A CLOSER LOOK AT THE MARINE INDUSTRY OF SINGAPORE

A World-Class Industry

The Singapore Marine Industry has seen significant growth over the last 40 years, evolving from a small regional ship repair and building centre into a world-class industry that serves international clientele. The industry includes ship repair, shipbuilding, rigbuilding and offshore engineering, and other marine supporting services.

Today, Singapore is one of the world's premier ship repair and ship conversion centres as well as a global leader in the building of jack-up rigs and the conversion of FPSO (Floating Production Storage and Offloading) units. It is also a niche player in the construction of customised and specialised vessels.

Globally reowned for its reliable and convenient range of comprehensive marine services, Singapore is a one-stop marine centre for shipowners, managers and agents around the world. Generating an annual turnover of close to $10 billion and employing some 100,000 workers, the marine industry plays a crucial part in Singapore's economic growth. Ship repair and conversion form the backbone of the local marine industry, accounting for more than half of the total revenue.

Ship Repair and Conversion

Ship repair in Singapore dates back to when the first dry dock was built in 1859. Due to active government encouragement and technology transfers in the late sixties, business became more international, and by the mid-seventies, Singapore was firmly established as a major international ship repair centre, particularly for larger vessels. It has maintained its leading position since then.

Singapore ship repairing has gained international recognition for its specialised re-construction jobs, which range from conversion to jumboisation. The extensive capabilities in ship repairing means a multitude of repair, reconstruction and conversion jobs can be carried out with high quality and timely delivery. The versatility of local shipyards is reflected in the wide range of ship conversions undertaken. Ship repair is carried out in shipyards and at the anchorage. To meet the needs of shipowners using the port, voyage repair are readily available on call. Projects include the conversion of car carriers to livestock carriers and tankers to FPSOs, just to name a few.

Shipbuilding

Over the years, Singapore shipbuilders have earned a reputation for fair prices, quality workmanship and short delivery time, for a range of specialised and customised vessels. Shipbuilding has progressed from minor projects such as the construction of wooden launches and fishing boats to major projects like steel vessels and specialised ships. Vessels built include cableships, container vessels, product tankers, naval ships, landing ship tanks and patrol crafts.

Rigging and Offshore Engineering

In 1969, Singapore delivered its first jack-up rig. Five years later, it grew from infancy to become the largest builder of jack-ups in the world. Today, it still enjoys this premier status. Our rigbuilders are competent in repairing, upgrading, converting and building jack-up rigs, semi-submersibles, drillships, drilling tenders and FPSOs. They also have the expertise and experience to produce rigs of their own designs.

Marine Supporting Industries

In line with the growth of ship repair, shipbuilding and rigbuilding activities, Singapore's marine supporting industry has also evolved. The supporting industry ranges from small to medium-sized workshops to comprehensive factory facilities. Many overseas manufacturers have also set up local agencies for their own manufacturing, sales and services facilities in Singapore.

There is a comprehensive range of marine services in various industries such as electronics communication and navigation, automation precision machining, and corrosion control. In addition, there are numerous factories manufacturing or servicing marine equipment and components such as diesel engines and turbochargers. Other services available include ship design and consultancy, marine inspection and surveying.

Working Conditions

The marine industry has been improving its safety record steadily over the last 12 years, due to management commitment, unions' involvement and workers' participation. Shipyards have also set out to increase safety awareness among workers, and to build a good safety culture within the industry. Initiatives started include safety briefings, orientation, training and the implementation of a comprehensive safety management system, safety guidelines and safe work practices.

Training and Advancement

The marine industry has a strong commitment to enhancing the knowledge and skills of its workforce, so as to raise overall productivity levels and stay competitive in the global market. Training and skill-upgrading programmes provide workers with new skills and keep them abreast of the latest technologies. The industry has also moved towards multi-tasking training for its workforce.

The extensive range of training initiatives within the marine industry includes apprenticeship schemes, on-the-job training, classroom-based training and even scholarships for further studies and overseas attachment schemes, which helps develop talents and groom potential leaders.

In addition, the Association of Singapore Marine Industries works closely with government agencies to administer trade tests and skills certification programmes, such as the Skills Evaluation Tests and National Skills Recognition System, for industry participants. Training and certification programmes serve to hone the skills of workers, upgrade their status within the industry, and give them due recognition for their achievements within their trade.

The need to upgrade and train the marine industry's workforce is crucial, especially as the industry has embarked on more challenging contracts and projects over the years, which require more knowledge-intensive skills and a higher engineering content. Industry players are keen to explore and introduce new processes and technologies, so as to continually enhance overall productivity and efficiency.

Conclusion

Singapore shipyards have over the last three decades gained prominence for quality, specialised services, timely delivery, skilled and disciplined workforce, strong project management capabilities as well as the ability to handle sophisticated turnkey projects with complex requirements. Singapore is also well supported by its strategic geographic, location and comprehensive and integrated marine infrastructure services. The industry has contributed to the economic development of Singapore for the last 40 years. It will continue to play a critical role in the national economy, in view of Singapore's drive to become a leading international maritime hub.