

ENGINEERING & MANUFACTURING 08/09

Salary

SALARY & EMPLOYMENT FORECAST

Michael Page
INTERNATIONAL

WELCOME

Welcome to the 08/09 Michael Page International Engineering & Manufacturing Salary & Employment Forecast.

Michael Page International is a world-leading specialist recruitment consultancy. Growing entirely organically, rather than by mergers or acquisitions, we now have over 5,000 people in 149 offices in 25 countries worldwide. Coming from all industry sectors, our clients range from market-leading multi-nationals to small and medium sized enterprises.

Our consistent organic growth strategy of investment through cycles is driving our growth in the specialist recruitment market in Australia. In just 23 years, we have grown to become one of the best-known and most respected recruitment consultancies and are proud to set the standard within our profession for specialist service, with a personal touch.

This year, the format of our Salary Survey has changed to reflect our growing business in Australia and make it easier for employers and candidates to stay abreast of current employment market and salary trends.

While a number of current industry surveys provide qualitative insight on hiring intentions and salary levels, the Michael Page International Salary & Employment Forecast combines both quantitative and qualitative research derived from our national survey of employers and job seekers and our extensive involvement in the professional labour market.

The national survey, completed by approximately 1,500 employers and 5,500 employees, covers a range of issues and trends relevant to today's corporate sector and establishes the Salary & Employment Forecast as a highly reputable report, based on in-depth national research.

The Engineering & Manufacturing Salary & Employment Forecast provides employers and candidates with useful insights into the hiring expectations, recruitment challenges and wage forecasts of key hiring managers in the engineering and manufacturing professions over the coming year. You can also view the Salary & Employment Forecasts for the following key professions on our website:

- Finance
- Financial Services
- Legal
- Marketing
- Sales
- Technology
- Human Resources
- Procurement & Supply Chain
- Property & Construction
- Mining & Resources

I wish to thank everyone who contributed to this year's Salary & Employment Forecast and trust you find the new report helpful and informative. We welcome your feedback and encourage you to contact us for further information or market specific advice at www.michaelpage.com.au/contact-us.



Phillip Guest
Managing Director, Australia

MARKET OVERVIEW

The employment market for engineers remains strong due to a significant increase in infrastructure expenditure, global demand and the demographics of the engineering workforce in Australia. Although the skills shortage is most acute in Western Australia and Queensland as a result of the ongoing resources boom, we are still seeing significant recruitment activity in Victoria and New South Wales due to spending on infrastructure and utilities.

An increasing recognition of the importance of modern infrastructure is putting pressure on an already tight labour market. The Federal Government's establishment of a new statutory advisory council, *Infrastructure Australia*, reinforces the significance of infrastructure development in sustaining economic growth and a high standard of living. According to The Association of Professional Engineers, Scientists and Managers Australia (APESMA), it is estimated that, over the next 10 years, more than \$500 billion will be spent on infrastructure in Australia. As many of these projects hit the drawing boards over the next 12 months, competition for engineering professionals, particularly civil engineers will intensify.

