

Singapore Marine Industry's Performance in 2011

OVERVIEW

Total Turnover

2011 was a challenging year for the Singapore marine and offshore industry amidst global macro-economic uncertainties brought about by the political and economic woes and debt crisis in the euro zone, a weakened US economy and weak global trade. Compounding the already volatile environment were unrest in the Middle East and disruptions to oil supply, natural disasters around the world, overcapacity in shipping and intensifying competition from overseas shipyards.

Against this plethora of external challenges coupled with the tight labour situation internally, the local marine and offshore industry proved its resilience, sailing through the tough seas to rake in a total turnover of S\$13.32 billion in 2011, comparable with its performance a year ago. This total turnover was down slightly by 1.1% or S\$150 million from S\$13.47 billion achieved a year earlier.

The steady turnover was achieved as a result of strong demand for offshore rigs and platforms, and production and support vessels, fuelled by continuing investments in the global energy sector, increasing global demand for oil and gas, sustained high oil prices as well as post-Macondo focus on quality rigs. The incident in the Gulf of Mexico in 2010 brought greater awareness among owners and operators on safety and quality offshore rigs. It also expedited the replacement of aging rigs currently in operation.

Depressing freight rates, high fuel costs, weak global trade and over capacity in supply of ships have resulted in a sluggish shipping industry. On the other hand, returning market confidence in offshore led to a robust rebound in new rig orders from the end of 2010.

The renewed interests in new premium and high specification rigs saw new contracts streaming into Singapore's shipyards from the first quarter of 2011, resulting in new orders totalling more than S\$13.7 billion secured by the local shipyards during the year. This has sent the industry's current net order books to a new high of more than S\$16 billion with deliveries extending to 2015. The industry has thrived on its ability to deliver proprietary designs offering cost-effective solutions tailored to customers' needs.

In the last few years, the offshore sector has overtaken ship repair and conversion sector to become the largest contributor to the industry's output. This looks set to be the scenario for the next few years given the signs of cyclical improvements in the offshore market.

In 2011, the offshore rigbuilding sector generated S\$7,459 million contributing 56% to the total industry's turnover. Ship repair and conversion activities brought in S\$5,195 million and accounted for 39% of the total turnover. Shipbuilding made S\$666 million or 5% of the industry's turnover.

In docking facilities, there are currently 15 graving docks in Singapore with capacity ranging from 5,000 to 500,000 deadweight tonnes in various shipyards. The total dry docking capacity stood at 3,332,500 deadweight tonnes. In addition, there are 15 floating docks and ship-lifts with a total lifting capacity of 237,900 tonnes.

Total Employment

The industry saw an increase in the number of workers employed in 2011. Statistics from Ministry of Manpower (MOM) showed the industry's total employment at 111,000 workers. This was 3.93% or 4,200 more workers compared to the workforce of 106,800 workers in 2010.

A well-trained professional workforce is critical in the technology-heavy marine and offshore industry. It is imperative to have access to a pipeline of trained manpower for effective project management and execution as well as leadership and workforce renewal at various levels. The industry has benefitted from the steady pool of Singaporeans trained in specialised courses such as marine engineering, naval architecture and offshore technology.

A disciplined and competent production workforce is also key to the industry. Apart from trade skills and regulatory workplace safety and health training, other upgrading programmes in

technical trades, supervision and project management are in place to ensure that workers are regularly updated in knowledge and skills to execute projects safely and expeditiously.

Workplace Safety & Health Performance

Workplace Safety and Health (WSH) is a key focus in the industry as it strives to provide a safe and healthy workplace for the marine workforce. Shipyards and marine companies had embarked on the national bizSAFE accreditation programme to make WSH an integral part of their businesses in 2009. By 2011, more than 1,300 shipyards and marine companies have attained bizSAFE Level 3 certification. This certification, a requirement for marine contractors and companies entering the major shipyards for work, gave impetus to the building of a safety culture in the industry.

In 2011, the industry saw the total number of accidents falling for the third year running. A total of 336 accidents occurred in the marine industry that year, 14.9% lower than the 395 accidents reported in 2010.

However, the number of workplace fatalities was higher compared to the previous year. Ten workplace fatalities was recorded in 2011, four more than in 2010. This represented a 66.7% increase in workplace fatalities. Correspondently, the industry's workplace fatality rate also increased to 9.0 per 100,000 persons employed in 2011, up from 5.6 in 2010.

The Accident Frequency Rate (AFR) for the industry continued its downward trend for the second consecutive year to 1.0 accident per million man-hours worked. This was a 23% improvement over the AFR of 1.3 reported in 2010.

The Accident Severity Rate (ASR) for 2011 is higher in view of the higher number of workplace fatalities. The ASR was 226 man-days lost per million man-hours worked compared to 146 in 2010. This registered an increase of 54.5% in ASR year-on-year.

Sectoral Performance

Ship Repair & Conversion Sector

The ship repair and conversion sector is supported by a comprehensive ecosystem of shipyards, marine equipment suppliers, marine engineering companies and contractors. Despite the sluggish shipping industry, this sector performed relatively well with a steady stream of projects from alliance partners and repeat customers, and a strong FPSO market.

