

Metal Fabricator	New South Wales (NSW)
ASCO Code: 4122-11	August 2007
Labour market rating	Shortage (Metropolitan)
Comment: Shortages were most evident in manufacturing in Sydney.	

Occupational demand

Demand indicators for this trade were mixed over the past year. The Construction Forecasting Council (CFC) estimates that non-residential construction in NSW grew by only three per cent in 2006-07 (in nominal dollars) following strong growth in 2005-06. Manufacturing activity improved over the year, with the Australian Industry Group / Pricewaterhouse Coopers *Survey of Australian Manufacturing* indicating an increase in production in each of the four quarters to June 2007.

Mining activity was strong, with coal production increasing by eight per cent in the year to May 2007. Although Labour Force Survey data do not show any significant increase in employment of fabrication engineering tradespersons over the past year, the consensus of employers contacted for this report was that demand for metal fabricators was solid in some sectors of construction and for industries servicing the mining sector.

Occupational supply

Supply to the fabrication engineering trades as a whole from apprenticeship completions grew by 23 per cent in 2006-07 and was 10 per cent above the average for the previous ten years. However, the training rate (apprenticeship completions as a percentage of employed fabrication engineering tradesperson) is slightly below the average for all trades (2.4 per cent compared with 2.7 per cent). There are no recent and reliable data on wastage from this trade although historically the wastage rate has been higher than the training rate. Net immigration of engineering fabrication tradespersons as a whole has grown strongly in the past two years, averaging 180 a year compared with an average of 50 a year for the previous five years.

Employer and industry comments/current labour market

A DEEWR survey of vacancies for metal fabricators found that 81 per cent were filled within four weeks of advertising, which compares with 64 per cent in 2006. Regional employers, particularly in the Hunter, were generally able to fill their vacancies, although the response to advertisements varied considerably. The experience of employers in Sydney was even more variable, with a substantial minority filling one or more advertised positions with little trouble while others failed to attract a single suitable applicant. While there was an average of over five applicants per vacancy, employers reported that most applicants were either unqualified or proved to have sub-standard skills when given a trial. A common failing among applicants was an inability to work from drawings. Employers offering project work at casual rates in the mining, construction and marine industries generally had the least trouble in filling vacancies, as did a number of prominent employers in the manufacturing industry. More typically, however, manufacturing employers and those offering employment on a wage basis experienced considerable difficulty in filling their vacancies. Most advertisements did not attract any suitable applicants or, when they did, the applicants were seeking remuneration levels comparable to those in the mining industry, which most employers could not afford. A number of surveyed employers were sponsoring migrants or head-hunting workers from their competitors in order to fill long-standing vacancies.

Labour market outlook

The CFC expects non-residential construction in NSW to grow by 23 per cent in 2007-08 and the outlook for mining remains positive. Demand for metal fabricators, therefore, should strengthen over the short term. Although apprenticeship completions are projected to increase further in 2007-08, it is unlikely that this will be sufficient to meet the demand for experienced workers and shortages should persist over the next 12 months.

Metal Fabricator		Victoria
ASCO Code: 4122-11	September 2007	
Labour market rating	Shortage	
Comment:		

Occupational demand

Demand for metal fabricators in Victoria is largely determined by the level of activity in the manufacturing industry, and more generally by overall economic activity. The Survey of Australian Manufacturing June 2007 discussed that growth in manufacturing activity strengthened moderately in the June quarter 2007, largely reflecting a broadening in demand, this has improved the 12 month outlook moderately for the industry, however the appreciating dollar is continuing to dampen export prospects. Manufacturing employment in Victoria for the August quarter has seen a 4.8 per cent increase from the 2006 August quarter.

Victoria's economy had relatively strong growth of 2.9 per cent over the year to December 2006 and the Australian economy grew by 3.7 per cent. DEEWR Skilled Vacancies Index data show demand for metal fabricators started to plateau in 2004 and 2005 after a steep decline, however it has once again started to decline in 2006.

Occupational supply

ABS Education and Work figures suggest around 57 per cent of employed boilermakers and welders have certificate III or certificate IV qualifications. DEEWR estimates the percentage of persons who completed a Certificate III in Engineering (Fabrication Trade, Production Systems and other related streams) was 474 persons in 2005-06, up from 383 persons in 2004-05 (Department of Immigration and Citizenship) data.

