

A Deep Dive into Ship Building & Ship Repair

The Mumbai Branch of the Institute of Marine Engineers (India) in line with the objectives of the society to develop knowledge and exchange ideas of Marine Engineering with the engineering fraternity of the country has joined hands with the oldest and most prestigious institute "The Institute of Engineers (India)". Branch is grateful to **Cdr Dr Bhaskar Bhandarkar**, recently elected Vice president of IME(I), who also happens to be the Chairman of Marine Engineering Division of Institute of Engineers, India, for all the initiatives taken and the encouragement.

Branch in association with IEI, Maharashtra State Centre recently organised a technical Webinar, on **23rd November 2023** on the subject "**Shipbuilding and Ship Repairs: Opportunities for Indian Industries and Manufacturing Sector.**"

Webinar was compered by **Mr Sanjeev Mehra**, Secretary Mumbai Branch who invited **Mr Milind Patil**, Hon Secretary IEI Maharashtra state for welcome address and Cdr Bhandarkar to introduce the subject and the Joint Venture. Thereafter a senior Fellow member of IME(I) **Mr SM Rai** took over as the Moderator in his knowledgeable style and introduced lead speakers **Mr Shobhit Kapoor**, Marine Operation Manager, of Lloyds Register of Shipping and Offshore Services India and **Mr Jyotisman Dasgupta**, President Institute of Naval Architects, India (INA).

Both the speakers in their presentations covered shipbuilding and repair activities currently dominated by China, Singapore, Bahrain, Korea, and Dubai and India getting a very limited share of these activities due to various economic and procedural reasons. The market share of India today is less than 1%. The main issues they spoke about were lack of repair docks, lack of floating docks, complicated custom and procurement systems and frequent labour unrest. Ship Building even for big vessels while abroad takes a few months, in India it is taking years. We do have very experienced shipyards like Cochin Shipyard capable of building even Aircraft Carriers, Hindustan Shipyard Visakhapatnam and Mazagaon Docks but lately they are more focussed on defence requirements.

Mr Kapoor in his presentation specifically spoke on the growing demands in Ship Building and the global trends affecting the future. In his extensive deliberation he covered Regulatory drivers, Rules and issues of Classification society. He also spoke on Retrofit Yard capabilities and their capacity. Yards need to be ready and updated on new technologies, issues of pollutions & emissions. He emphasised and stated that Ship Building design Clusters are crucial for R&D and Industry growth. He was very optimistic saying that India's Maritime

talent can fuel ship building clusters with solid IT and technical knowhow. Speaking about repair activities he stated we are on average 1.4 to 2 times more expensive due prolonged procurement and custom regulations. He was hopeful that under Maritime vision 2030 we will be able to improve. He also advocated for Freeing up of finances, Setting up of Finance funds and incentives for Indian Ship owners.

Mr Dasgupta in his presentation stated that shipbuilding and ship repair activities in India is very challenging task and it is essential that it is aligned to global and national pursuit of pollution reduction with particular focus on GHG emission of ships. He was appreciative of the recent Government of India scheme to support ship building and ship repair activities in our own country. He advised that India should take advantage of the fact that various Global trade routes especially between far east and Middle East, Europe and Africa transit through Indian borders. He also mentioned key steps being taken under Maritime vision 2030 and now MIV 2047. He gave good account of green technologies and impact it is going to have on Vessel design and operational efficiency and monitoring in future. In his presentation he covered New Ship designs on the horizon which are operating on new technologies with Solar Power, Wind turbines, Electricity and alternative fuels. Speaking about Govt of India's declared aspirations by 2047 and revised Atmanirbhar Bharat policy, He was hopeful that we shall improve our ship building rank to 5 and provide extensive services for retrofits. Complexity of ship building can be understood comparing it with other manufacturing industries. What is automobile industry to Light manufacturing; Ship Building is to heavy Industry. It has potential to multiply the employment by 5 to 6 times. He elaborated on four-pronged Transition Strategy of ICT implementation, Education & Training, Collaboration & Cluster and Green Shipyard Development. Talking about major Shiprepair opportunities he said Refits and Installation of new machinery & equipment are challenging. Normally these are extremely time sensitive and safety-critical. Training to workmen is essential from quality efficiency and speed completion point of view. In conclusion per him, there is need to change the national mind set to bring this sector to mainstream industry. The Paradigm shift in technology can be captured in Start -Ups in the maritime sector. Educational and R&D institutions need to promote this.

Mr Rai while summarising the presentations took question from the participants which the speakers replied gracefully. In conclusion **Mr Nilaj Deshmukh**, Chairman Navi Mumbai IEI local centre CBD Belapur gave Vote of Thanks.