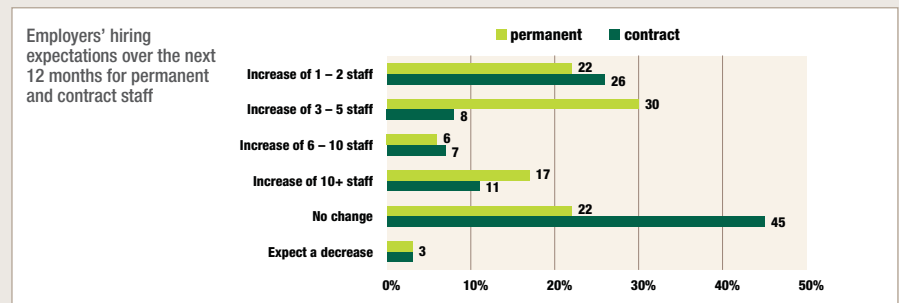
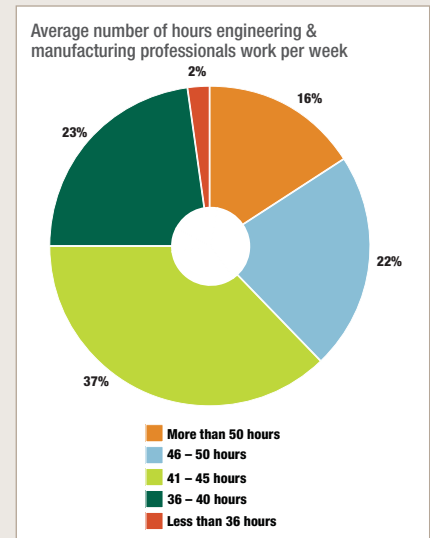
We are seeing a sustained level of activity across the manufacturing sector with many organisations having to streamline their processes and relocate specific operations overseas to compete on the world stage. As a result, manufacturers are looking for

professionals with broad experience who can make process improvements and identify opportunities for competitive advantage. Although it is a challenging environment for manufacturers in light of a strong Australian dollar and competition from Asian countries such as China, the employment prospects for experienced professionals remain strong, with opportunities for candidates to move interstate and overseas.

We anticipate significant competition for engineering talent over the next 12 months as new projects commence and companies require engineers to deliver on the development of these initiatives and the associated infrastructure. Our survey results indicate that 75% of employers plan to increase permanent headcount and 52% expect to hire more contractors over the next 12 months.

Employers will have to focus more heavily on staff development and training new recruits

in the areas where there are ongoing skills shortages to sustain current growth levels. The contract market will remain buoyant as employers turn to contract employment to address the shortage of permanent staff.



SKILLS IN DEMAND

Favourable business conditions and the injection of funding for major infrastructure projects will create a positive employment market for professionals over the next 12 months. The market will remain buoyant for traditional engineering roles but we will also see increased demand for specialist engineers.

Nationally, there is strong demand for project managers, construction managers, electrical and mechanical engineers and process engineers, as a result of the infrastructure boom. There is also a growing interest in professionals with water expertise and civil engineers, to support infrastructure developments in areas such as roads, rail, electricity and water.

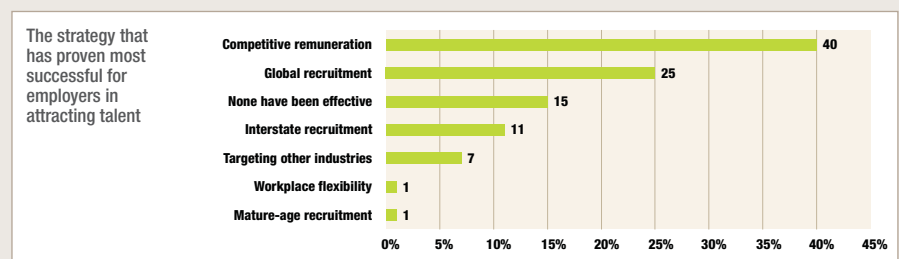
We are seeing greater demand for professionals in the renewable energy market, albeit small in comparison to the rest of the sector, because of rising environmental awareness. Companies are

looking for specialist engineers in wind power generation, hydro-electricity and solar thermal energy. Candidates with public/private sector partnership experience will be highly sought after as companies look to partner with consultancies.

Employers remain under considerable pressure to deliver projects within strict timeframes. As a result, there is a growing trend where professional services and consultancies are decreasing their graduate intake and focusing on hiring experienced professionals who can

hit the ground running due to limited time for training and development.

The market for contract employment remains strong as employers require people to work on projects within a finite budget and timeframe. Employers are prepared to pay a premium for contractors and there is a trend in candidates becoming more open to contract work, particularly at the senior level, due to the variety and scope of opportunities.

