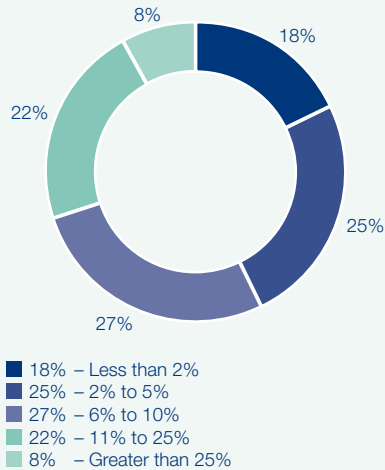


# ***SALARY SURVEY*** 07/08

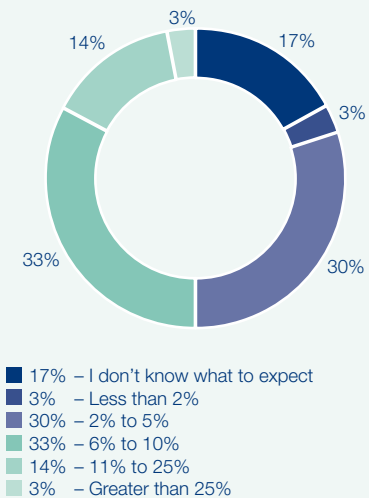
## PERCENTAGE OF SALARY GIVEN FOR MOST RECENT BONUS

One-third of respondents had a bonus component as part of their salary package. When asked about their last bonus payment, 27% reported a payment of between 6% and 10% of base salary.



## WHAT PERCENTAGE INCREASE WOULD YOU EXPECT WITH YOUR NEXT SALARY REVIEW?

The majority of respondents were optimistic in terms of salary expectations, with one-third expecting a rise of between 6% and 10%.



## WELCOME

Welcome to the Michael Page Engineering & Manufacturing Salary Survey for 2007/2008.

The survey provides employers and candidates with useful insights into employment conditions, business confidence levels and recruitment trends. Our commentary is based on both quantitative and qualitative research and covers the following sectors:

- Manufacturing
- Mining & Resources
- Infrastructure & Utilities
- Professional Services & Consultancies

I wish to thank everyone who contributed to this year's survey and trust you find it helpful and informative. Your feedback is welcome and we encourage you to contact us for further information or specific market advice.

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## INTRODUCTION

Skills shortages and rising labour costs are preventing mining companies from taking full advantage of the ongoing resources boom. These issues will intensify in the coming year and employers need to extend their recruitment campaigns to global markets in order to remain competitive.

Resources and mining is experiencing the tightest labour market of any sector in Australia and this is placing significant inflationary pressures on salary levels. We predict salary increases of as much as 15% for roles such as mining engineers in the coming year. These forecasts are supported by University of NSW figures which show the median starting salary for a mining graduate in 2005 was \$84,500. This had risen dramatically to \$99,000 in 2006.

Given the available pool of talent in Australia is fully utilised, employers need to extend their recruitment campaigns to international markets. Professionals with the required skills and experience are available in countries such as Canada, South Africa and Brazil. These markets need to be targeted through international recruitment campaigns, with relocation and sponsorship arrangements facilitated as part of the strategy.

In contrast to the buoyant employment conditions for the engineering sector, conditions in manufacturing are challenging because of competition from Asia, a strong Australian dollar and high domestic labour costs when compared to other regions around the world. Manufacturers are being forced to offshore operations to locations such as China and focus on streamlining processes within their Australian operations.

# NATIONAL EMPLOYMENT SURVEY 2007

The National Employment Survey is conducted on an annual basis and measures employment conditions, business confidence levels and recruitment trends. The survey for 2007 was completed by 3,300 employers and 2,100 employees from a variety of industry sectors in Australia.

A selection of key findings is listed on this page and in graphical format throughout the publication. The complete body of research forms the quantitative component of the broader Salary Survey, with qualitative insight derived from our extensive involvement with employers and job seekers across Australia.

