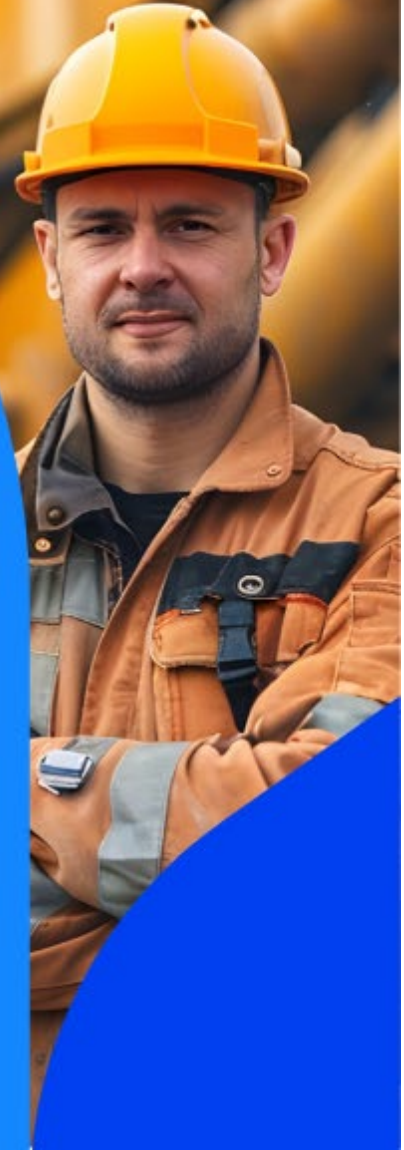# February 2025 Research Bulletin

Does the skilled migration system meet the needs of the mining and automotive industries?

Migrants in the Mining and Automotive Industries

Migrants are an integral part of the Australian workforce with nearly one in four Australian residents being born overseas and half of the population having an overseas-born parent.[1] In an attempt to boost productivity, address skills shortages, and build stronger communities the Australian Government has recently undertaken a review of the migration system.[2] This Research Bulletin investigates the role of migration and the alignment of the migration system towards the Automotive and Mining industries.

Migration at the Industry Level

In the Mining Industry, the proportion of migrant workers in each subdivision varies; Metal Ore Mining (23%), Exploration and Other Mining Support Services (25%), and Oil and Gas Extraction (25%) have higher proportions of migrant workers, whereas Coal Mining (9%) and Non-Metallic Mineral Mining (11%) have lower proportions of migrant workers (Figure 1). The proportion of migrant workers correlates with the need for workers with tertiary education in the sector (Figure 2).[3] In both the Coal mining and Non-Metallic Mineral mining sectors, 15% of the workforces hold a bachelor's degree or higher, compared to 24% across the entire mining industry workforce.[4]

In the Automotive industry, the motor vehicle manufacturing sector has the highest proportion of migrant workers (28%), followed by the automotive repair and maintenance industry (20%), and the retailing and wholesaling sector (19%) (Figure 1). Like the mining industry, the proportion of migrants correlates with the education level of the workforce (Figure 2). 21% of the automotive manufacturing workforce holds a bachelor's degree or higher, compared to 11% in the overall automotive sector.[5] The automotive repair and maintenance sector, an occupation that is more aligned with VET pathways, has a workforce of which 6% hold higher education qualifications and employs 20% migrant workers.