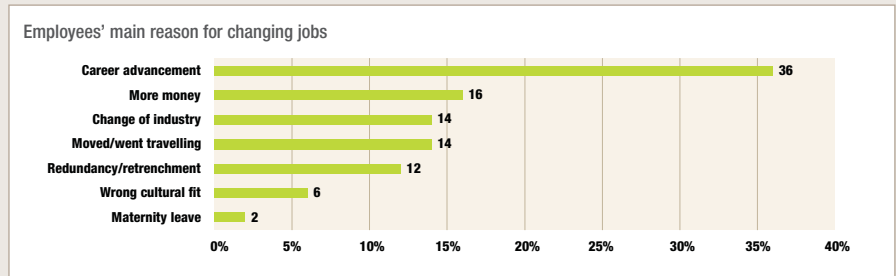
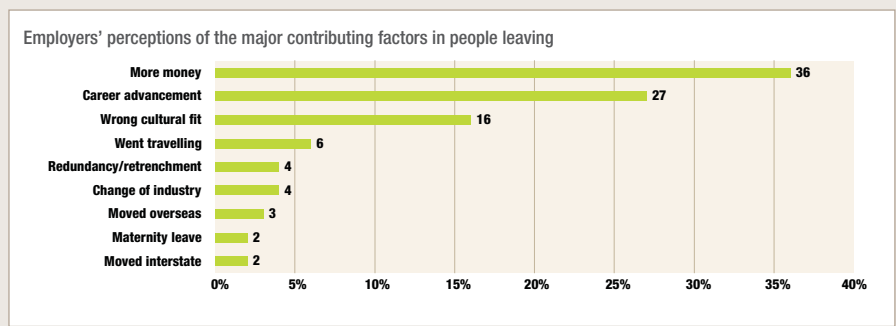


RECRUITMENT CHALLENGES

Employers in the engineering and manufacturing industry are facing unprecedented pressures due to the confluence of multiple factors. In addition to the considerable injection of funding for major projects, the demographics of the engineering workforce in Australia and global demand for engineers are having a significant impact on the supply of talent.

In terms of demographics, research by APESMA shows that over 32% of all engineers are aged 50 and above. With these figures indicating significant numbers of engineers nearing retirement age, organisations need to partake in proactive workforce planning and anticipate future skills requirements if they are to sustain current levels of business growth. Our survey results show that 80% of employers believe the ageing workforce will have a moderate or significant impact on their organisation over the next three to five years. We encourage employers to develop strategies to retain expertise through the provision of part-time employment and flexible working conditions for engineers post-retirement.

Engineering is one of the most geographically mobile professions and Australian engineers are very highly regarded and sought after overseas. Furthermore, an increasing number of graduates travel and work overseas in the first few years post graduation, which is having a significant impact on the supply of engineers for the domestic workforce. According to our survey results, 50% of professionals have worked overseas and of these 74% would consider doing it again. The challenge for employers is to



attract these engineers back to Australia and also provide opportunities to meet the needs of their existing staff in terms of international travel and experience. An increasing trend in recent years has been for employers to conduct international recruitment campaigns and attract skilled workers via sponsorship arrangements. It is no longer enough to limit recruitment activity to Australia as there are simply not enough professionals to go around.

It is also vital for companies to have a professional and efficient recruitment process in the current competitive environment and ensure that promises made during the interview process are honoured. We

encourage employers to invest in an induction program for staff and make a concerted effort, especially during the first six months, to ensure new staff are happy and engaged.

In terms of retention, 91% of employers see it as an important focus for the year ahead. An emerging trend for an increasing number of employers is to pay milestone and completion bonuses as an incentive for staff to remain with the company for the duration of their contract or the completion of a project.