## KEY FINDINGS FROM THIS STUDY:

### Employer Trends

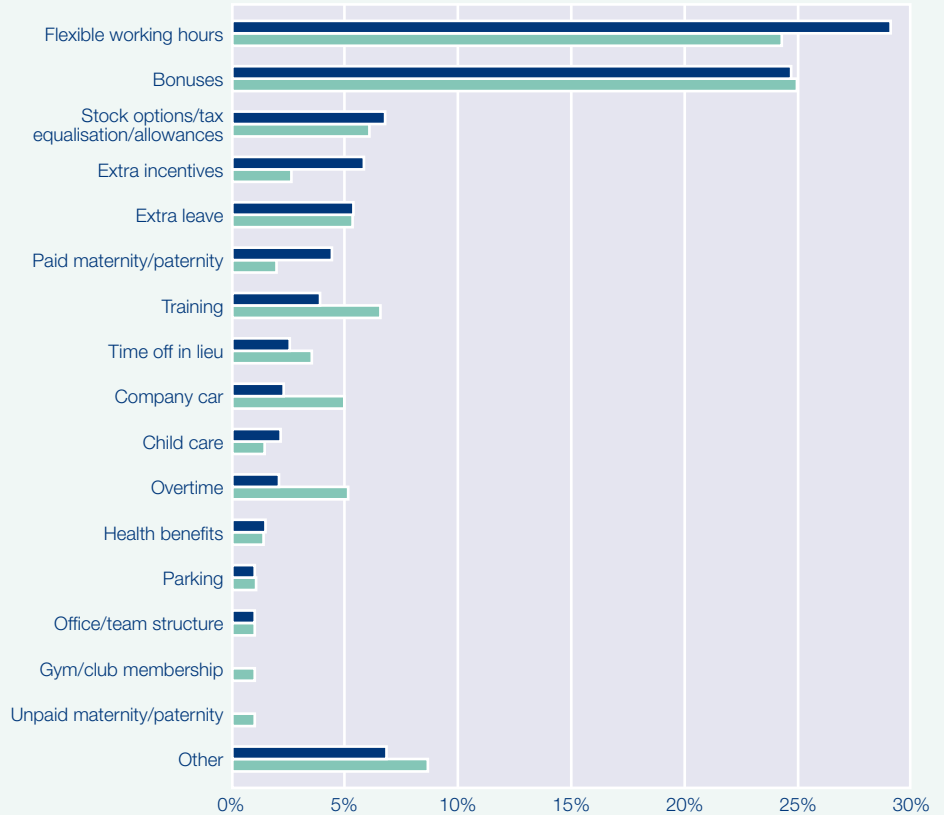
- 91% of employers surveyed predicted their staff numbers would remain constant or increase in the next 12 months.
- 28% of respondents listed organic growth as the main area of focus for the year ahead, followed by new projects at 23%.
- 41% of respondents experienced difficulty in retaining staff over the last 12 months.
- 87% of employers surveyed see staff retention as an important focus for the year ahead.
- Of the retention strategies adopted by employers, the top three were training and development, bonus schemes and flexible working arrangements.
- 76% of employers believed bonuses are important for retaining staff.
- In relation to the frequency of employee salary reviews, 86% of employers conducted them annually, with 6% conducting reviews on a six-monthly basis.

### Employee Trends

- When asked to nominate the main reason for their last job change, 29% of respondents cited career advancement. Only 9% cited more money as the primary motivator.
- 33% of respondents expected their next salary increase to be between 6% and 10%.
- Bonuses were part of the employment contract of 36% of respondents. Bonuses were discretionary for 56% of respondents and a fixed percentage of base salary for the remainder.
- 48% of respondents believed they were being rewarded appropriately for their work, with only 10% reporting rewards well below expectations.
- Flexible working hours was the favoured incentive by 29% of respondents, followed by bonuses at 25%.
- 35% of respondents rated their employer's training and career development opportunities as average, 26% as good and 18% as poor.
- 56% of respondents have worked overseas, and of those 75% would consider doing it again.

## ACTUAL INCENTIVES VS PREFERRED INCENTIVES

There was alignment between the incentives employees wanted and those that their employers were providing. Flexible working options and bonuses were the preferred incentives.



# MANUFACTURING

## MARKET OVERVIEW

The manufacturing industry in Australia is facing significant challenges. A strong Australian dollar discourages exports and boosts imports and this is being compounded by the rise of Asia as the manufacturing hub of the world.