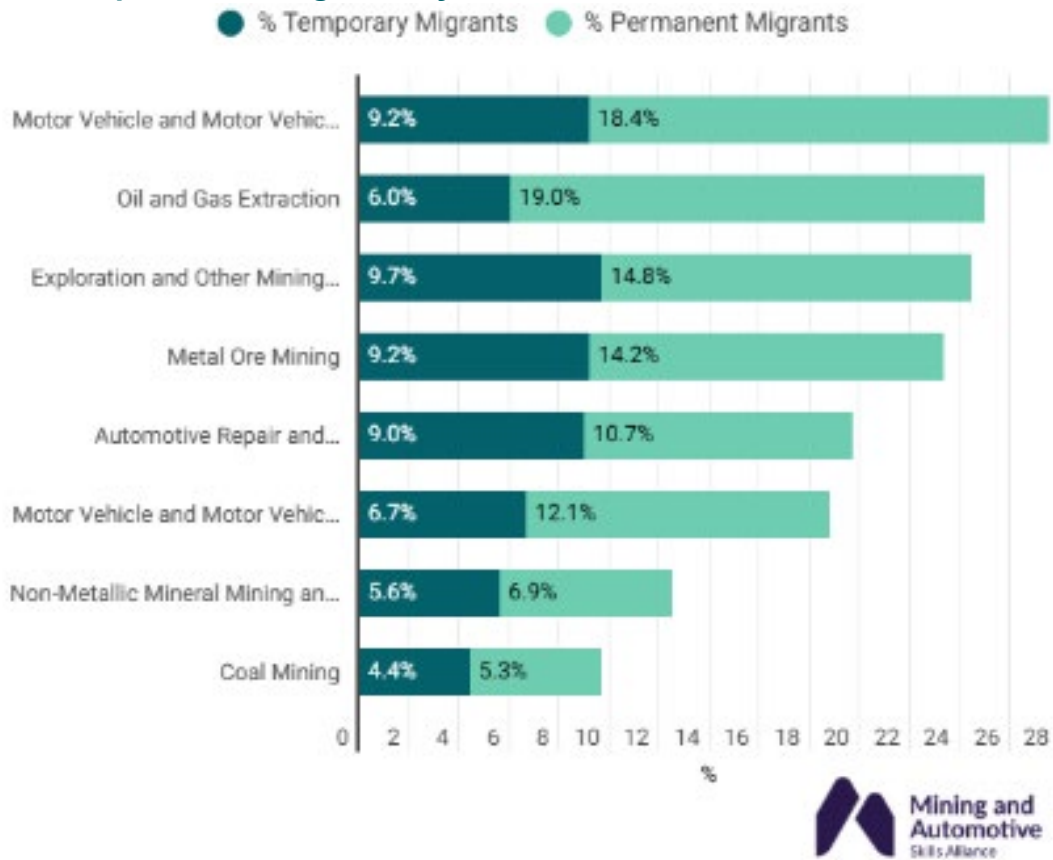[1] Ai Group, "Skilled migrants' contribution to the Australian workforce", 2024
[2] Commonwealth of Australia, "Migration Strategy", 2023
[3] Skilled migrants generally have higher educational attainment, with 71.6% holding a diploma or above, compared to 35.6% of the Australian population. Ai Group, "Skilled migrants' contribution to the Australian workforce", 2024
[4] AUSMASA, Workforce Plan 2024; ABS, "Census of Population and Housing (HEAP Level of Highest Educational Attainment)", 2021
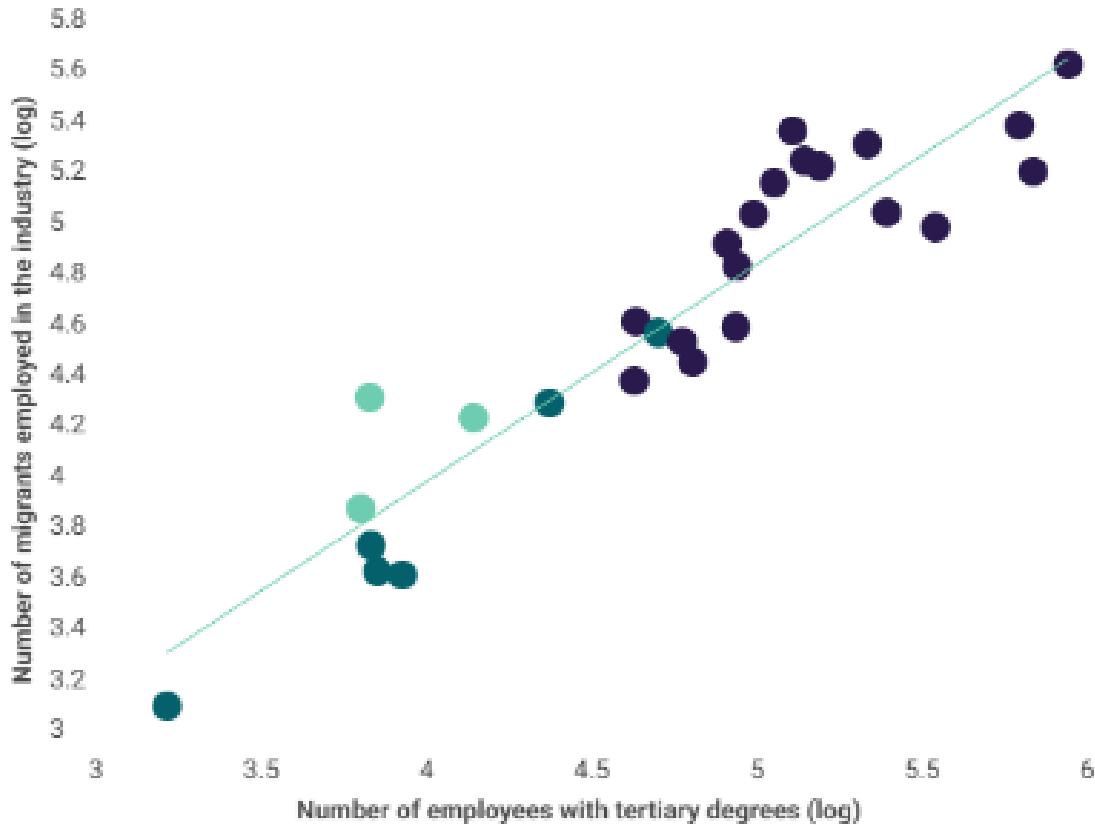[5] AUSMASA, Workforce Plan 2024; ABS, "Census of Population and Housing (HEAP Level of Highest Educational Attainment)", 2021