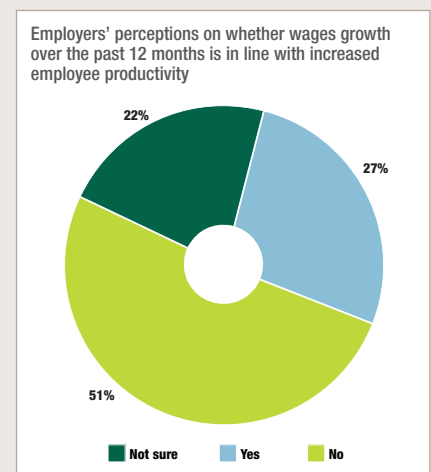
WAGES INFLATION

The engineering sector continues to experience record growth, compounding the already high demand for engineering talent across many sectors. For engineers remaining in the same job, we predict salary increases of between 5–10% over the next 12 months, with increases of 15–20% for candidates moving jobs.

In response to the tight labour market, we are seeing loyalty bonuses of 10–15% being paid to professionals on completion

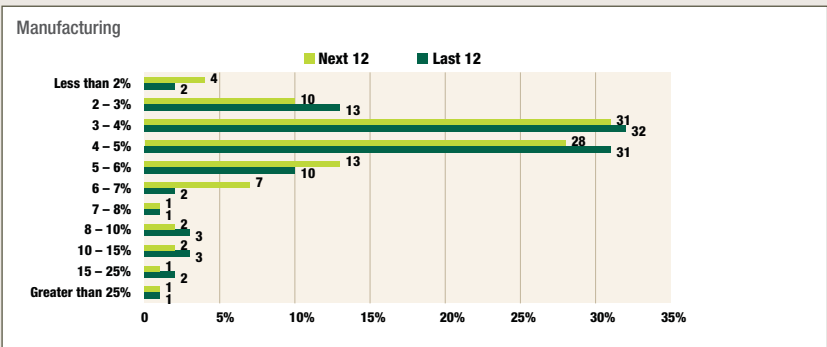
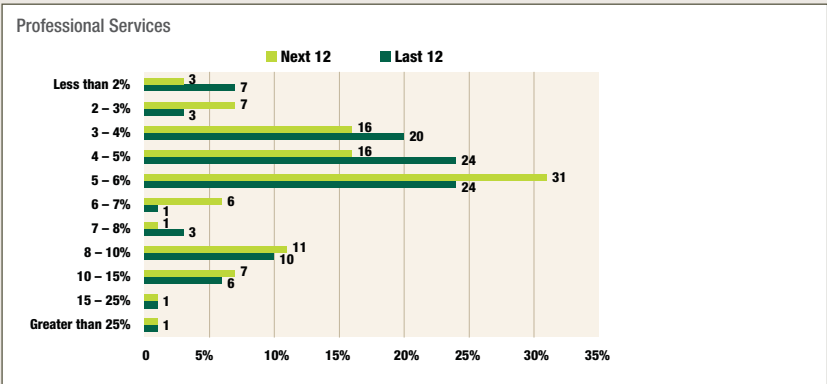
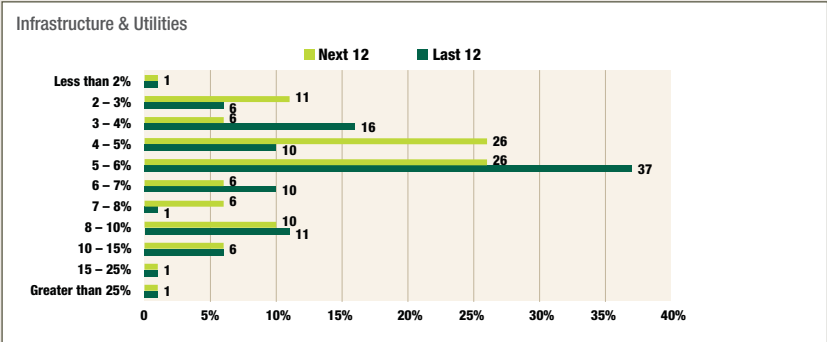
of project-orientated work in addition to base salary, which are designed to stop the poaching of staff by competitors before a project is completed.