The products being manufactured in locations such as China are not only inexpensive but of a sufficiently high standard to compete in terms of quality. As a consequence, more companies in developed nations such as Australia are purchasing products from Asia in preference to domestically produced alternatives.

Australian manufacturers are having to streamline processes and relocate certain operations to locations overseas to compete from a labour cost perspective. Australian companies are having to offshore manufacturing activity in order to survive on the world stage. These changes are having a pronounced impact on employment within the manufacturing industry.

There have been widespread redundancies across operational and middle management roles. The recruitment focus is on specialists who have the experience to come on board and identify opportunities for process improvements, as well as the production operations that could be relocated overseas.

## EMPLOYMENT FORECAST

While our expectation is for standard rises of 3–5%, we are already seeing employers offering increases between 10–20% to secure hard to find skills in areas such as lean manufacturing. The increases are primarily on base salaries, although bonuses are becoming more common as an additional incentive as part of the complete package.

## PERMANENT EMPLOYMENT

- A challenging environment for Australian manufacturers in light of a strong Australian dollar and competition from Asian countries such as China.
- Strongest demand is for mechanical, technical, chemical and civil engineers.
- Investment in process improvements and competitive advantages will continue to fuel demand for specialists in areas such as lean manufacturing.
- Opportunities for candidates to move interstate and abroad.

## CONTRACT EMPLOYMENT

- Shortages of technical manufacturing and engineering staff are encouraging interim solutions through contracting.
- Attractive hourly rates on offer for roles in lean manufacturing, senior operations and technical engineering.
- Contracting market will remain buoyant for the year ahead as a result of the tight permanent labour market.

## MANUFACTURING SALARY TABLE

State	NSW	NSW	VIC	VIC
Size of company	Small/Med	Large	Small/Med	Large
Salary	\$'000	\$'000	\$'000	\$'000
<b>ENGINEERING</b>				
Graduate Engineer	40–45	45–55	40–50	45–55
Chem/Mech/Elec Engineer	50–80	65–120	45–70	65–120
Process Engineer	70–90	80–120	70–90	75–110
Reliability Engineer	55–75	70–100	55–70	70–100
Quality Engineer	50–70	60–75	50–70	60–75
Quality Manager	90–120	120–160	90–120	120–160
Packaging Engineer	75–95	80–105	75–95	80–105
Lean Manufacturing Specialist	70–110	110–150	80–110	110–150
Project Engineer	60–75	70–90	60–75	70–90
Engineering Manager	90–110	110–150	90–120	120–150
<b>OPERATIONS</b>				
Maintenance Manager	80–100	100–130	70–100	90–130
Reliability Manager	80–100	100–130	70–100	90–130
Production Engineer	70–90	80–120	70–90	75–110
Production Manager	90–120	120–150	90–115	115–150
Plant Manager	100–130	130–170	100–150	140–170
Shift Supervisor	75–90	90–110	70–90	90–100
Operations Manager	100–140	140–200	100–135	135–200
Operations Director	–	200–300	–	160–250

Notes:

1. Salaries indicated are inclusive of superannuation, but exclusive of bonus/incentive schemes.

2. Small to medium companies are defined as having a turnover of less than \$100m. Large companies are defined as having a turnover of more than \$100m.

# MINING AND RESOURCES

## MARKET OVERVIEW

The unprecedented employment boom in the mining and resources industry is continuing and the forecast is positive for the year ahead. Demand for resources from the developing world is accelerating and China's rapid industrialisation shows no signs of slowing.

There is a critical skills shortage in this sector and it is a lack of qualified candidates that is being blamed for project delays and cancellations in Western Australia and Queensland. It is certainly a candidate driven market and the intense competition to secure workers is placing inflationary pressures on salaries.

Recruitment and retention are two of the key challenges for employers in the mining and resources sector. The employers that get it right will do so by offering far more than money. Additional benefits such as workplace flexibility, professional training and career development all play a crucial role in talent attraction and retention.

## EMPLOYMENT FORECAST

Our prediction is a positive one for the mining and resources sector. Average salary increases will be in the 5–10% range and go as high as 15% for sought after professionals such as mining engineers.