Figure 1. Proportion of migrants by subdivision

● % Temporary Migrants ● % Permanent Migrants

Subdivision	% Temporary Migrants	% Permanent Migrants
Motor Vehicle and Motor Vehic...	9.2%	18.4%
Oil and Gas Extraction	6.0%	19.0%
Exploration and Other Mining...	9.7%	14.8%
Metal Ore Mining	9.2%	14.2%
Automotive Repair and...	9.0%	10.7%
Motor Vehicle and Motor Vehic...	6.7%	12.1%
Non-Metallic Mineral Mining an...	5.6%	6.9%
Coal Mining	4.4%	5.3%

Source: Australian Bureau of Statistics, "Australian Census and Migrants, 2021, TableBuilder", 2021; 'Australian Census and Temporary Entrants, 2021', 2021.

Figure 2. Employment of migrants and workers with tertiary degrees in mining and automotive sub-divisions and all other ANZSIC divisions.

Source: Australian Census and Migrants, 2021, TableBuilder, 2021; Census of Population and Housing, 2021, TableBuilder. Each dot represents the Industry of ANZSIC main-division (1-digit level) and the mining and automotive sub-industries.

Migration at the Occupation Level

Various occupations in the mining industry employ migrant workers (Figure(s) 3 & 4).[6] The number of skilled migrants has increased over the years, indicating an ongoing need for their skills. The two most in-demand occupations in mining remain metal fitters and machinists, who increased from 1,216 to 1,793 (+47%), and migrant mining engineers, who increased from 1,019 to 1,575 (+35%) (Figure 3a).
