Provides safety leadership in the workplace by example.
- Provides leadership in safety in design.
- Demonstrates knowledge of OH&S requirements for process plants.

## **Compliance**

- Has a working knowledge of QA system requirements.
- Has a working knowledge and is able to interpret and apply relevant international and local Codes and Standards.
- Has a working knowledge and is able to interpret and apply relevant client standards and specifications.
- Understands and implements the requirements and procedures required for the preparation and checking of calculations, drawings and documents.

## **Communication**

- Written communication follows a logical sequence, clarifies purpose and importance, stresses major points, appropriate to audience needs.
- Expresses ideas clearly verbally in a concise and logical manner appropriate to audience needs.
- Develops others' and own ideas — seeks and expands on original ideas, enhances others' ideas, and contributes own ideas about the issues at hand.
- Facilitates agreement — gains agreement from partners to support ideas or take partnership-oriented action; uses sound rationale to explain value of actions.
- Uses effective interpersonal style — establishes good interpersonal relationships by helping people feel valued, appreciated, and included in discussions.

## **Managing work, planning and organisation**

- Prepares proposals and reports with minimal supervision.
- Estimates hours to complete complex design tasks.
- Provides clear direction, definition of scope and adequate support for persons working for them.
- Prioritises work — identifies more critical and less critical activities and assignments; adjusts priorities when appropriate.
- Makes preparation — within their team, determines project/ assignment requirements by allocating tasks and identifying types of equipment, materials, and people needed.
- Schedules activities for the discipline project team — allocates appropriate amounts of time for each team member; avoids scheduling conflicts; develops discipline schedule and milestones.

## ***Typical engineering job description — engineering manager***

### **Leadership**

- Demonstrates ability to motivate and manage teams undertaking complex highly integrated design activities.
- Demonstrates ability for teams under their leadership to provide quality outcomes which meet client expectations.
- Demonstrates ability to accurately assess progress against budget and schedule, identify areas of concern and take action to recover budget and schedule.
- Responsible for working within the provisions and guidelines of the Quality Assurance system relevant to the discipline.

### **Compliance**

- Understands and is able to use the tools and resources that are available internally and externally to assist in the engineering design process.
- Develops QA system requirements and work process improvements for the discipline.
- Has an expert knowledge and is able to interpret and apply relevant international and local Codes and Standards.

### **Understanding and implementation of engineering and design process**

- Evaluates new technology advancements against existing design standards and revises where applicable.
- Identifies and reviews new technology development which could be applicable in providing more cost-effective facilities.
- Able to estimate high-level costs and schedule for mechanical equipment and auxiliaries.
- Conducts technical audits across projects, including change control / key document change notices process.
- Proactive in managing design activities to reduce overall project costs and durations.
- Understands the engineering design sequence, the interaction with other disciplines and implication of changes in the design schedule.
- Reviews project Basis of Design developed by projects.

### **Application of knowledge**

- Provides guidance on the development of alternative design concepts that satisfy the requirements of other disciplines, constructability and operability.
- Determines the advantages and disadvantages and relative costs of alternative design concepts and establishes preferred concept.
- For complex problems identifies issues and evaluates options and recommends preferred solution.
- Actively mentors others. Participates in a formal mentoring or graduate training scheme.

### **Equipment design and specification**

- Develops and maintains specialist design capabilities within the discipline.
- Able to estimate high-level costs and schedule for mechanical equipment and auxiliaries.

### **General software and analytical skills**

- Develops strategies for developing procedures and tools.
- Demonstrates willingness to trial and implement new software and leads by example.

### **Designs for constructability**

- Competently prepares proposals and reports.
- Leads multi-discipline design risk and constructability reviews.
- Develops procedures for design.
- Benchmarks discipline design/drafting to identify areas of improvements.

### **Safety in the workplace**

- Demonstrates knowledge of OH&S requirements for process plants.
- Is conversant with OH&S statutory requirements, and develops procedures and systems to ensure legal compliance by the discipline.
- Provides safety leadership in the workplace by example.
- Leads discipline design safety audits.
- Pro-actively develops a safe working culture within the discipline.

## **Communication**

- Facilitates agreement — gains agreement from partners to support ideas or take partnership-oriented action; uses sound rationale to explain value of actions.
- Uses effective interpersonal style — establishes good interpersonal relationships by helping people feel valued, appreciated, and included in discussions.
- Develops relationships with clients to promote business opportunities.

