Australian Government
Department of Industry and Science
Business

IBISWorld
WHERE KNOWLEDGE IS POWER

Industry information sourced from: IBISWorld – C2391 Shipbuilding and Repair Services in Australia – May 2016

Variables	Key data
Industry definition	Companies in the industry primarily manufacture or repair ships with displacement of 50 tonnes or more. Firms that manufacture submarines and major components for ships and submarines are also included in the industry.
Industry trends	The Shipbuilding and Repair Services industry has undergone moderate growth over the past five years, with revenue estimated to rise at an annualised 1.5% over the five years through 2015-16. Defence expenditure and Royal Australian Navy (RAN) shipbuilding contracts strongly influence revenue growth. Key RAN projects during the past five years include the construction of the Canberra-class landing helicopter docks (LHDs), which were completed in December 2015, and the ongoing Hobart-class air warfare destroyers (AWDs) project, with both projects continuing to drive revenue growth. Revenue is set to grow by 1.9% in 2015-16, to reach $3.0 billion. Exposure to overseas markets has shifted the industry's operations over the past five years. Overseas competitors such as Spain's Navantia contributed a significant portion to imports due to their involvement in the AWD project. Navantia were also selected for a key $1.2 billion project by the Federal Government in March 2016 to construct two auxiliary oiler and replenishment (AOR) vessels. Despite this, some domestic shipbuilders have increased their foothold in commercial export markets, as export revenue has grown significantly over the past five years due to stronger demand for high-speed passenger catamarans, particularly in South-East Asian markets. The industry is expected to undergo robust growth over the next five years. A strong commitment from the Federal Government to support the industry should see revenue streams become less volatile, allowing domestic firms to plan their operations with greater efficiency. Construction on the Offshore Patrol Vessel project and on the Anzac-class frigates fleet replacement project are expected to commence in 2018 and 2020, respectively, which will boost industry revenue and provide a stable operating climate for the industry. Capital expenditure on defence is anticipated to skyrocket over the next five years, which should also bolster industry revenue. Despite the $50.0 billion Collins-class submarine replace project being awarded to French shipbuilder DCNS in April 2016, the majority of the project is

	expected to be built in Australia, which will benefit domestic subcontractors over the next five years. As a result, industry revenue is forecast to grow at a compound annual rate of 5.1% over the five years through 2020-21, to reach $3.9 billion.
5 year trend	The Shipbuilding and Repair Services industry is expected to display robust growth over the next five years. Increased capital expenditure on defence, and strong backing from the Federal Government is expected to stabilise revenue streams and help the industry overcome issues that have hindered firms in the past, when the time between contracts is significant enough to warrant the closure of shipyards. However, imports are expected to increase as a share of domestic demand over the next five years, as foreign shipbuilders that operate with low wage costs and large economies of scale can retain a competitive advantage over Australian firms.
Major players (domestic and international)	**Major Players** ASC Pty Limited - 35.4% market share BAE Systems Australia Holdings Limited - 16.6% market share Thales Australia Holdings Pty Limited - 10.7% market share Austal Limited - 8.4% market share Civmec Construction & Engineering Pty Ltd - 7.6% market share
Key drivers for growth	**Capital expenditure on defence** Industry operators build warships and submarines for the RAN. Increases in capital expenditure on defence often result in the commission of multi-billion dollar RAN shipbuilding projects, which can drive industry revenue over many years. In 2015-16, capital expenditure on defence is expected to increase, which may provide an opportunity for industry shipbuilders. **Domestic price of iron and steel** Steel is the major raw material input in shipbuilding. Increases in the price of steel significantly add to the cost of building ships. Due to the inelastic demand for ships built by the industry, particularly naval vessels, these price increases can typically be passed on to customers through higher prices. Although these higher prices can restrict demand, shipbuilders generate more revenue per vessel. Increased steel prices therefore tend to positively affect industry revenue. In 2015-16, the domestic price of iron and steel is set to rise, which will benefit companies in the industry. **Demand from water transport terminals** Rising trade volumes drive demand for services at water transport terminals such as ports. Increased activity at these terminals generally results in greater demand for commercial ships and repair services. Activity at Australia's water transport terminals is projected to decline in 2015-16, which will reduce demand for a range of ships, hindering industry players. **Trade-weighted index** The trade-weighted index measures the Australian dollar against a basket of foreign currencies. An appreciation of the dollar can threaten industry operators as import penetration tends to increase and Australian vessels become comparatively more expensive in export markets. The Australian dollar is expected to depreciate in 2015-16, which will assist shipbuilders.