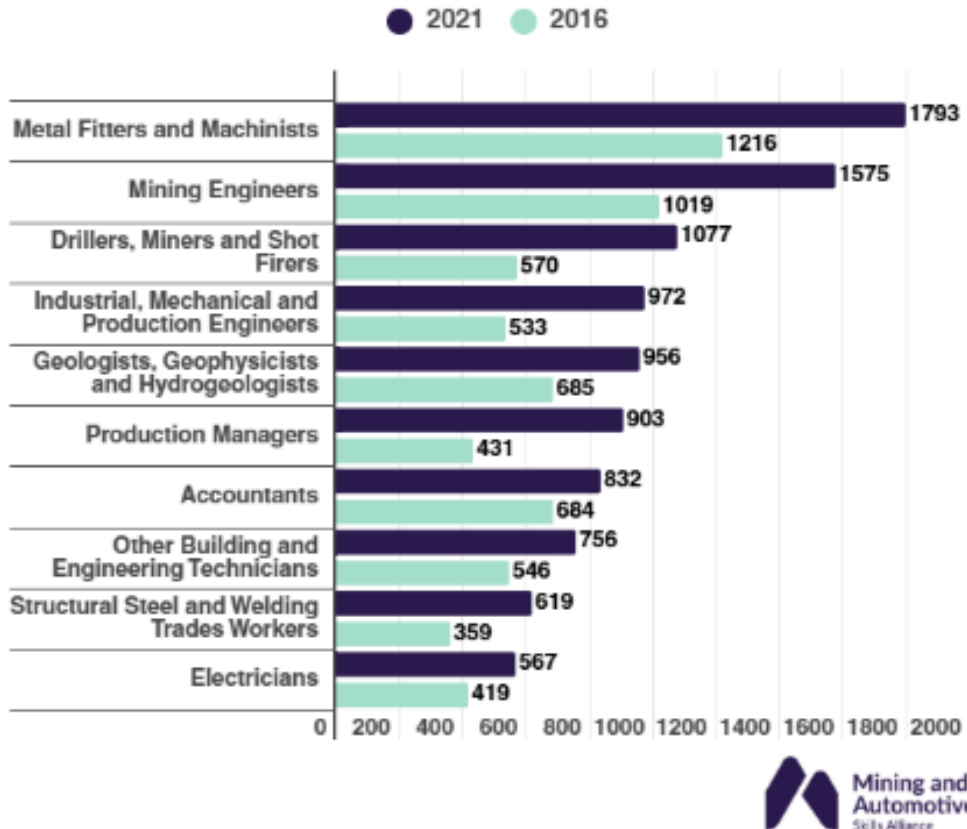
While skilled migrants in the mining industry are dispersed across various occupations, those in the automotive industry are predominantly concentrated in the automotive technician occupation, surpassing the second-largest occupation – motor vehicle and vehicle parts salesperson - by 4,200 skilled migrants (Figure 4a). [7]

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[6] Ai Group, "Skilled migrants' contribution to the Australian workforce", 2024
[7] Referred to as "Motor Mechanics" under ANZSCO

Accountants and Industrial, Mechanical, and Production Engineers had the highest and second-highest proportions of migrant workers in both the Mining and Automotive industries, each comprising around 30% of the workforce in 2021 (Figure 3b). Although Metal Fitters and Machinists topped the list of skilled migrant occupations in mining, skilled migrants represented 8% within the occupation category. Similarly, Motor Mechanics,[8] the leading occupation for skilled permanent migrants in the Automotive industry, accounted for 9% within the occupation in 2021 (Figure 4b).
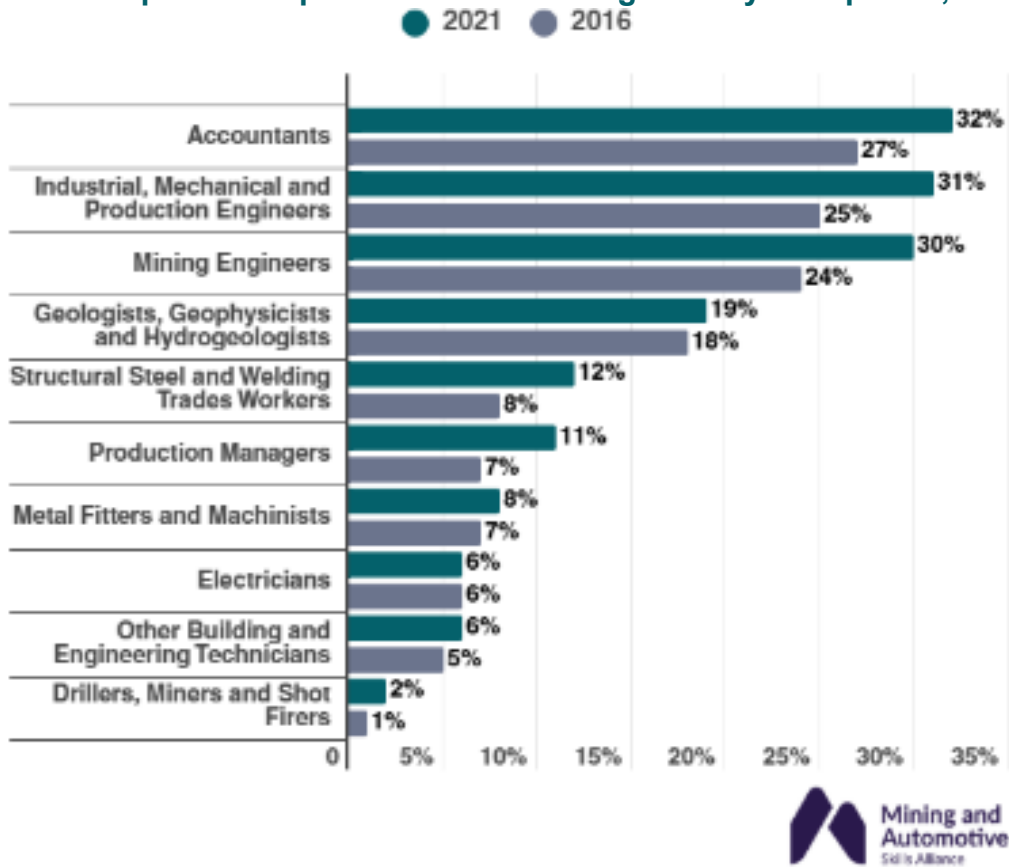
Figure 3a. Top 10 Occupations employing permanent skilled migrants, Mining