MINING & RESOURCES SALARY TABLE				
State	WA	WA	QLD	QLD
Size of company	Small/Med	Large	Small/Med	Large
Salary	\$'000	\$'000	\$'000	\$'000
<b>DESIGN &amp; CONSULTING</b>				
Engineering Manager	150–170	170–190	145–165	165–185
Lead Engineer	145–170	160–190	135–160	160–180
Senior Design Engineer	120–140	130–160	120–135	125–140
Design Engineer	85–120	95–125	75–105	95–115
Graduate Engineer	55–65	60–70	50–60	55–70
<b>PROJECT MANAGEMENT &amp; CONSTRUCTION</b>				
Project Director	–	280–350	–	280–350
Project Manager	180–230	220–280	180–220	200–250
Construction Manager	180–220	220–260	170–210	200–240
Field/Site Engineer	100–140	120–150	90–130	110–140
Senior Project Engineer	120–140	130–160	120–135	125–140
Project Engineer	85–120	95–125	75–105	95–115
Project Controls Manager	160–190	170–200	150–180	170–200
Senior Planning Engineer	130–150	140–160	110–140	130–155
Senior Cost Engineer/Estimator	120–150	135–160	100–135	130–155
Contracts Manager	160–190	170–200	150–180	170–200
Senior Contracts Engineer	130–150	140–160	110–140	130–155
<b>OPERATIONS &amp; TECHNICAL</b>				
Graduate Engineer	55–65	60–75	50–60	60–70
Process/Metallurgy/Mechanical/Electrical Engineer	75–100	80–110	70–95	80–105
Senior Process/Metallurgy/Mechanical/Electrical Engineer	95–115	110–140	90–110	95–125
Maintenance/Reliability Engineer	80–105	100–130	75–100	80–110
Maintenance Superintendent	110–140	140–160	110–135	140–160
Projects Superintendent	130–150	140–160	95–120	120–140
Senior Project Engineer	90–120	100–130	80–115	90–125
Project Engineer	75–95	80–110	60–90	75–105
Maintenance Manager	140–175	170–220	130–170	160–200
Engineering Manager	140–175	170–220	130–170	160–200
Quarry/Mining Manager	190–220	220–250	190–210	200–240
Mining Superintendent	140–160	150–180	130–155	150–175
Senior Mining Engineer	115–135	125–150	110–130	120–145
Mining Engineer	80–110	90–120	80–110	90–120
Plant/Metallurgy Manager	150–180	160–200	130–165	155–190
Operations Manager/Resident Manager	220–250	220–270	190–220	200–230
Operations Director/General Manager	250–300	270–330	230–270	250–290

Notes:  
 1. Salaries indicated are inclusive of superannuation, but exclusive of bonus/incentive schemes.  
 2. Small to medium companies are defined as having a turnover of less than \$100m. Large companies are defined as having a turnover of more than \$100m.

## PERMANENT EMPLOYMENT

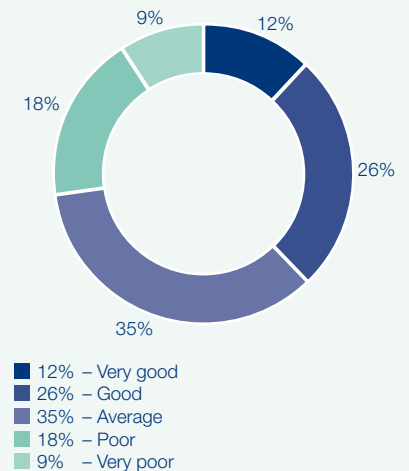
- Mining engineers, geologists, design drafting professionals, sub-sea engineering professionals and construction engineers are all highly sought.
- Demand likely to increase for operational professionals with the ability to operate mining plants, and process and business improvement specialists with six sigma skills.
- Employers will be in fierce competition for senior professionals with 15+ years experience and this will place upwards pressure on salary levels.

## CONTRACT EMPLOYMENT

- The contracting market will remain buoyant because a high number of mining projects are finite works best executed with a flexible labour force.
- Contract positions are being filled by permanent workers who are seeking to capitalise on lucrative hourly rates.
- Highest demand is for project controllers, mechanical design engineers, structural engineers and design drafting professionals.