The major shipyards' strategy of long-term partnerships and fleet agreements with regular customers has helped to bolster ship repair volume in the shipyards and ensured a steady and growing base-load for ship repair activities in the local shipyards. Such alliance contracts accounted for more than 80% of the respective shipyards' repair workload, up from 60% a year ago. The major shipyards continued to forge long-term partnerships with international customers in niche market segments such as repair and upgrading of tankers, LPG and LNG carriers, passenger ships and cruise vessels.

Port statistics from Maritime and Port Authority of Singapore (MPA) showed a total of 8,235 vessels calling in Singapore for repairs in 2011. This was 4.6% lower or 396 vessels fewer compared to 8,631 vessels recorded a year ago. Although there were fewer vessel calls in 2011, the total gross tonnage of vessels that called was higher at 37.27 million grt. This was 2.68 million grt or 7.8% higher than the total gross tonnage of 34.59 million grt in 2010. The type of vessels in Singapore for repairs, upgrading and maintenance included tankers, container ships, gas carriers, passenger ships, and bulk carriers.

In 2011, the total turnover from ship repair and conversion was S\$5,195 million, accounting for 39% of the industry's turnover. This registered a growth of 7.1% growth year-on-year. It was S\$346 million more than the S\$4,849 million achieved in 2010. Its contribution to the industry's turnover improved by 3%, up from 36% the year before.

Shipbuilding Sector

Singapore's strength in shipbuilding lies in the niche production of customised and specialised vessels such as offshore supply and support vessels, and anchor handling and supply tugs (AHTS).

Shipbuilding activities generated a total turnover of S\$666 million in 2011, an increase of S\$127 million or 23.6% from the turnover of S\$539 million earned in 2010. Shipbuilding increased its share by 1% to account for 5% of the total turnover in 2011.

According to port statistics, 88 vessels were launched in 2011. This is an increase of 12.8% or ten vessels more than the 78 vessels launched in 2010. The total gross tonnage of the vessels launched in 2011 at 298,150 grt was 20.9% higher compared to the year before. It was 51,512 grt more than the total gross tonnage of 246,638 grt for vessels launched in 2010.

Most of the vessels launched were barges, workboats and offshore supply and support vessels. Other vessels launched included tankers, AHTS, motor launches, yachts, tugs, passenger ferries and crew boats.

Offshore Sector

The offshore sector which comprises repair and construction of rigs and offshore platforms has grown in the last few years to become the largest contributor to the industry's turnover. In 2011, the offshore sector turned in a total turnover of S\$7,459 million. This was 7.7% lower than the turnover of S\$8,082 million attained in 2010. Its share to the industry's total turnover fell from 60% to 56%.

Singapore delivered a total of 15 new rigs and offshore platforms in 2011. This included five jack-up rigs, eight semi-submersible rigs and two offshore platforms.

Industry Outlook

The years ahead will continue to be challenging as the global economic climate continues to remain uncertain with growth subdued in many advanced economies, escalating political tensions and debt crisis in more parts of Europe. Nonetheless, the outlook for the industry remains good as long-term fundamentals driving the industry, such as increased demand for oil, increased exploration and production spending budgets and firm oil prices, remain intact.

Research reports affirmed the rising global demand for oil. Oil prices have strengthened and day rates for both jack-up and semi-submersible rigs have increased in relation to supply. Major oil companies have also announced increased budgets for exploration and production activities to address replacement of depleting reserves and to increase production capacity.

Deepwater drilling activities have remained robust with strong growth in demand for development drilling in Brazil, the North Sea and West Africa, and also the Asia Pacific. Industry watchers are expecting another wave of offshore boom especially in the deepwater and ultra-deepwater segments. Hence, prospects are good for deepwater solutions and demand for deepwater rigs is expected to improve as offshore drilling continues into deeper waters.

Singapore's 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 next offshore wave. With its proven track record in rigbuilding, and design and research and development capabilities, Singapore is well-positioned to meet the challenge of stringent operating requirements for new rigs and to capture new orders for high specification deepwater rigs.

In ship repair and conversion, the market is expected to improve with steady base-load from the shipyards' alliance partners and long-term customers as well as growing demand for floating production units. Industry analysts are projecting an FPSO up cycle that will see double the current worldwide fleet. Singapore stands to benefit from this upswing with its reputation for FPSO conversions. Shipyards are also enhancing their infrastructure set-up with facilities upgrade, bigger docks, quay extension, workshop enhancements, process mechanisation and automation to maximise and deliver more projects annually.

In shipbuilding, strong oil prices and attractive charter rates are expected to drive new orders for more technically-advanced offshore support vessels and platform supply vessels to work in deepwater and harsher environments.

On the home front, industry players will have to find ways to boost capabilities and raise overall productivity given the intensifying competition from overseas shipyards. There is a need to raise productivity through innovative improvement of production systems and processes. To mitigate

the tight labour situation and stay competitive, industry members must hone new technologies, increase workforce competencies and adopt methodologies to improve operational efficiencies.

Many industry members have invested significant resources in WSH. The industry's vision is to inculcate a robust safety culture where safety is everyone's business. Changing mindsets and behaviours are onerous but necessary tasks for safe and timely execution of projects, and protection of valuable human assets.

Moving forward, industry players are looking into new business opportunities such as new products and emerging markets. This will include design and construction of drill ships, and offshore wind turbine installation and support vessels as well as expansion of their global footprints to new continents.