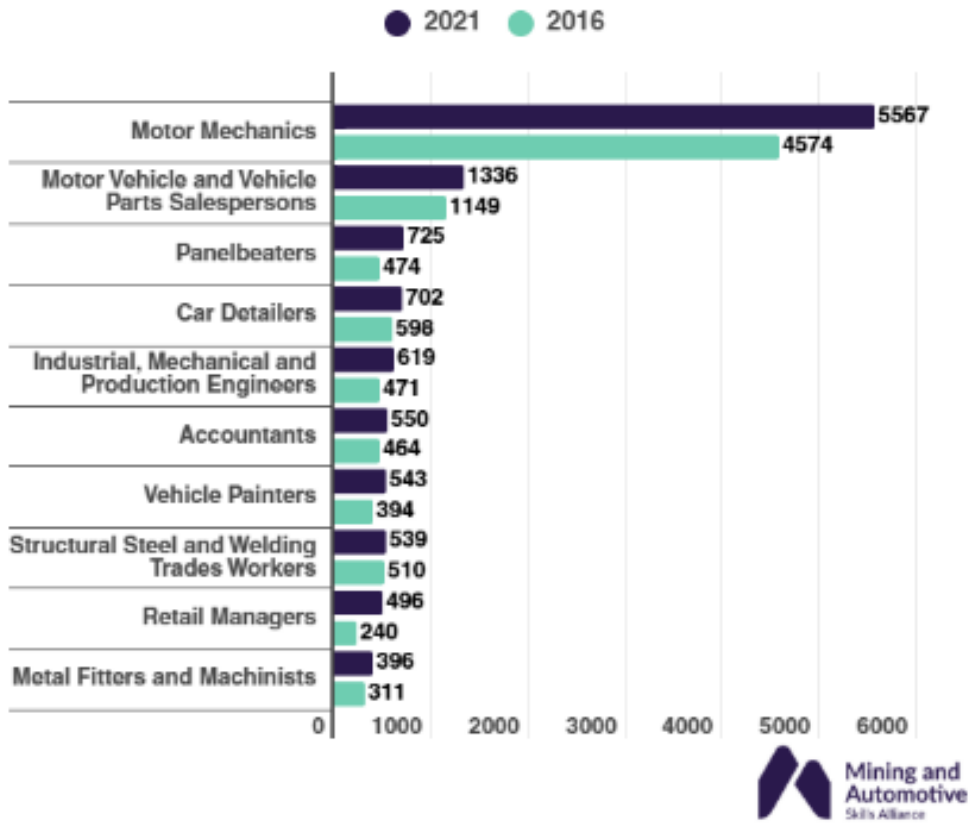Source: Australian Bureau of Statistics, "Australian Census and Migrants, 2021, TableBuilder", 2021.