Employer and industry comments/current labour market

The survey of Employers who Recently Advertised (SERA) found that 45 per cent of vacancies were filled. The average number of suitable applicants per vacancy was 0.6 and there was an average of two unsuitable applicants per vacancy.

Employers discussed that they found it difficult to find applicants with experience. Although qualifications were the first thing employers were looking for, many applicants lacked hands on experience particularly with reading drawings and undertaking heavy duty work. Employers advertised in both newspapers and through the internet for long periods of time with vacancies remaining unfilled for significant periods, many of the positions for metal fabricators were newly created positions to meet company expansion.

Several employers had previously used the 457 visas to fill positions and discussed that they would consider this again if they were unable to fill positions. Some employers commented that qualified and experienced metal fabricators often started their own businesses or would seek positions that would pay above award rates with the shortage of qualified workers enabling this flexibility.

Labour market outlook

Strong demand for metal fabricating services in Victoria has led to a shortage, which is expected to continue over the next six months.

Metal Fabricator		Queensland
ASCO Code: 4122-11		September 2007
Labour market rating	Shortage	
Comment:		

Occupational demand

Metal fabricators or boilermakers are generally employed in the manufacturing industry where they manufacture, maintain or repair metal products and structures by using detailed drawings and specifications to cut, shape, join and finish metal. The Australian Industry Group-PricewaterhouseCoopers *Survey of Australian Manufacturing* shows that manufacturing production in Queensland increased in all four quarters over the year to June 2007. The overall increase in orders and exports within this sector has created strong and steady demand for this trade. In addition, Queensland's mineral resources are in global demand and the population increases by almost 1800 persons a week. Employers from the State's mining and non-residential building sectors are therefore seeking the skills of metal fabricators to support a growing number of mining and infrastructure developments.

Occupational supply

Entry to this trade is via the completion of an apprenticeship in Engineering Fabrication. Data from the Department of Education, Training and the Arts indicate that new commencements in fabrication courses have been on an increasing trend for several years with the intake in 2006 (1140) reported to be more than 30 per cent higher than the number recorded in 2004 (780). Taking into account wastage during training, it is anticipated that approximately 550 apprentices will enter the labour market at the end of 2007. Overseas migration may play a significant role in supply to this trade with data from the Department of Immigration and Citizenship showing a net gain to the State of 541 self-identified structural steel and welding tradespersons to the workforce in 2006-07. Queensland Labour Force Survey figures suggest a stronger role for interstate migration with an increase of 3500 persons to the workforce over the year to August 2007.

Employer and industry comments/current labour market

In this year's study, 18 per cent of vacancies for metal fabricators were filled within four weeks of advertising. Almost 90 per cent of the applicants were considered to be unsuitable because they did not have qualifications or experience. Some employers reported however, that qualifications were not essential if appropriate skills could be demonstrated. A number of contacts remarked that increased business specialisation has gradually eroded the pool of applicants for generalised fabrication positions. In contrast to other trades examined this year, there were few overseas applicants for these vacancies. Employers noted however that a standard recruitment practice within this trade is to trial an applicant's skills prior to offering employment, in which case, they did not consider overseas recruitment as a viable option. Respondents reported high levels of turnover in this trade as fabricators take advantage of the many employment opportunities available. Employers who had successfully recruited and retained workers attributed their success to higher remuneration, building links with schools to secure apprentices, developing a positive company profile and promoting a workplace that offers a range of employee incentives.

Labour market outlook

Reflecting the flow-on effects of the resources boom on manufacturing in Queensland, the Australian Industry Group has forecast a strong 5.6 per cent growth in manufacturing sales in 2007. When combined with the State's advancing population and associated infrastructure development, it is expected that demand for metal fabricators will strengthen. Metal fabricators in Queensland are currently in shortage and while apprenticeship numbers have been on an increasing trend since 2004, so has demand for this trade. Without significant improvements to supply through either training or migration, the outlook for this trade over the next twelve months is not expected to change.