Barriers to entry	Barriers to Entry in this industry are **high** and **steady**. The industry has high barriers to entry and this trend has remained steady over the past five years. Substantial start-up costs, including land acquisitions, make it difficult for prospective companies to enter the industry. Competition is moderate and the industry is highly concentrated, which makes it difficult for new participants to gain a foothold in the industry and compete with well-established major players. Defence contracts are usually awarded to companies with proven track records. Incumbent firms are often multinational shipbuilding entities that have expertise in ship design and construction. These factors make it even harder for potential companies to enter the industry. In the more price-conscious commercial market, strong competition from overseas shipbuilders makes it extremely difficult for new players to compete globally. Shipbuilders in countries such as China can operate with far lower wage costs and can use economies of scale to provide more competitive prices than Australian firms. Technological change is highly advanced and occurs regularly in both the defence and commercial sectors. Generally, only established industry players have the resources and expertise to initiate and keep up with the industry's rapid rate of technological change. Stringent licencing regulations are another barrier to entry for prospective companies. Licences to supply products to Federal Government projects are issued to foreign firms sparingly, while domestic firms must demonstrate significant corporate governance to win these contracts. Entry is more achievable in the auxiliary and parts manufacturing segment, but new participants still must satisfy the requirements of major players that outsource these activities. Opportunities for niche market operators do exist, particularly for specialised shipbuilders that target export markets.
Basis of competition	Competition in this industry is **medium** and trend is **steady**. The industry displays a moderate level of competition and this trend has remained steady over the past five years. Internally, companies compete for contracts on the basis of their reputations and technical capabilities. Externally, industry players compete with imported products and alternative uses for defence expenditure. **Internal competition** Many ships and submarines built in the industry are highly technical and specialised, and changes in design and development techniques are frequent. Firms regularly compete based on sophisticated building techniques, system integration capabilities, product and service reliability, and the ability to respond to changing customer needs. Competition in new naval shipbuilding is fierce as the industry's major players compete for each defence contract that goes to tender. ASC has traditionally held an advantage in submarine construction projects, but that advantage is weakening with the Federal Government opting to award the future Collins-class submarine replacement project to French firm DCNS. Competition for repair and maintenance contracts for military vessels is not as fierce as government policies dictate that most refurbishment and repair work on

	naval vessels must be reserved for Australian firms. Commercial shipbuilders focus on constructing specialised vessels, such as barges, container ships, ferryboats, catamaran and other niche ships. They often operate large-scale shipyards with high wage costs, so specialising in single-line products is vital when maximising output capacity. Commercial shipbuilders therefore compete via economies of scale, as firms that minimise input costs per ship are most likely to be profitable. **External competition** Alternative uses for defence funds are the greatest source of external competition for industry operators. For example, if the military decides to upgrade its aircraft vehicle fleet, they are unlikely to significantly upgrade their naval fleet due to budgetary constraints. Military shipbuilders are therefore in direct competition with tank, armoured vehicle and military aircraft manufacturers. Additionally, many Spanish shipbuilders have established military expertise, which makes their vessels attractive in Australia's military markets. In the commercial market, external competition stems from shipbuilders in other countries, particularly in Singapore, South Korea and China. Commercial shipbuilders are also in indirect competition with commercial aircrafts, as an increase in passengers travelling via aircrafts instead of commercial ships reduces demand for the construction of new commercial ships.
Regulatory and compliance issues	The level of regulation is **medium** and the trend is **steady**. A moderate level of regulation influences the industry and this trend has remained steady over the past five years. The International Maritime Organization (IMO) governs regulation in global shipbuilding industries, predominantly at a civil level. The IMO, a specialised agency of the United Nations, was adopted in Geneva in 1948, and aims to develop and maintain a comprehensive regulatory framework for shipbuilders. The IMO's concerns include safety, environmental issues, legal matters, technical cooperation, maritime security and shipping efficiency. IMO proposals include goal-based standards, which aim to strengthen sea safety management protocols to prevent ship exhausts from polluting the air and sea. Modern shipbuilders must therefore comply with these environmental regulations when designing and constructing new vessels. The plans and needs of the RAN significantly shape regulation and policy in the industry. The RAN's required fleet sizes and specifications determine building activity for many of the industry's key players. The Defence White Paper, most recently issued by the Department of Defence in February 2016, outlines the Federal Government's long-term defence strategy, with a commitment to increasing defence spending to 2.0% of GDP by 2020-21. The paper also outlines the government's commitment to the shipbuilding industry, with a proposal to continuously build and maintain warships, frigates and offshore patrol vessels in Australia. This is an attempt to overcome issues that have hindered industry operators in the past, as it prevents shipbuilders' revenue streams from drying up once their current defence contracts are completed.

Key success factors	**Effective quality control** Shipbuilders that have good quality control systems can increase word-of-mouth sales and repeat business. **Undertaking technical research and development** Product innovation and expenditure on research and development provide operators with competitive advantages. **Provision of superior after sales service** Companies can gain an advantage over their competitors by providing after-sales support, such as through-life support maintenance arrangements. **Proximity to key markets** Proximity to customers reduces transportation costs, which can be substantial due to the bulky nature of industry products. **Access to the latest available and most efficient technology and techniques** Shipbuilders need to stay abreast of the latest technological advances and performance improvements. **Establishment of export markets** The development of export markets can provide industry operators with new downstream customers and revenue streams.

Benchmarking

The comparisons shown below represent a large industry sector benchmarked against Yamba Welding & Engineering Pty Ltd. The measures are a guide only, intended as a reflection of the broad results of the industry sector and comparisons should not be taken literally. The reader can draw their own conclusions from the results displayed.

Information sourced from: IBISWorld – C2391 Shipbuilding and Repair Services in Australia – May 2016

Item	Shipbuilding and Repair Services in Australia 2015/16	Yamba Welding & Engineering Pty Ltd
Sector revenue	$3.0bn	N/A
Annual revenue per business (423 businesses in sector; 9597 employees respectively)	$7.1M	$5.1M
Average No. employees / business	22.7	24
Annual growth rate for five years 11 - 16	1.5%	9.2% *Growth for the 206 FY*
Sales/employee/year	$313,952	$214,154
Average Wage	$85,110	N/A
Operating profit (EBIT)	10.1%	6.6%
Rent	1.2%	0.0%
Utilities	1.1%	1.3%
Depreciation	1.7%	0.0%
Other expenses	6.9%	15.0%
Wages to revenue	27.1%	29.2%
Purchases	51.9%	49.5%