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[8] Known as Automotive Technicians under the new OSCA system

Figure 3b. Proportion of permanent skilled migrants by occupation, Mining

● 2021   ● 2016

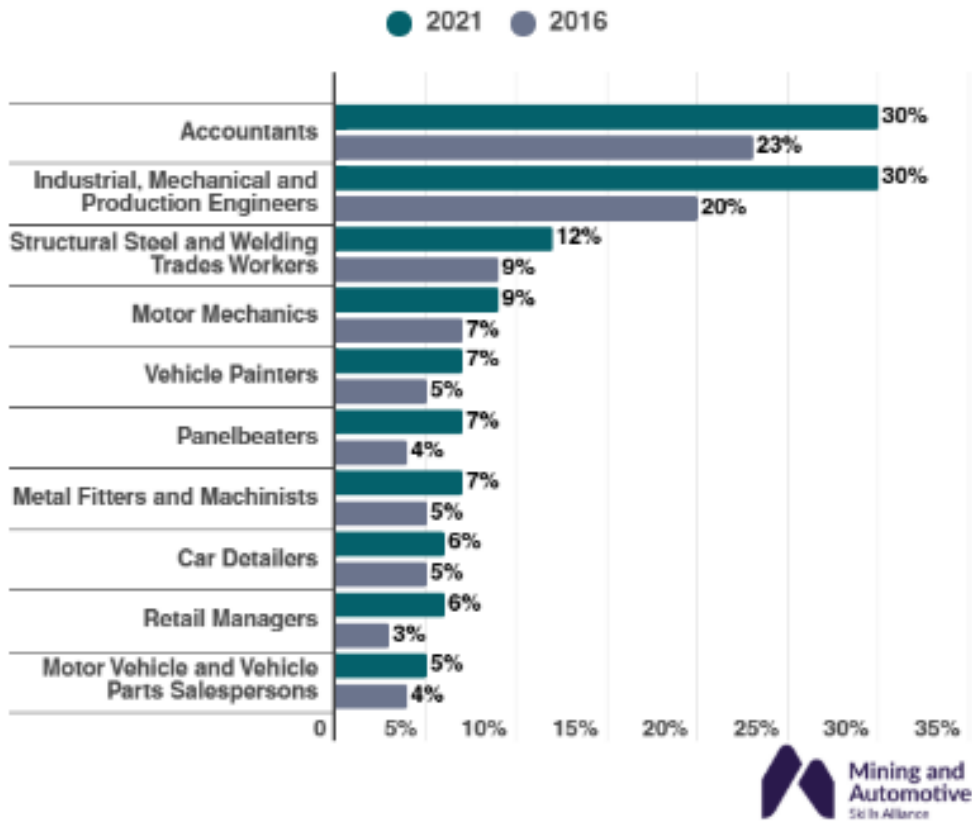| Occupation	2021	2016
Accountants	32%	27%
Industrial, Mechanical and Production Engineers	31%	25%
Mining Engineers	30%	24%
Geologists, Geophysicists and Hydrogeologists	19%	18%
Structural Steel and Welding Trades Workers	12%	8%
Production Managers	11%	7%
Metal Fitters and Machinists	8%	7%
Electricians	6%	6%
Other Building and Engineering Technicians	6%	5%
Drillers, Miners and Shot Firers	2%	1%

Source: Australian Bureau of Statistics, "Australian Census and Migrants, 2021, TableBuilder", 2021.

Figure 4a. Top 10 Occupations employing permanent skilled migrants, Automotive

Source: Australian Bureau of Statistics, "Australian Census and Migrants, 2021, TableBuilder", 2021.