Metal Fabricator	South Australia
ASCO Code: 4122-11	July 2007
Labour market rating	No Shortage
Comment	

Occupational demand

Around 80 per cent of metal fabricators are employed in the manufacturing industry, particularly in the manufacture of fabricated metal products, structural steel and basic iron and steel manufacturing. In the three years to May 2007, around 8000 jobs have been lost in the industry, representing an eight per cent reduction in the size of the workforce. Investment in new equipment, plant and machinery fell by eight per cent in 2006. Moreover, after a period of strong growth from 2004 to 2006, the value of metal and metal manufactures exports has steadied in recent months and exports of road vehicles and parts have fallen since mid 2006. These trends are largely caused by increased competition from cheaper replacement items manufactured overseas, the loss of existing contracts to off-shore companies, and the persistently high Australian dollar. In contrast to falling demand from some sections of the manufacturing industry has been growing demand driven by the significant growth in mining activity both in South Australia and interstate over the past few years. As a consequence, overall demand for metal fabricators has remained steady, as reflected by DEEWR's Skilled Vacancies Index data which recorded no significant change in the number of newspaper vacancies for metal fabricators in 2006-07. However, employment of structural steel and welding tradespersons decreased by ten per cent in the year to May 2007 (in four quarter average terms).

Occupational supply

Since detailed training statistics for metal fabricators are not available, the following data are based on the broader category of fabrication engineering. The number of persons completing a four-year apprenticeship in fabrication engineering peaked in 1998 at 188. Completions subsequently declined to 139 in 2002 and although they increased to 160 by 2004, they fell again to 134 in 2005. In 2006 there were 164 completions which represents the highest level in seven years. Trainee commencements increased from a low of 172 in 1999 to 248 in 2004 which was followed by a slight reduction to 242 in 2005 and 230 in 2006. As a consequence of the recent downward trend in training commencements, the number of completions is anticipated to decline in 2008 and 2009. Net migration represents an additional source of supply to the workforce that supplements formal training. Though relatively small in size, over the past few years there has been a significant increase in the net migration of structural steel and welding tradespersons to South Australia.

Employer and industry comments/current labour market

A survey of employers who recently advertised for metal fabricators indicated that almost all employers were able to fill their vacancies. Around 98 per cent of positions were filled within four weeks, compared with a filled rate of 81 per cent in 2006 and 90 per cent in 2005. Each vacancy attracted an average of 2.6 applicants compared to 3.4 applicants in 2006. The average number of applicants considered suitable for employment was 1.2 per vacancy compared to 0.9 in 2006. Employers reported high turnover of staff due to the short term nature of some work, but also because some tradespeople frequently change employers in search of higher rates of pay. Most of the advertised vacancies were for new positions, though many of these are project-based.

Labour market outlook

Training data indicate that the supply of fabrication engineering tradespersons will decrease slightly over the next two years. This is likely to coincide with an anticipated strong increase in demand associated with new projects in the defence and mining industries. Therefore, although the labour market is currently in balance, shortages may emerge over the next few years.

Metal Fabricator		Western Australia
ASCO Code: 4122-11	September 2007	
Labour market rating	Shortage	
Comment		

Occupational demand

Labour Force Survey data suggest that the number of employed metal fabricators (boilermakers) has been fairly flat in the 12 months to September 2007 while the Department of Education, Employment and Workplace Relations (DEEWR) Skilled Vacancies Index shows that newspaper vacancies for the trade have continued to decrease after falling from 2005 to 2006. The increased activity in the resources sector has led to greater demand for all types of metal fabricators. Oil and gas exploration and general mining activity has generated an increase in demand for tradespeople able to work on large, structural equipment, pipelines, railway rolling stock and heavy mining machinery, including buckets and truck trays. There is also a strong demand for specialised metal fabricators with aluminium welding/shipbuilding experience. Experience is often considered more important by employers than qualifications, especially in heavy mining work.

Occupational supply

Trade qualifications are gained via an apprenticeship now known as Engineering Tradesperson (Fabrication) – Welding which includes TAFE study. During the trade year, 304 persons completed apprenticeships an increase of 25 per cent over the previous year and 13 per cent above the average over the previous four years.

