

Singapore Marine Industry's Performance in 2012

OVERVIEW

Total Turnover

2012 was another volatile year for the Singapore marine and offshore engineering industry. Globally, the world economy was suffering from a weak recovery in the US and the debt crisis in the Eurozone. Asia remained resilient amidst this environment, whilst Singapore managed a modest 1.2% GDP growth for the year.

Despite the lingering uncertainties in the global economic environment, the long term fundamentals for the offshore oil and gas industry remain sound underpinned by high oil prices and projected increases in offshore exploration and production spending by international oil majors and national oil companies.

Apart from the macro-economic uncertainty and volatile global market conditions, the industry was also challenged by keen competition from overseas shipyards moving into the offshore rig building market. Amidst these challenges, Singapore marine and offshore engineering industry managed to rake in a total turnover of S\$15.01 billion in 2012. This was 12.7% or S\$1.69 billion more than the total turnover of S\$13.32 billion attained in 2011.

This higher turnover was achieved by the successful execution of ship repair, FPSO conversion, rig building and repair, and shipbuilding contracts clinched during the year as well as the completion and deliveries of projects secured in prior years.

The offshore rig building sector was the largest contributor to the industry's total turnover in 2012. This sector continues to dominate the total turnover due to the sheer contract value of each of the rigs built, alongside the upgrading of rigs arising from the strong demand for improved and more efficient rigs. The sector generated S\$9.08 billion constituting 60.5% of the total turnover.

The ship repair and conversion sector contributed S\$4.8 billion to the industry's total turnover. This represented 32% of the total turnover. The shipbuilding sector brought in S\$1.13 billion accounting for 7.5% of the total turnover.

The order book for 2012 hit a new record high with some S\$22.1 billion of new orders secured during the year. These new orders have completion dates and deliveries stretching to 2019.

Total Employment

Some 106,500 workers were employed during the year in review. This was 4.1% lower or 4,500 workers fewer compared to the workforce of 111,000 workers in 2011.

The industry is dependent on a well-trained and skilled workforce. A highly competent and disciplined workforce is key to safe execution and prompt delivery of projects to customers. The industry has a strong training culture and major players have put in place training infrastructure to ensure that workers are trained and constantly updated in their knowledge and skills to execute projects safely and expeditiously.

In 2012, ASMI spearheaded the training of technology or productivity innovators to help improve process productivity in their respective organisations.

Workplace Safety & Health Performance

The industry places great emphasis and commitment on Workplace Safety and Health (WSH). The bizSAFE accreditation programme was launched in 2009 to drive shipyards and marine companies to incorporate WSH as an integral part of their business. The industry then undertook to enforce bizSAFE Level 3 certification as a minimum requirement for marine contractors and companies entering major shipyards for work. This provided the impetus and contributed to the building of a safety culture in the industry.

In 2012, the industry saw a spike in accident cases, reversing the declining trend in the past three years. There were 430 accident cases in 2012, 94 cases more than the 336 accidents that occurred in the previous year. This was an increase of almost 28%. As a result, the Accident Frequency Rate (AFR) also rose to 1.3 accidents per million man-hours worked, 18.2% more than the AFR of 1.1 accidents per million man-hours worked in 2011.

Despite the rise in accident cases, the severity of the accidents had declined. Six workplace fatalities were recorded in 2012, four fewer than the year before. This represented a 40% decline in workplace fatalities. Correspondingly, the workplace fatality rate also decreased to 5.6 per 100,000 persons employed in 2012, down

from 9.0 per 100,000 persons employed in 2011. Correspondingly, the Accident Severity Rate (ASR) also declined to 149 man-days lost per million man-hours worked. This was a decrease of 37.4% compared to the ASR of 238 man-days lost per million man-hours worked recorded in 2011.

Sectoral Performance

Ship Repair & Conversion Sector

The ship repair sector is supported by a comprehensive ecosystem of shipyards, marine and offshore equipment suppliers, marine engineering companies and contractors. Ship repair market was sluggish in 2012 due to the weak performance of the shipping industry.

The major shipyards have formulated a strategy of long-term partnerships and fleet agreements with long-standing customers to ensure a steady income stream from ship repair. Many of these alliances are in niche market segments such as the repair and upgrading of tankers, LPG and LNG carriers, passenger liners and cruise ships. Such alliances have helped to ensure a steady base-load for ship repair activities in the local shipyards. Alliance contracts and regular customers accounted for some 80% of the respective shipyards' repair workload.

Port statistics from the Maritime and Port Authority of Singapore (MPA) showed a decline of 19.2% in the number of vessels calling in Singapore for repairs in 2012. A total of 6,657 vessels came for repairs in 2012, 1,578 vessels fewer than the 8,235 vessels that came the year before. The reason for the decline was due to the sluggish shipping sector, which pulled down the overall number of vessels sent for repair. As a result, the total gross tonnage of vessels that called for repair was also lower at 34.89 million grt. This was 2.37 million grt or 6.4% lower than the total gross tonnage of 37.26 million grt in 2011.

The total turnover from ship repair and conversion work in 2012 was S\$4,804 million, accounting for 32% of the total turnover. This marked a decrease of 7.5% year-on-year. It was S\$391 million lower than the S\$5,195 million achieved in 2011. The sector's contribution to the industry's turnover also fell by 7%, from 39% the year before.