Figure 4b. Proportion of permanent skilled migrants by occupation, Automotive

Source: Australian Bureau of Statistics, "Australian Census and Migrants, 2021, TableBuilder", 2021.
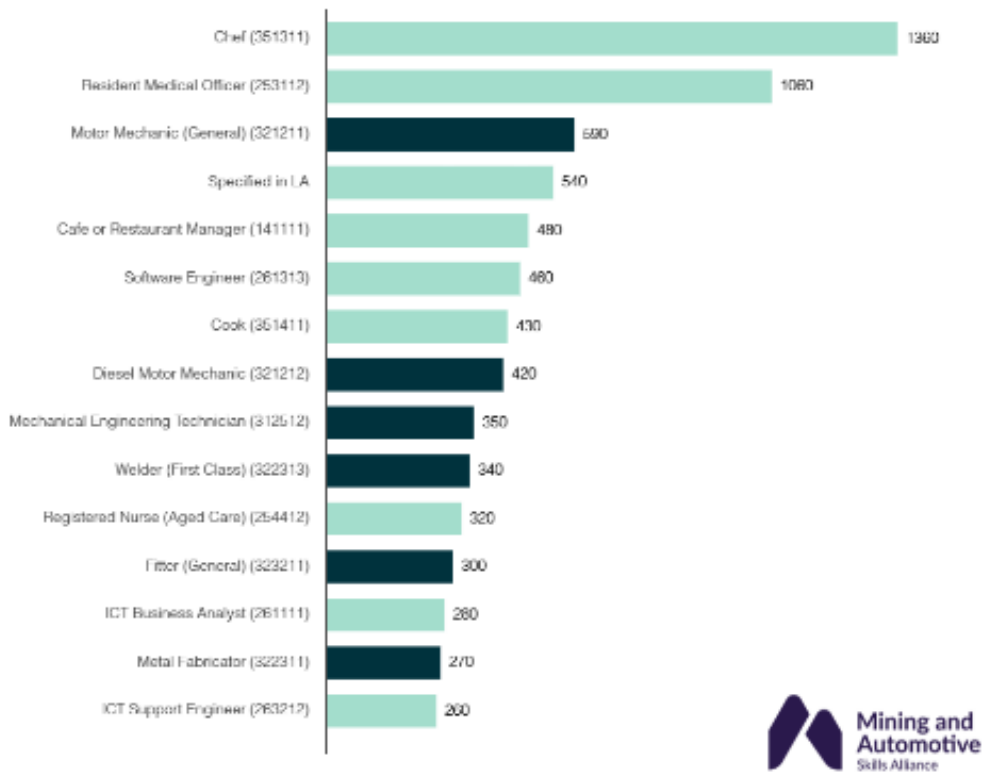
The top 15 occupations by number of visas granted contains several occupations of relevance to the Mining and Automotive industries (Figure 5). Including Motor Mechanics[9] at third highest with 590 granted temporary skilled visas. The number of motor mechanics[10] or automotive technicians granted skilled visas underscores the industry's use of international talent to address workforce shortages in the occupation.

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[9] Known as Automotive Technicians under the new OSCA system
[10] Known as Automotive Technicians under the new OSCA system

Figure 5. Top 15 nominated occupations for primary visa applications granted

Occupation	Value
Chef (351311)	1360
Resident Medical Officer (253112)	1080
Motor Mechanic (General) (321211)	690
Specified in LA	540
Cafe or Restaurant Manager (141111)	480
Software Engineer (261313)	460
Cook (351411)	430
Diesel Motor Mechanic (321212)	420
Mechanical Engineering Technician (312512)	350
Welder (First Class) (322313)	340
Registered Nurse (Aged Care) (254412)	320
Fitter (General) (323211)	300
ICT Business Analyst (261111)	280
Metal Fabricator (322311)	270
ICT Support Engineer (263212)	260

Source: Department of Home Affairs, "Temporary resident (skilled) report", 30 September 2024.

Note: The highlighted occupations are of interest to AUSMASA. *Other is a placeholder for ANZSCO occupation category 070499, it is typically employed as a catchall for occupations that are not classified by any other ANZSCO code. Data covers the 2024-25 visa grants up to 30th September 2024.

Migrants are scattered across both the mining and automotive industries, employed in various occupations. The reliance of both the mining and automotive industries on the migration system depends on economic trends, commodity prices, and even seasonal fluctuations affecting the industry. Furthermore, although the primary purpose of the skilled migration system is to cater to skilled shortages, it is important to note that the migration system caters to professions that have formal pathways. The migration system does not cover skilled occupations that may be in shortage but are without formal pathways, such as belt splicers.