## **Managing work, planning and organisation**

- Coordinates development of project budgets, obtaining input from project members and project stakeholders.
- Anticipates problems and takes corrective actions.
- Estimates and manages discipline resources to meet current and future project requirements.
- Seeks opportunities — pro-actively tries to build effective working relationships with other people.
- Maintains relationships with past, current and potential clients.
- Identifies issues, problems or opportunities — recognises issues, problems, or opportunities and determines whether action is needed.
- Develops and sets direction for team.
- Able to set realistic and appropriate budgets to achieve objectives.
- Interviews and selects personnel to suit long-term organisational needs.
- Ability to motivate, understanding that motivational drivers vary between cultures.

## ***Elements of engineering CVs***

Firstly, a couple of notes on general basics: what you call yourself and the language you use.

### **Your name**

Australians like simple, monosyllable first names. Like Ian. Even David is too long for them. They prefer Dave. Likewise Bob for Robert, Tom for Thomas and Tim for Timothy.

If your first name is long, unusual (to Australians) or complicated, it will be shortened or you will be renamed. So shorten it yourself to a name of your choice rather than leaving it to others.

It will greatly help acceptance if you adopt an abbreviation or an English-style name. Chinese people are good at this. In China, the children have English names for using on the internet, and Chinese students studying in Australia adopt English-style names.

It is not necessary to take an English style name, but it helps your communication if Australians can say your name easily - such as Tad or Siva. Listen to how Australians say your name and adopt something they can pronounce.

It has been observed if people cannot pronounce a person's name, they do not use it in conversation. The person then tends to be excluded from social activities. Ironically, this happens because people are embarrassed if they cannot say a person's name properly. They do not want to offend them by pronouncing their name incorrectly - so they do not use the name at all.

At a job interview it could be a disadvantage if the selection panel members cannot say your name and feel uncomfortable using it. Interviewers get embarrassed if they can't say your name properly. If they do not use your name they will not relate to you as well as they will with someone whose name they can pronounce.

If you choose to do this, put your native first name in brackets after your Australian first name — for example, John (Srivananapal) Ranje. Some people prefer putting their adopted name in the brackets, but this can be confusing because it can be difficult to work out which is the family name.

Incidentally, Australians put their family name last. They will assume that your last name as written is your family name. Cricket commentators still get this wrong sometimes when referring to Indian and Pakistani cricketers. No-one means to be offensive; they just make the wrong assumption.

Adopting an “Australian” name will help make you feel more Australian and it makes it easier for people to talk to you. It also shows employers that you are flexible and adaptable, qualities that they look for.

## **Language and writing**

You are writing an application to a person who is foreign to you, who won't necessarily understand your use of language. I don't mean your native language, or your English. It goes beyond that. We all have things we know and our own understanding of colloquial or common (to us) expressions, so you need to consider what the person reading your application will interpret from what you have written.

Always use full titles and not acronyms in the first usage. What is familiar to you is not familiar to everyone else. For example, Skilled Occupation List rather than SOL. If you are using the title more than once in the same section of your CV, put the acronym in brackets after the full title, then use the acronym.

Likewise, explain what projects are. Project Alpha may have been a memorable experience for you, but it could be unknown to the person reading your application.

Use simple language and avoid long sentences, especially complex ones with several sets of commas and dashes. Keep it all direct and simple. Write as you would speak. Fortunately, Australians don't favour formal or complex style in their business writing. In recent years, even legal writing has been subject to efforts to turn it into 'plain English' which almost anyone can understand.

## **It's all about you**

Employers want to know about you. They want to know about your education, knowledge, skills, attitudes and abilities. They want to know what you have done and how you went about it.

Few people do anything of significance by themselves. We all work with and through other people. Many engineers work in project teams, and employers know this. In your CV, you must tell them what your role in the team normally is. That is, your CV is not about teams or companies. It's about you. 'I' is the key word, so don't be afraid to use it.

A CV for an Australian employer should be about three pages in length. They vary in style: your experience in chronological sequence, your experience by skills, your experience by industry or type of work. Personally, as an employer, I prefer the traditional chronological sequence because I can assess when the various aspects of experience were obtained.

It can be useful to list your key skills up front. If you do this,

be careful it doesn't come across as an unsubstantiated brag. You need to give examples so that you are showing the employer what you can do, and not merely telling them. DON'T list your skills like this (an example from an actual CV):

## **Key Competencies**

### **Administration Skills**

- Ability to communicate effectively and to establish sound relationships with clients and contractors.
- Able to work under pressure and prioritise tasks.
- Highly developed organisational and time management skills.
- Effectively manage different responsibilities simultaneously.
- Well-developed report writing skills.
- Coordinate within inter-departments and give necessary support to project team.
- Identifying and rectifying problems.