The contract market will mirror the permanent market in terms of required skills, with the ongoing tight labour market likely to place inflationary pressures on contracting rates in the coming year.



EMPLOYER SALARY PREDICTIONS

Percentage increase next 12 months VS last 12 months



SALARY TABLES

INFRASTRUCTURE & UTILITIES

State	VIC	VIC	QLD	QLD	NSW	NSW	WA	WA
Size of Company	Sml/Med	Large	Sml/Med	Large	Sml/Med	Large	Sml/Med	Large
Salary	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
PROJECT MANAGEMENT & CONSTRUCTION								
Project Director	180–210	190–250	180–210	200–300	180–210	200–250	150–220	200–250
Senior Project Manager	140–200	160–220	140–190	150–210	140–180	150–220	140–190	150–210
Project Manager	120–160	150–200	110–180	150–210	120–160	140–200	120–140	130–180
Construction Manager	120–170	150–190	140–210	200–240	125–180	160–210	100–140	120–160
Field/Site Engineer	90–120	100–130	90–130	110–140	85–120	100–130	80–110	90–120
Senior Project Engineer	110–130	120–140	120–135	125–140	115–135	125–150	90–120	100–140
Project Engineer	70–110	90–130	75–105	95–115	75–105	90–110	80–110	90–120
Project Controls Manager	130–150	150–170	140–170	170–200	125–160	160–180	120–140	130–180
Project Controls Engineer	80–110	80–130	90–130	100–140	80–120	90–140	90–130	100–140
Estimator	80–130	100–150	80–120	90–130	90–130	110–160	80–120	90–130
OPERATIONS & TECHNICAL								
Graduate Engineer	40–55	50–60	45–55	55–65	50–60	50–60	50–60	55–65
Process/Mechanical/Electrical/Civil	55–80	60–85	70–90	90–105	60–75	75–85	60–80	65–85
Senior Process/Mechanical/Electrical/Civil	75–95	80–105	90–110	95–125	80–100	85–110	90–120	100–130
Maintenance/Reliability Engineer	65–95	75–115	75–100	80–110	70–100	80–120	80–100	85–120
Maintenance Superintendent	95–120	120–140	100–130	140–160	100–125	125–150	100–130	110–140
Projects Superintendent	95–120	120–140	95–120	120–140	100–125	125–150	100–130	110–140
Maintenance Manager	115–150	130–180	120–170	150–180	120–180	130–190	130–170	130–180
Engineering Manager	120–165	150–180	130–170	160–200	130–160	140–180	140–170	150–180
Operations Manager	120–150	160–210	125–170	160–210	125–145	150–200	140–180	170–220
Operations Director	140–190	200–300	160–220	210–295	150–200	220–330	170–220	180–250
Quality Engineer	55–70	60–90	70–95	80–100	80–90	90–100	70–100	80–110
Quality Manager	90–110	110–140	90–110	110–140	100–120	120–140	120–150	130–160
Asset Manager	70–110	110–160	70–110	110–160	80–120	120–140	130–170	130–180
Draftsperson	50–70	60–85	50–70	60–85	50–70	60–85	50–70	60–85
Design Draftsperson	70–110	110–160	70–110	110–160	70–110	110–160	70–110	110–160