## HOW WOULD YOU RATE YOUR COMPANY'S TRAINING AND CAREER DEVELOPMENT OPPORTUNITIES?

The majority of respondents rated their employer's commitment to training and development as average.



# INFRASTRUCTURE AND UTILITIES

## MARKET OVERVIEW

Continued investment in the public and private sectors has provided an exceptional first half of 2007, and a positive outlook for the year ahead. Business confidence levels remain high as expansions to existing utilities networks continue.

As often happens in an election year, this sector has benefited from an injection of funding for large projects including railways, roads, construction and water. As the economy becomes more ecologically focused, water supply and power generation have emerged as particularly active markets. Water supply is a major issue in Australia, and there have been some instances of regional water utilities tripling their capital budgets to mitigate against severe water shortages.

Candidates with strong understanding of transmission and distribution networks, in both technical and operational aspects, are in high demand to help with infrastructure and utilities increases. Companies with sound business practices, international opportunities and a healthy project portfolio will continue to attract the top quality candidates.

## EMPLOYMENT FORECAST

We anticipate recruitment activity to remain positive because of favourable business conditions as well as the injection of funding for major projects to address issues such as road, rail and water supply. This demand will drive up salaries by 4–7% as a standard, with increases of 10% and more for specialist technical skills in areas such as civil engineering, project management, rail and water.

## PERMANENT EMPLOYMENT

- Strong demand for rail specialists, project control specialists with specific software expertise, construction managers, electrical and mechanical engineers and process engineers.
- Renewable energy experience and/or water desalination experience will become increasingly prevalent because of rising environmental awareness.
- Candidates with public/private sector partnership experience will be highly sought as companies look to partner with consultancies.
- We anticipate permanent roles to remain steady, with demand highest in the resource-driven states of WA and QLD.

## CONTRACT EMPLOYMENT

- The market will remain buoyant as employers turn to the contracting alternative as a means to address the shortage of permanent workers.
- The contracting market will mirror the permanent market in terms of required skills.
- The tight labour market is likely to place inflationary pressures on contracting rates in the coming year.

## INFRASTRUCTURE AND UTILITIES SALARY TABLE

State	VIC	VIC	NSW	NSW	WA	WA
Size of company	Small	Large	Small	Large	Small	Large
Salary	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
<b>PROJECT MANAGEMENT AND CONSTRUCTION</b>						
Project Director	180–210	200–250	190–220	210–230	150–220	200–250
Project Manager	100–180	180–220	105–190	190–230	120–140	130–180
Construction Manager	120–170	150–200	125–180	160–210	100–140	120–160
Field/Site Engineer	90–120	100–130	95–125	105–135	80–110	90–120
Senior Project Engineer	110–130	120–140	115–135	126–150	90–120	100–140
Project Engineer	70–100	90–110	75–105	100–105	80–110	90–120
Project Controls Manager	130–150	150–170	125–160	160–180	120–140	130–180
Project Controls Engineer	80–110	80–130	85–115	85–135	90–130	100–140
Estimator	80–130	100–150	85–135	110–160	80–120	90–130
<b>OPERATIONS AND TECHNICAL</b>						
Graduate Engineer	45–55	50–60	50–60	55–63	50–60	55–65
Process/Mechanical/Electrical/Civil	55–70	60–85	58–75	65–90	60–80	65–85
Senior Process/Mechanical/Electrical/Civil	75–95	80–105	80–100	85–110	90–120	100–130
Maintenance/Reliability Engineer	65–95	75–115	70–100	80–120	80–100	85–120
Maintenance Superintendent	95–120	120–140	100–125	125–150	100–130	110–140
Projects Superintendent	95–120	120–140	100–125	125–150	100–130	110–140
Maintenance Manager	115–180	150–180	120–190	160–190	130–170	130–180
Engineering Manager	120–150	150–180	125–160	155–190	140–170	150–180
Operations Manager	120–150	150–210	125–160	160–220	140–180	170–220
Operations Director	140–200	200–285	150–210	210–330	170–220	180–250
Quality Engineer	55–70	60–90	60–75	65–95	70–100	80–110
Quality Manager	90–110	110–140	95–115	115–150	120–150	130–160
Asset Manager	70–110	110–160	75–115	115–170	130–170	130–180

### Notes:

1. Salaries indicated are inclusive of superannuation, but exclusive of bonus/incentive schemes.
2. Small to medium companies are defined as having a turnover of less than \$100m. Large companies are defined as having a turnover of more than \$100m.