11 FPSO (Floating Production, Storage and Offloading) conversion and upgrading projects were completed in 2012. These comprised eight FPSO vessels, one Floating Storage and Offloading (FSO) vessel, one Floating Storage Unit (FSU) and one Floating Storage Regasification Unit (FSRU).

Shipbuilding Sector

The shipbuilding sector improved its performance in 2012 to account for an increasingly larger piece of the pie in the industry's turnover. Singapore has honed its strength in constructing customised and specialised vessels such as offshore supply and support vessels, and anchor handling and supply tugs and its expertise has been tapped on by ship owners.

In 2012, the shipbuilding sector generated a total turnover of S\$1,126 million. This was an increase of S\$460 million or 69.1% from the turnover of S\$666 million earned in 2011. This sector increased its share by 2.5% to account for 7.5% of the total turnover in 2012.

According to statistics from MPA, a total of 110 vessels were launched in 2012. This is a significant increase of 25% or 22 vessels more than the 88 vessels launched in 2011. However, the total gross tonnage of the vessels launched decreased, indicating that smaller tonnage vessels were being built. The total gross tonnage of vessels launched was 257,664 grt. This was 13.6% lower or 40,486 grt lesser than the total gross tonnage of 298,150 grt for vessels launched in 2011.

As in previous years, most of the vessels launched were supply vessels, barges, workboats and tugs. Other vessels launched included safety vessels, fast crew and supply boats, yachts, ferries and motor launches.

Offshore Rigbuilding Sector

Activities in the offshore rig building sector included the repair, upgrading and construction of new oil rigs and offshore platforms. This sector has grown the fastest in the past few years to account for a significant volume of work undertaken by the industry and is to date the largest contributor in the industry's total turnover.

In 2012, the offshore rig building sector generated a total turnover of S\$9,082 million. This was S\$1,623 million or 21.8% higher than the turnover of S\$7,459 million generated in 2011. The sector contributed 60.5% to the total turnover, increasing by 4.5%, up from 56% in 2011.

Singapore delivered a total of 13 new rigs and offshore platforms in 2012. This comprised six newbuild jack-up

rigs, four semi-submersible rigs and three offshore platforms.

Industry Outlook

The fundamentals of the offshore oil and gas sector remain good despite the macro-economic uncertainty affecting global markets. With improving economic conditions in China and the US, demand for oil and gas will grow. Global oil consumption is expected to rise from 87.4 million barrels per day in 2011 to 99.7 million barrels per day in 2035.

The growing demand for energy, stable high crude oil prices, nationalisation of resources by government of emerging countries, and the need to increase production to replace depleting reserves will give impetus to oil companies to explore new marginal fields and as well as those in harsher environments such as in the Arctic and North Sea. It will drive exploration and production (E&P) expenditure into new frontiers which are deeper, harsher and more challenging. Latin American companies are expected to lead the way in 2013 with some 15% increase in capital spending in the region.

Demand for new rigs is strong given the ageing rig fleet and the increasing focus by oil companies for new, safer and more efficient rig units. In the shallow water market, there is demand for high premium high specification rigs with better capabilities to drill challenging wells, and utilisation rates for such rigs remains high. Some 35% of the current fleet of jack-up rigs in the world are at least 30 years old. The older rigs will need to be replaced or upgraded for better drilling capabilities.

Drilling contractors are reporting favourable underlying fundamentals in the deepwater drilling market. The Golden Triangle region of the Gulf of Mexico, Brazil and West Africa, is expected to dominate spending in the deepwater sector over the next five years. Growth is also expected in new and emerging basins in Australia, the Mediterranean, and East Africa. In addition, Asia and the Australasia regions are becoming increasingly important areas for deepwater activity.

Singapore rigbuilders with its proven track record are well-positioned to meet the demand for premium rigs. Her ability to offer a full spectrum of product line and its own proprietary designs, from shallow water to deepwater drilling rigs, shallow water production platforms to deepwater production units, places her in good stead to ride the offshore wave in both existing key and emerging offshore oil and gas markets.

With the anticipated increased E&P spending and activities in deepwaters, the outlook for floating production systems will also be positive. It will encourage demand for more or new offshore support vessels and anchor handling tug supply vessels. Singapore shipyards are capable of delivering such vessels to global customers. Rising demand is also expected in the construction of subsea support vessels. Local shipbuilders can hone their capabilities to serve this market segment.

In ship repair and conversion, Singapore shipyards are moving more into niche market segments of LNG carriers, passenger/cruise ships and offshore support vessels. The local shipyards' alliance partners and regular customers will provide a stable and steady repair baseload for the industry. Industry players are also exploring new markets such as the conversion of LNG vessels into Floating LNG vessels as well as the construction of drill ships and vessels for the offshore wind energy sector.

The industry is facing stiff competition from Chinese and Korean shipyards which are chasing after offshore work. This competition places pressures on newbuild prices and margins in some product segments. To entrench our position as market leaders in various products and stay ahead of the competition, industry players will need to differentiate themselves from the competition and focus on value creation for its customers. This will entail developing innovative and cost-effective solutions, increasing product offerings and expanding global footprints in key and emerging oil and gas markets across the world.

On the home front, with the tightening of foreign manpower resources across industries by the government, shipyards and marine companies will need to improve productivity in their operations to deliver more with less. They will also need to build new capabilities and enhance core competencies to take on more complex offshore projects and new challenges in the global oil and gas industry.