PROFESSIONAL SERVICES

State	VIC	VIC	QLD	QLD	NSW	NSW
Size of Company	Sml/Med	Large	Sml/Med	Large	Sml/Med	Large
Salary	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
DESIGN & CONSULTING						
Engineering Manager	150–190	170–200	130–140	150–170	140–160	160–180
Chief Engineer	140–170	170–200	120–140	140–160	120–140	130–160
Lead/Principal Engineer	120–160	150–205	120–130	140–150	120–130	140–150
Senior Design Engineer	105–120	110–150	105–120	110–140	110–130	120–140
Design Engineer	55–80	60–110	55–80	70–100	60–90	80–110
Graduate Engineer	45–55	50–55	45–55	50–60	50–60	50–60
Process Improvement	70–100	95–160	70–110	100–140	80–110	120–170
Risk Engineer	65–80	75–110	70–90	80–115	70–90	80–120
Risk Manager	80–110	105–150	80–110	100–140	90–110	100–140
PROJECT MANAGEMENT & CONSTRUCTION						
Project Director	N/A	230–350	160–200	280–350	180–200	230–280
Project Manager	160–190	190–240	180–220	150–210	160–190	190–230
Construction Manager	150–180	180–215	170–210	200–240	150–180	180–220
Field/Site Engineer	85–115	105–130	90–130	110–140	85–115	105–130
Senior Project Engineer	105–120	115–130	120–135	125–140	105–120	115–130
Project Engineer	65–95	85–120	75–105	95–115	65–95	85–110
Project Controls Manager	130–160	150–180	150–180	170–200	130–160	150–180
Planning Engineer	85–105	105–120	90–130	100–140	90–110	110–130
Project Controls Engineer/Estimator	90–130	130–200	80–120	90–130	90–120	120–140

Please note:

- Salaries indicated are inclusive of superannuation, but exclusive of bonus/incentive schemes.
- Small to medium companies are defined as having a turnover of less than \$100 million. Large companies are defined as having a turnover of more than \$100 million.
- Consulting salaries in WA are largely influenced by pay rates in the resources sector and correlate strongly to salaries in this industry. A majority of work done in consulting engineering in our WA business is within the mining sector, hence please refer to our Mining & Resources Salary Employment Forecast.
- Roles marked N/A are not commonly found in small to medium companies in Victoria.

MANUFACTURING

State	VIC	VIC	QLD	QLD	NSW	NSW
Size of Company	Sml/Med	Large	Sml/Med	Large	Sml/Med	Large
Salary	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
ENGINEERING						
Graduate Engineer	40-50	45-55	40-50	40-55	50-60	50-60
Chemical/Mechanical/Electrical Engineer	50-90	65-130	50-80	70-105	50-80	70-120
Process Engineer	70-90	75-110	70-90	80-120	70-90	80-120
Reliability Engineer	55-70	70-100	55-75	65-100	60-80	70-100
Quality Engineer	50-70	60-75	55-80	75-95	60-75	80-100
Quality Manager	90-120	120-160	90-110	100-130	90-110	100-130
Packaging Engineer	75-95	80-120	80-100	90-130	80-100	90-130
Lean Manufacturing Specialist	80-130	130-170	80-120	110-150	80-120	110-150
Project Engineer	60-75	70-100	70-90	80-110	70-90	80-110
Engineering Manager	90-110	120-160	100-120	120-170	100-120	120-170
OPERATIONS						
Maintenance Manager	70-100	90-130	80-100	85-125	90-110	120-140
Reliability Manager	70-100	90-130	80-100	85-125	90-110	120-140
Production Engineer	70-90	75-110	65-80	80-110	70-90	80-120
Production Manager	90-110	120-150	75-95	110-140	90-110	120-150
Plant Manager	100-150	140-170	90-125	120-170	100-130	130-180
Shift Supervisor	70-85	90-100	60-80	90-105	75-90	90-110
Operations Manager	100-130	140-200	80-100	110-180	100-130	150-200
Operations Director [†]	N/A	160-250	110-130	150-220	160-180	200-300

Please note:

- Salaries indicated are inclusive of superannuation, but exclusive of bonus/incentive schemes.
- Small to medium companies are defined as having a turnover of less than \$100 million. Large companies are defined as having a turnover of more than \$100 million.
- Roles marked N/A are not commonly found in small to medium companies in Victoria.

[†] Salaries at this level can vary widely depending on the individual's background and experience and the scope of the role. Please contact our Executive Search team for specific advice regarding salaries at the executive level.

Salary

SALARY & EMPLOYMENT FORECAST

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