### **Communication Skills**

- Possess excellent interpersonal skills and a willingness and ability to work as part of team.
- Strong communications, motivation, team building and leadership abilities.

Your recent experience is the most valuable. What you have done over the last five years should take up about half of your CV. Then the experience tapers off. Experience more than 10 years old should be presented only as one-line summaries.

If you have graduated from university, employers don't want to know what school you went to and that you worked at McDonald's.

Avoid phrases such as 'I believe ...', 'I could ...', 'I will ...' and 'If successful ...'. This speculation can be seen as no more than 'blowing your own trumpet'. Let your achievements speak for you.

Also avoid words which are relative and tell the employer nothing specific. For example, 'some', 'a little', 'large' or 'complex'. Employers are not looking for 'some knowledge' or 'some skill' — they want a lot. What you see as large and complex, the reader may see as small and straightforward. Consider the size of the business you are applying to if you feel you must use words such

as these. You could be rejected for being unable to handle a really large job.

### **Not required**

Do not include anything about gender, age, marital status, number of children, religion, ethnic origin, health, or if you are pregnant. Under anti-discrimination laws, it is illegal for Australian employers to take any of these factors into consideration.

Do not put in a motherhood statement of career objectives.

Show concern for the environment: don't use a cover sheet. It will only be torn off and thrown away anyway.

### **Hobbies and interests**

Including a list of hobbies and interests is optional. Ask yourself if yours show additional skills or if they are merely conversation items. For example, playing in team sports will be viewed positively, particularly if you have been a team leader or coach. On the other hand, watching videos at home is likely to be seen as a sign of inactivity and insularity.

Include activities in voluntary organisations — a positive indication of your ability to mix with a variety of people.

### **Referees**

A prospective employer will normally call referees after interviewing you if they have formed a genuine interest in employing you. Your referees can make or break your application. It is most important that the people you nominate as referees will give you a positive reference. I have been in the embarrassing situation of being asked to comment on engineers who I had to say I would not re-employ.

Only nominate people who really know you. Do not nominate the managing director of your last company because it looks impressive. It makes you look stupid and will end your job chances if the person you have nominated as a referee can't remember you when the prospective employer calls.

If you are in a job, do not put referees' names in your CV. This will avoid the embarrassment of current work colleagues knowing that you are looking to change jobs. Simply put 'Available on

request'. Take the list of names along with you if you get an interview.

In other circumstances, always ask people in advance if they are willing to be a referee for you. This enables you to contact them, tell them about the job and explain why you are well suited to the position. You can be sure your referee will remember you if you haven't been in touch for a while, and they are almost certain to give the prospective employer a much better appraisal of you.

A prospective employer is likely to ask your nominated referees:

- Was he/she reliable?
- What work did he/she do with you?
- Was he/she punctual?
- Did he/she put in additional effort when it was required?
- Why did he/she leave?
- Was he/she a team player?
- And the last and most important question: Would you re-employ him/her?
- If you are not confident the referee will answer 'Yes' to the last question, find another referee.

### ***Example: mechanical engineer's CV***

#### **Siva (Sivarangopal) N Srikanthachna**

53 Heathmont St  
Box Hill North  
Victoria 3132

Home: (03) 6548 1224

Mob: 0499 108 555

E-mail: ssrikachna@hotmail.net.au

#### **Résumé**

##### **Summary**

- Siva Srikanthachna is a senior mechanical engineer who has worked in design and equipment supply in heavy industry for 15 years. He has specialist expertise in heavy equipment layout and alignment, welding of exotic piping and heavy wall pressure vessels, hot refractory lining, and non-destructive testing of reactors and regenerators.
- Siva has led teams responsible for designing and fabricating fertiliser plant and refinery upgrades, and designing vessels for water and effluent treatment plants. He has also supervised

engineering for construction of oil and gas transportation pipelines.

### **Career Objective**

I am keen to launch my career in Australia as a lead mechanical design engineer within the oil and gas industry. The organisation I am seeking is a leading-edge company where I can utilise my strong technical and management skills on major refinery projects.

### **Key skills and abilities**

- Working knowledge of API, ASTM and NACE codes.
- Project engineer able to lead multidiscipline teams on refinery and fertiliser plant projects.
- Expert knowledge of refinery reactor and pressure vessel technology.
- Able to specify, evaluate bids and review vendor data for refinery mechanical equipment.
- Excellent communication skills with the ability to relate to people at all levels.
- Demonstrated teamwork skills, as well as the ability to work effectively on own initiative.
- Able to develop quality assurance documentation to ISO 9000.