Employer and industry comments/current labour market

Large recruitment firms have reported that advertisements seem to achieve a 50 per cent placement rate in the metropolitan area and about 80 per cent for “fly-in fly-out” (FIFO) jobs. They also report they have ongoing vacancies due to high turnover rates, short term contract work and workers looking around for higher incomes. This tends to lead to variations in response to advertisements which some employers accredit to availability of major mining projects. The ship builders state that they require fabricators with aluminium welding experience to work on boats and there is an ongoing shortage such workers. Reasons suggested for this difficulty include the unpleasant odours of aluminium welding, and the higher incomes in mining cause this shortage. Ship builders report that expected naval contracts will extend this shortage.

Some employers report “poaching” of good metal fabricators and boilermakers with offers of higher incomes. Many employers report that there are large number of less skilled workers around who are applying for technically advanced or specialised jobs.

Labour market outlook

The shortage of metal fabricators is expected to continue. Very strong demand from the resources and related manufacturing industries combined with limited supply has resulted in a shortage of tradespeople with heavy metal and welding skills. The ongoing trade in mineral resources with overseas markets, particularly China, will continue to have flow on effects to associated and support construction industries and infrastructure projects. This means that metal fabricators will be in high demand for the foreseeable future.

Metal Fabricator	Tasmania
ASCO Code: 4122-11	September 2007
Labour market rating	Shortage
Comment <i>In Tasmania this trade is generally known as boilermaker/welder or metal fabricator.</i>	

Occupational demand

At the 2001 Census there were 802 metal fabricators counted, which was 12.5 per cent lower than the number recorded in 1996. However there were also 447 welders, so there are likely to be definitional issues in counting this trade as there is often little distinction between boilermakers and welders in Tasmania. Since 2001 there has been considerable growth in metal trades generally, reflecting increases in demand, and as at May 2007, ABS estimated 2700 people worked in the structural steel and welding trades. Demand for metal trades is associated with growth in a range of industries that require parts and services produced by metal trades people, including the mining industry, forestry, manufacturing, and increasingly in Tasmania, shipbuilding. In Tasmania most metal fabrication and engineering trades are employed in the manufacturing industry, at about 64 per cent, with construction the next largest at 7 per cent. Total employment in this industry has been declining over a long period of time, but industry sources suggest that demand for higher skilled people at the trade and above level remains strong. There is also an increasing trend of tradespeople generally, working for labour hire companies, who are classified as working in the property and business services sector even though they may be hired out to work in the manufacturing or construction industries.

Occupational supply

The number of apprentice metal fabricators commencing in 2006-07 was at its highest level since the current statistical series began in 1995. The numbers in training are also at their highest level since then and are nearly 70 per cent above the level recorded 10 years ago. Apprentice sheetmetal workers have been included in these figures since 2003, but they are a relatively small proportion of the total and are not responsible for the significant increases in the overall numbers. Census data shows that around 80 metal fabrication trades people arrived in Tasmania from interstate, and another five from overseas, between 1996 and 2001. However, a number of industry sources indicated that they are increasingly looking overseas for metal fabrication trades people in the light of current recruitment difficulties.

Employer and industry comments/current labour market

Only 36 per cent of vacancies for boilermakers were filled in the lead up to this report, while other employers reported that the occupation was in shortage. The expansion of the shipbuilding industry and the resulting increased competition is one of the main reasons provided for why shortages exist, particularly in southern Tasmania. Most employers indicated that they required qualified tradespeople for their works, although some indicated they had employed unqualified but experienced welders/fabricators in the past at a lower rate of pay.

Labour market outlook

Despite significant increases in the numbers of apprentices in training, the very low percentage of vacancies filled combined with other industry comments support a rating of shortage.

Metal Fabricator		Northern Territory
ASCO Code: 4122-11	August 2007	
Labour market rating	Shortage	
Comment:		

Occupational demand

ABS Census data show that there were 337 people employed in general fabrication trades (which include metal fabrication and welding) in 2001. Labour Force Survey data indicate that employment in the general fabrication trades has grown gradually over the past six years after a low in 2001. Engineering construction activity in the NT was dramatically influenced by the Wickham Point LNG plant construction and Alcan's G3 alumina refinery expansion and although the peak employing construction phases for these projects are complete, the construction and commodities industries remain strong. There have been brief periods over the past year when the labour market for metal fabricators has been less constrained in between larger projects finishing and new ones starting up, however the underlying demand has remained high.