# PROFESSIONAL SERVICES AND CONSULTANCIES

## MARKET OVERVIEW

Private companies and government bodies are embarking on large scale engineering projects and this is good news for the professional services sector. There is strong demand for consulting services and this will drive steady employment growth in the coming year.

We are seeing more consultancies entering joint venture partnerships to maximise their breadth of expertise, while minimising project delivery risks through access to increased resources and networks. A number of larger consulting groups have acquired smaller players in order to enter new markets, boost staff levels in a tight labour market and drive growth.

Continued strength in the infrastructure, mining and resources sectors will provide extensive opportunities for engineering consultancies in the next 12 months. Tier 1 consultancies

that service these sectors will generate a large proportion of employment growth. Increasingly, these consultancies are assisting the same clients on international projects. This is providing opportunities for younger engineers to gain international project experience.

## EMPLOYMENT FORECAST

Our forecast is a positive one and we predict steady growth in this sector. There will however be spikes and troughs as major projects are won and move through the project life cycle to completion. We anticipate salary increases of 4-7% as an industry standard, with 10% increases for the engineering skills in highest demand. Increases will be primarily on base salary with bonuses most common in continuous improvement roles where performance can be measured and tracked.

## PERMANENT EMPLOYMENT

- Strong demand to continue for senior civil, process and instrumental/electrical engineers as employers target specialists with the experience to drive business growth.
- Competition amongst consultancies is high, with many companies aligning themselves with recruiters to maximise candidate flow.
- Company branding will be actively promoted when sourcing graduate engineers, and organisations will need to increase involvement in career fairs, university affiliations and work programs.

## CONTRACT EMPLOYMENT

- Managing the rate of wages growth in the contracting market is becoming more difficult, especially in the oil and gas market.
- Loyalty bonuses for contractors to encourage project completion will continue and possibly become more aggressive.
- Roles in demand include all discipline specific specialists, process, instrument/electrical, petroleum engineers, lean manufacturing and continuous improvement specialists.

## PROFESSIONAL SERVICES AND CONSULTANCIES SALARY TABLE

State	VIC	VIC	NSW	NSW	WA	WA
Size of company	Small	Large	Small	Large	Small	Large
Salary	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
<b>DESIGN AND CONSULTING</b>						
Engineering Manager	130-150	150-170	135-145	155-180	150-170	170-190
Lead Engineer	120-130	130-150	125-135	135-155	145-170	160-190
Senior Design Engineer	105-120	110-130	110-125	115-135	120-140	130-160
Design Engineer	55-80	60-90	60-85	65-85	85-120	95-125
Graduate Engineer	45-55	50-55	45-60	50-60	55-65	60-70
Process Improvement	70-100	95-140	75-105	100-150	-	-
Risk Engineer	65-80	75-110	70-90	80-120	-	-
Risk Manager	80-110	105-150	80-110	105-150	-	-
<b>PROJECT MANAGEMENT AND CONSTRUCTION</b>						
Project Director	-	230-280	-	250-310	-	280-350
Project Manager	160-190	190-230	170-200	200-210	180-230	220-280
Construction Manager	150-180	180-215	155-190	190-225	180-220	220-260
Field/Site Engineer	85-115	105-130	90-120	110-135	100-140	120-150
Snr Project Engineer	105-120	115-130	110-125	120-135	120-140	130-160
Project Engineer	65-95	85-105	70-100	90-110	85-120	95-125
Project Controls Manager	130-160	150-180	135-170	155-190	160-190	170-200
Planning Engineer	85-105	105-120	90-110	110-125	90-120	100-140
Project Controls Engineer/Estimator	85-105	105-120	90-110	110-125	90-120	100-140

### Notes:

1. Salaries indicated are inclusive of superannuation, but exclusive of bonus/incentive schemes.
2. Small to medium companies are defined as having a turnover of less than \$100m. Large companies are defined as having a turnover of more than \$100m.
3. 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, thus our data on salaries in this area is resources specific.

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