### **Selected achievements**

- Developed a new ISO 9000 quality system in procurement and material handling.
- Lead mechanical design engineer for three refinery hydrogen reformer units.
- Site engineer for 1500 km gas pipeline installation.
- Multidiscipline project engineer for ammonia and urea expansion projects.

### **Work history**

#### **Engineer — Resources planning and Quality June 2007–now**

##### **Box Hill Engineering (Aust) Pty Ltd**

##### *Responsibilities*

- Supervision of production works daily planning schedules.

Planning and setting work priorities, arranging resources — capacity calculation, job estimation and quotations.  
Restructured responsibility matrix for efficient and effective working of quality systems.

- Liaison with clients and suppliers on various technical/commercial matters.

#### *Achievements*

- I successfully designed and implemented a material handling system from order placement to commissioning.
- Developed a new quality system in procurement and material handling which achieved 20% scrap reduction.
- Provided in-house training program on ISO 9000 quality systems.

### **Project design engineer 1997–May 2007**

#### **Engineers India Limited — Mumbai**

##### *Responsibilities*

- Project engineer for multidiscipline engineering activities for a major revamp of FCCU reactor.
- Lead mechanical design engineer for three refinery hydrogen reformer unit projects.
- Preparation of job cost estimates.
- Development of QA documentation.
- Specification and procurement of static plant for refinery and fertiliser plants.
- Site engineer for long-distance gas pipeline installation.

##### *Achievements*

- Led and supervised site activities of contractors during the construction phase for supply, fabrication and laying of 24"/18"/12"/6" API5LX60 and X65 cross-country gas distribution 1500km pipeline. Promoted HSE workplace and implemented site safety and risk management plans.
- Periodic repairing/monitoring/updating of project schedule incorporating all resources, i.e. manpower, materials and machineries for pipelines and facilities for lump-sum turnkey (LSTK) project for provision of treated effluent disposal system comprising underground water retaining sumps, pumping

stations, cross-country HDPE/CS pipelines and long sea marine outfall offshore pipeline.

- Managed and coordinated multidiscipline engineering activities for a major revamp of FCCU reactor and regenerator for refineries comprising erection of heavy equipment, replacement of cyclone assembly and interconnection piping network. Exposed to various American standards including ASME Sec-II part A,B,C&D, ASME B31.3, ASME Sec VIII Div-I, ASME Sec-IX, ASME Sec-V, API 640, API 1104. Highly experienced in design of welding joints, selection of consumables and adapt welding procedure for various base metals. Exposed to welding of high alloys, low alloys, C-Mn, stainless-steel, Monel, etc.
- Lead mechanical engineer for three refinery hydrogen reformer unit projects. The first comprised erection of gas burner, interconnection piping network, installation of heavy equipment, reformer furnace walls and structural works. The second was a refurbishment project which comprised replacement of existing regenerator dome/cyclone assemblies and installation of new reactor/riser piping.
- The third involved development of technical specifications and quality inspection documentation for staged inspection of heavy equipment layout and alignment, similar/dissimilar heavy wall welding, hot refractory lining and non-destructive testing of a reactor and regenerator.
- Prepared specifications, requisitions, bid evaluation and vendor data review for reformer package for synthesis gas generation unit for Fertilisers Inc, comprising erection of gas burner, interconnection piping network, super heaters, flue gas boilers, reformer furnace walls and structural works.
- Provided engineering supervision for ammonia expansion and urea revamp project for Fertilisers Inc. Project had staged shutdowns comprising dismantling and installation of heavy equipment and piping structures. Solved problems on the spot related to selection of material, process piping rerouting and welding repairs in maintenance of vessels, and pipe support structures during shutdown operations.
- Estimated and prepared bills of quantities (BOQ) of material pertaining to vessels, piping and structural works for a

reformer package for a 1350 MTPD ammonia expansion LSTK project. Developed quality inspection and technical specification documentation.

- Prepared project cost estimates. Monitored project costs and prepared cost reports for identified areas of concern, and made recommendations for timely remedial action for chemical process plant and utilities for Research and Development Lab, comprising erection and commissioning of equipment, structural and piping network.

### **Assistant Engineer 1995–96**

**Inspection Services** — Conducted supplier and process evaluation, inspection of pipes, fittings, rotary equipment and valves at vendor premises for government departments.

### **Graduate Engineer 1993–94**

**Karachi Air Ltd** — Installation of air compressors in chemical plants.

### **Qualifications**

- Bachelor of Mechanical Engineering (qualification accepted by Engineers Australia)
- Graduate Certificate in Quality Management — Swinburne University of Technology. Completed management responsibility and process management modules.

### **Other Credentials**

- Certified internal auditor for ISO 9000, 2000 quality management system.

### **Referees**

Available on request.