Occupational supply

Apprenticeship commencements increased significantly in 2004 and again in 2005 for general fabrication trades and many employers contacted commented that they had or were planning to take on extra apprentices. The school based apprenticeship programmes were heralded by some employers as a great initiative and some employers noted that there seemed to be more interest in people taking up apprenticeships in the trade. This year, unlike the previous year, the majority of applicants for vacancies were local tradespeople and so there was less reliance on sourcing people from interstate. There remain a considerable number of migrant metal fabricators working in the NT and some employers are looking to sponsor more overseas tradespeople to alleviate their recruitment problems, but would prefer to be able to source local people.

Employer and industry comments/current labour market

Employers contacted had variable success recruiting metal fabricators with 63 per cent of vacancies being filled, a similar fill rate to the previous two years. Some employers attracted a good field of applicants, while others had difficulty generating any interest in their vacancies. Employers for higher paying mining or contractor business roles tended to fare better, compared to those looking to fill standard workshop roles.

Employers consistently commented that there were wage pressures, with locals taking advantage of the shortage and shopping around seeking better wages and conditions. It was also considered difficult to retain tradespeople in the NT due to competition coming from interstate roles. Poaching was also considered to be an issue by some employers with third or fourth year apprentices often targeted. There was also a tendency for tradespeople to switch to contractor roles.

Employers commonly commented that demand remained very strong and that further growth was restricted by the ability to take on additional skilled workers. The vacancies advertised were commonly due to a combination of staff turnover and the creation of new positions.

Labour market outlook

There is currently a greater demand for metal fabrication work than supply of tradespeople. With the construction and commodities industries set to continue strongly at least for the coming year, the trade is expected to remain in shortage. For the longer term outlook, the increase in the take up of apprenticeships should help alleviate the shortage.

Metal Fabricator		Australian Capital Territory
ASCO Code: 4122-11	July 2007	
Labour market rating	Shortage	
Comment:		

Occupational demand

Nationally, manufacturing is the main employing industry employing metal fabricators but this is a small industry in the ACT. ABS Labour Force Survey data show there are around 200 structural steel and welding tradespersons employed in the ACT. The same survey suggests employment of structural steel and welding tradespersons in the ACT has fallen over the last five years. DEEWR Skilled Vacancies Index data show the number of newspaper vacancies for metal trades fell by 14 per cent over the year ending June 2007. However, the number of advertisements is generally low reflecting the small employment size and these data should be used cautiously.

Occupational supply

Entry to the trade of metal fabrication is generally through an AQF Certificate III in Engineering (Fabrication trade). Over the past seven years there have been an average of 15 student commencements and an average of nine completions per annum for this Certificate in the ACT. Overseas departures and arrivals information from the Department of Immigration and Citizenship shows the net inflow from overseas of general fabrication engineering tradespeople to the ACT is minimal.

Employer and industry comments/current labour market

A survey of employers who had recently advertised for boilermakers was conducted for this report, with the majority of vacancies surveyed being positions in fabrication shops and light engineering. Slightly more than 60 per cent of vacancies were filled within four weeks of advertising, a significant increase from the vacancy fill rate recorded in 2006. However, several employers described these positions as being vacant for long periods and most received low numbers of applicants.

There were three applicants per advertised vacancy on average, with less than one of those applicants considered by employers to be suitable per vacancy. Employers were seeking to recruit metal fabricators who had completed their apprenticeship and gained a minimum of a couple of years of experience. Not all advertisers who were recruiting metal fabricators needed applicants to have completed a metal fabrication apprenticeship, and some were willing to employ someone who had skills in welding or maintenance work developed over the first few years of the course. Most employers screen candidates over the phone before inviting them to trial in the work place, and some expressed frustration that candidates did not always attend trials. A recruitment company surveyed suggested the difficulties associated with finding skilled metal trade workers are related to the relatively poor pay and conditions.

Labour market outlook

There are no indications that the labour market conditions will change significantly over the next six months.